

UNIVERSITY OF NAIROBI

MASTERS OF LAWS (LLM)

THE EFFICACY OF DOG OLFACTION AS A TOOL IN TRANSNATIONAL WILDLIFE LAW ENFORCEMENT IN KENYA, UGANDA AND TANZANIA.

A PROJECT PAPER SUBMITTED TO THE UNIVERSITY OF NAIROBI IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD FOR THE DEGREE OF MASTERS OF LAWS (LLM)

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November 2019

I, **PHINNET AWUOR ONDIEK**, do hereby declare that this Project Paper is my original work submitted in partial fulfillment for the award of a Degree in Masters of Laws (LL. M) at the University of Nairobi, School of Law; and has not been submitted or pending submission for a Degree in any other University.

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DEDICATION

I dedicate this project paper to my dearest mother Mrs. Julia Aoko Ondiek who was my greatest source of inspiration and drive. The constant encouragement and persistence to pursue my LLM sooner rather than later gave me the strength to carry on to the end. In your wise words "you must always finish whatever you start" made it clear that while giving up is not an option there is need for extra commitment on any pursuit in life. You were here when I commenced but only present spiritually as I complete my studies. Thank you for praying, believing and encouraging me to pursue my studies. May my efforts make you proud as you rest with the angels.

ACKNOWLEDGEMENTS

I acknowledge all those who have guided me throughout the entire process of writing this project paper. First, I would like to thank Almighty God for making all this possible. I wish to acknowledge Africa Wildlife Foundation (AWF) through Charlotte Fellowship for fully funding and making possible this this entire study. I am grateful to my supervisor Dr. Collins Odote for the guidance and directions that led to this achievement. I wish to particularly thank Dr. Philip Muruthi, Didi Wamukoya and Sylvia Wasige (Africa Wildlife Foundation Species Team)for their continued guidance and support throughout the entire journey. Lastly, I am grateful for the endless encouragement and support from my loving parents (R.I.P Mama) in pursuit of my endeavors. Thank you.

LIST OF INTERNATIONAL LAW DOCUMENTS

African Convention on the Conservation of Nature and Natural Resources .Convention on International Trade on Endangered Species (CITES) .International Consortium on Combating Wildlife Crime (ICCWC).

East Africa Court of Justice, Rules of Procedure, 2013.

International Court of Justice, Rules of Court (1978).

Arusha Declaration on Regional Conservation and Combating Wildlife Environmental Crime

Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora.

United Nations Convention Against Transnational Organised Crimes, A/RES/55/25

Cartagena Protocol on Biosafety to the Convention on Biological Diversity

(Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity

Convention on Wetlands of International Importance Especially as Waterfowl Habitat

Protocol on Environment and Natural Resources Management

Treaty for the Establishment of the East African Community

Protocol concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region

Convention on the Conservation of Migratory Species of World Animals

Convention on Biological Diversity

LIST OF CONSTITUTIONS AND STATUTES

Constitution of Kenya 2010

Constitution of Uganda 1995

Constitution of the Republic of Tanzania 1977

Wildlife Conservation and Management Act 2013

Uganda Wildlife Act Cap 200

The Uganda Wildlife Bill, 2017 [No.8 of 2017]

Wildlife Conservation Act 2013

Evidence Act Cap 80 Laws of Kenya

LIST OF CASES

- 1. Abdallah Wendo v. Republic(1953) 20 EACA 166
- 2. John Njogu Weru v Republic[2016] eKLR
- 3. Regina v. Das Mathew Theodore Peterson (1994)
- 4. Buck v. State (1943) OK CR 65 138
- 5. Kennedy Maina v. Republic Criminal Appeal No. 14 of 2005
- 6. Omondi v. Republic [1967] EA 802
- 7. Uganda v. Juvenile HCT-02-CR-SC-0377 OF 2017
- 8. *Uganda* v. *Albina Ayoko*[1974] H.C.B. 176
- 9. Republic v. Ahmed Mansour HusseinEnvironmental Case No. 01 of 2019 (Unreported) Kisitu Resident Magistrate Court

LIST OF ABBREVIATIONS

CITES Convention on International Trade on Endangered Species

EAC East African Community

EACJ East Africa Courts of Justice

EALA East Africa Legislative Assembly

EALR East Africa Law Report

EAWS East Africa Wildlife Society

ICC International Criminal Court

JKIA Jomo Kenyatta International Airport

KLR Kenya Law Report

KPA Kenya Ports Authority

KWS Kenya Wildlife Services

LATF Lusaka Agreement Task Force

TAA Tanzania Airport Authority

TAWA Tanzania Wildlife Management Authority

UWA Uganda Wildlife Association

UWA Uganda Wildlife Authority

WCMA Wildlife Management and Conservation Act

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ABSTRACT

Transnational Wildlife crimes are on the rise in East Africa. This has led to the need to enhance law enforcement to deter illegal wildlife trade and crimes in the region. The research carried out shows that Kenya, Uganda and Tanzania have set up detection dog units under their law enforcement institutions to enhance investigations and deter transnational wildlife crimes. This study seeks to establish the adequacy and efficacy of the legal and institutional frameworks on the use of detection and tracker dogs in investigation and such evidence in prosecution of transnational wildlife crimes in Kenya, Uganda and Tanzania. It examines the suitability of detection and tracker dogs in wildlife law enforcement and protection of wildlife species generally. It interrogates the legal provisions and effectiveness as well as institutional functions including agencies and authorities and their capacity to carry out their mandate in detection, prosecution of wildlife crimes and conservation of wildlife species. It further evaluates the admissibility of dog olfactory evidence in Kenya, Uganda and Tanzania Courts. Qualitative and quantitative research was carried out to meet the study objectives. The field study was carried out in Kenya Uganda and Tanzania. The interviews target law enforcement officers under KWS, UWA and TAWA including prosecutors, investigators and dog handlers. The findings of the study show that inadequate detection measures in transnational wildlife law enforcement contributes to increased illegal trade and wildlife crimes. The study further suggests that inadequate sub-regulations on the use dog olfaction tool may hinder the successful prosecution of and eventual deterrence of wildlife crimes. It provides a way forward on the use of dog olfaction tool in investigations and prosecution of wildlife crimes for enhance conservation of wildlife species and deterrence of wildlife crimes

CHAPTER ONE

INTRODUCTION

1.1 Historical Background

Wildlife resources have been a mainstream income generator and a source of livelihood in Kenya, Uganda and Tanzania since the pre-colonial Africa.¹ This is backed by the diverse reign of species roaming freely across borders of the continent.² Currently, wildlife resources, tourism and related activities generates a total income of 3.60 percent of Kenya's GDP in 2012, 21.71 percent of Uganda's GDP in 2011 and 30 percent of Tanzania's GDP in 2012 respectively.³ However, since the colonial era, extensive hunting, killing and illegal wildlife trade has seen tremendous reduction and extinction of some wildlife species.⁴

High rates of biodiversity destruction and eventual extinction of some species became a matter of concern as early as 1897, during colonial Africa.⁵ Furthermore, creation of sustainable management of biological diversity has become a matter of concern to the international community.⁶ The extensive recreational hunting and killing of wildlife species during the colonial raised an outcry where state governments' action was sought for creation of national parks and reserves which is significant for protection of wildlife, this also led to the creation of 1900 East African Game Regulations.⁷ The involvement of the international community was seen in the formation of London Convention for the Preservation of Wild Animals, Birds and Fish in Africa in 1900 to prevent controlled killings and ensure conservation of wild animal species in Africa.⁸

With high demand from countries such as China, there has been unprecedented rise in illegal hunting, poaching and international trade in specimens and trophies leading to a decline in

Wildlife crime and offences cause an immense loss of revenue for states and local communities. See UNEP, Fighting Wildlife crime and offences within and beyond border (CMS/Resolution 11.31, 2014).

Bolante T. Erinosho, *Environmental law in Africa* (Kraft Books Publishers 2005).

³ Moses M. Okello, Economic Contribution, 'Challenges and Way Forward for Wildlife Based Tourism Industry in Eastern African Countries' (2014) *Journals of Tourism and Hospitality*.

Threats to the habitats and species have meant a gradual decline in flora and fauna. Cf. Bolante T. Erinosho, *Environmental law in Africa* (Kraft Books Publishers 2005).

Patricia Kameri Mbote, Property Rights and Biodiversity Management in Kenya(ACTS Press 2002) 87-88

⁶ Ibid.

⁷ Ibid.

⁸ Convention for the Preservation of Wild Animals, Birds and Fish in Africa.

elephant population from 1.3 billion in 1979 to 6,000 in 1989 in Africa. ⁹ Illegal wildlife trade and crimes still persist even with introduction of CITES regulation of many species ¹⁰ and the Convention against Transnational Organized Crimes. ¹¹

Cognizant of the ramifications of this trade on threatened species, the three East African Countries have entered into agreements and collaborations aimed at stamping out illegal wildlife crime and trade. In 1968 African Convention of Nature and Natural Resources was adopted to protect animals and plant species threatened with extinction and their habitat. It also regulated trade and transport of specimens and trophies to ensure prevention of illegally acquired specimens and trophies. ¹² The Protocol for protected Areas and Wild Fauna in Eastern Africa region, to protect species and introduce cross-border cooperation as it required that parties which include Kenya, Uganda and Tanzania should coordinate their efforts for protection of Migratory species. ¹³ Recently, regional instruments have been adopted to resolve transnational environmental crimes with respect to resources within the border and those shared across borders cross-crimes resources, ¹⁴ including the Convention on International Trade on Endangered Species ¹⁵ and Lusaka Agreement on Cooperation Enforcement which was adopted in 1996 and directed seeking to regulate and reduce illegal wildlife and trade in wild fauna and flora. ¹⁶

More recently, in 2016, the East Africa member states signed an agreement committed to working together towards standardization of wildlife laws, policy development and joint law enforcement to curb illegal wildlife trade.¹⁷ The member states intend to work on establishing mechanisms to identify and undertake joint enforcement activities.¹⁸ This is in tandem with the regional and global framework such as CITES and UNCTOC which require signatories to commit to legal enforcement mechanisms.

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⁹ Bolante T. Erinosho, Environmental *law in Africa* (Kraft Books Publishers 2005). See Lemieux A. & Clarke R, 'The International Ban on Ivory Sales and its effects on elephant Poaching in Africa' [2001] 49 *Journal of Criminology*.

Convention on International Trade of Endangered Species (CITES).

¹¹ Convention against Transnational Organised Crimes.

African Convention on Conservation of Nature and Natural Resources, 1968.

Protocol for Protected Areas and Wild Fauna and Flora in East Africa, 1985.

Ed Couzens, 'Environmental Law: Good Practices from Africa and Asia' (2017) Vol II

¹⁵ Convention on International Trade on Endangers Species, 1975.

Lusaka Agreement on Operations directed at Illegal Wildlife Trade in wild Fauna and Flora, 1994.

Resolution of the East Africa Wildlife Directors Meeting, Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora 'Fighting Wildlife Crimes in Africa' (2016).

Lusaka Agreement on Operations directed at Illegal Wildlife Trade in wild Fauna and Flora, 1994.

Wildlife crimes continue to be perpetuated by poachers within local communities who kill both protected and unprotected species and those commissioned by international traders for economic gain. ¹⁹ Illegal wildlife trade in protected species was estimated at 7-23 billion USD per annum by the year 2014 globally. ²⁰ This has also seen the adoption of the United Nations Convention on Transnational Organized Crime with provisions on law enforcement and cooperation. ²¹ Further suggestions arose on a protocol to United Nations Conventions to address international wildlife crimes, enforcement mechanisms and criminalization of the actions. ²²

The unprecedented rise in illegal wildlife trade is one of the most pressing challenges that the world is currently facing. This trade has threatened to decimate decades of conservation gain. The East Africa Community (EAC) partner states have not been spared by this wildlife crime which continues to erode one of their sources of natural capital and cultural heritage. This is according to the findings of the East Africa Legislative Assembly (EALA) Committee.²³

The rise in international illegal wildlife crimes and trade deemed fit the need to use of criminal law in the enforcement of environmental law as it became significant to use sanctions to elicit compliance.²⁴ This led to coaching of international conventions such as the Convention of the Preservation of Fur Seals in North Pacific in 1911, allowing state parties to take action and enforce rules on agreement including seizure of persons and authorizing inspection institutions,²⁵ and the Bamako Convention which requires for introduction of national legislation imposing penalties sufficient to punish and deter such conduct.²⁶

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Lydia Slobodan, 'Addressing Transnational Wildlife crimes through a protocol to the UN Convention against Transnational Organised Crime' (2014) A Scoping Paper.

Ibid. See UNEP, Fighting Wildlife crime and offences within and beyond border (CMS/Resolution 11.31, 2014).

United Nations Convention on Transnational Organized Crime, 2003.

Lydia Slobodian, 'Addressing Transnational Wildlife crimes through a protocol to the UN Convention against Transnational Organised Crime' (2014) A Scoping Paper.

Zephania Ubwania, 'East Africa: Poaching Poses Security Threat in East Africa' (2016) The Citizen http://allafrica.com/stories/201609130548.htmlitizen> accessed 29 September 2017.

Charle. O. Okidi, 'Concept, Function and Structure of Environmental Law on key management concepts' in C. O Okidi, P. Kameri Mbote, & Migai Akech (eds) *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers 2008).

²⁵ Convention on the Preservation of North Fur and Seals, 1957.

Bamako Convention, 1998.

International and transnational wildlife crimes are not only on the rise, but have taken a more intense and sophisticated nature. Wildlife products are not transported in ordinary form but incorporated into different spaces and shapes. Even with different regional conventions and national legislation and law enforcement institutions in place, detection of the criminals still remains a daunting task. This has warranted the need to modern detection and investigation measures such as scent identification by use detection and tracker dogs to sniff out wildlife products and track wildlife criminals.

Historically, detection and tracker dogs have been used as military dogs to locate mines, cadaver dogs and sniffing of drugs and substances. The scientific use of dogs in detection of wildlife crimes, also called dog olfaction tool, can be quintessential if properly applied in Kenya, Uganda and Tanzania. Law enforcement contraband dogs are used to detect illegal wildlife or their parts smuggled in and out of countries around the world.²⁷ As early the 19th Century the greatest growth aspect of police dog work in the United States was deploying sniffer dogs while the European police used tracking, trailing, identification and suspect apprehension with a preference of dogs smaller in size for their detection, owing to their paramount olfactory ability with 125-300million olfactory receptors.²⁸

Dog olfaction tool has been used in European Countries since the beginning of the 20th Century, while in the United States the tool has been used for over 40 years by law enforcement agencies.²⁹ In 1893, United States Court stated that," It is common knowledge that dogs may be trained to follow tracks of a human being with considerable certainty and accuracy". ³⁰ Detection and tracker dogs have been used for detection of landmines, explosives and drugs in the military

Mary E. Cablk, John C. Sagebiel, Jill S. Heaton and CindeeVertatan, 'Olfaction-based Detection Distance: A Quantitative Analysis of How Far Away Dogs recognize Tortoise Odour and Follow it.' (2008)Sensor, 2208-2222. ²⁸ John Enisminger,"Police and Military Dogs: Criminal Detection, Forensic Evidence and Judicial Admissibility." Taylour and Francis Group(2020)

John Ensiminger, Tadeuse Jezierski and Michael McCulloch, 'Scent identification in Criminal Investigation and Prosecution: New Protocol Designs Improve Forensic Reliability.' (2010) ≥ accessed 12 April 2018.

Hodge Versus Alabama, ALA.SUP.CT.198

and law enforcement agencies.³¹ Further, in 1946 the British Military dogs were used in Palestine to detect buried arms which other detectors failed to discover.³²

The detection dogs were trained to function on alerts which are specific behavior pattern indicating to the handler that the target scent or ordour is present including by biting, scratching or standing still and should not be confused with showing interest.³³ Law enforcement dogs and handlers trained together starting with obedience lessons followed by trailing and later scent instructions.³⁴ Tracking dogs are able to detect the perpetrators or objects touched by them based on their unique scents while comparing and identifying scents depending on its training.³⁵

During law enforcement investigations, deterrence measures and searches, the scent identification line up is an investigative tool based on detection dog's high sense of smell with an olfactory ability made of 125-300million olfactory receptors. ³⁶The detection dogs are able to give results to confirm or disregard the presence of an object during investigations.³⁷ Sniffer dogs can be used at more places than just ports and airports to sniff out ivory and rhino horns as the can pick up scents up to three hundred hours old.³⁸ They also make effective members of enforcement teams as they form close bond and trust with their handlers while picking expressions and cues.³⁹ In Africa, site based protection of wildlife and anti-trafficking techniques such as sniffer dogs are widely use to curb transnational trafficking of wildlife and wildlife products, 40 when trained to identify illegal goods, among other things they scratch, sit or lie down besides the suspect container.⁴¹

³¹ Ibid

Kimberly Brice O'donell, 'Military Working Dogs, Past, Present and Future' (2014)

³⁴ Samuel.G. Chapman and Trooper Douglas C. Lancelot," Police Dogs in North America." Charles C. Thomas(1990) pp. 31

^{35 &}quot;Orsolya Orvath .'Police Dogs: Serving the Security." Conference Paper, April 3013 accessed at https://www.researchgate.net/publication/281096140 Police dogs - servicing the security 5th August 2020 36 Ibid

³⁷ Supra

³⁸ Bridgit Martin," Survival or Extinction? How to Save Elephants and Rhinos." Springer Publishers (2019) Pp.287

⁴⁰ United States Congress, Senate Committee on Foreign relations, Sub Committee on African Affairs, "The Escalating International Wildlife Crisis: Ecological, Economic and National Security Issues." 2nd Session U.S Government Printing Offices (2014)

⁴¹ Supra n6

During the Fourth Progress report to CITES for Uganda on Implementation of the National Ivory Action Plan, Uganda reported strengthening law enforcement, intelligence and trainings since the beginning of implementation of NIAP.⁴² These actions included acquisition of sniffer dogs since early 2016, training of dog handlers and deployment at the border posts and suspected ivory transit routes including training by Uganda Wildlife Authority of dogs for three months and handlers four months.⁴³ The number of arrests of wildlife traffickers has increased with the deployment of sniffer and tracker dogs in Uganda ports and points of transit.⁴⁴

In 2001, Kenya introduced the wildlife detection dogs which are deployed at Jomo Kenyatta International airport and seaports of Mombasa where the unit is supported by Kenya Wildlife Services, Immigration and Customs to inspect containers. This is an anti-poaching tool involving specially trained dogs to curb illegal shipments of specimen out of the country while targeting notorious routes for illegal trafficking. The detection and tracker dogs use remote air sampling for canine olfaction as a technique used to sniff out air samples of specimens from shipments or luggage. Further, canine units have been deployed to uncover illegal wildlife trophies at the Jomo Kenyatta International Airport in Nairobi and the Port in Mombasa. Like many other police forces, dogs are used in Tanzania for prevention and detection of crime. In Tanzania sniffer and detection dogs have been used in its border from around 2016 in January leading to 26 wildlife seizures.

The use of scent detection of tracker dogs is a powerful investigative tool. The scent lineups and searches can be valuable evidence in courts with proper procedures they can be good forensic

^{42 .&}quot;CITES SC67 National Ivory Action Plan Progress Report." Accessed at < https://cites.org/sites/default/files/eng/com/sc/67/E-SC67-13-A9.pdf 5th August 2020

Saad Kittatio Kaaya, 'Uganda: Museveni Orders use of sniffer dogs to track VIPs' (2017) < http://observer.ug/news/headlines/54627-museveni-orders-use-of-sniffer-dogs-to-track-vips.html accessed 8 December 2017.

⁴⁵ Braun. B. De Rosa "Proceedings of the conference on wildlife Detector Dogs." WWF Germany, 2012https://www.traffic.org/site/assets/files/7145/detector-dogs-hungary.pdf Pp.83

Bukula Adebayo,"Super sniffer dogs help Kenya crack down on illegal poaching." accessed at https://edition.cnn.com/2018/08/27/africa/kenya-antipoaching-technique/index.html at 6th August 2020.

4747 Ibid.

Kenya: Investing in Enforcement, https://eia-international.org/wp-content/uploads/eia_iwtp-report-kenya.pdf accessed 8 December 201).

[&]quot;Tanzania Today: A portrait of the United Republic." (University Press of Africa 1986) pp.92

Tanzania: *Investing in Enforcement*." < https://eia-international.org/wp-content/uploads/eia iwtp-report-tanzania.pdf> accessed 8 December 2017.

and judicial evidence in courts. The determination of scent detection cases have set foundational from social and judicial assumptions about the accuracy of dogs. ⁵¹Scent detection dogs are trained in a series of staged until they have higher proficiency ratios in test trials with samples prepared under rigorous standards to eliminate contamination as much as possible. ⁵²

In assessing a dog's reliability the court weighs its training, certification and field performance.⁵³ Cueing indicating dog's behavior or from training of scent identification when supported by the testimony of an expert indicating that the dog has been reliable with good training, filed records and certification with courts only accepting the handler to be the one to say whether the dog has alerted.⁵⁴

Dog olfaction evidence has recently been under more rigorous attacks and dog handlers are spending more time in courts defending the actions of the dogs in criminal investigations. ⁵⁵However, courts have generally acknowledged the detection/tracker dog evidence can be admitted provided that a sufficient base can be established and a warning of limitation issued. ⁵⁶

Recent development and emergence of theories and application of such dog evidence is increasingly being used in courts.⁵⁷ In 1943, the evidence of the Royal Canadian Mounted Police Dog whose "evidence' was given in court was upheld by the Canadian courts as corroborative evidence given by the dog in the case of *Rex versus Stokes*.⁵⁸ In 1893, tracking evidence began to be used and accepted by the United States Courts.⁵⁹ Similarly in 1953, the East Africa Court of Appeal Court of Appeal endorsed the use of dog evidence in a criminal matter. There is increased use of such detection dog evidence in courts to prosecute wildlife crimes in Kenya,

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John Ensiminger, Tadeusz Jezierski and Michael McCulloh, "Scent Identification in Criminal Investigations and Prosecutions: *New Protocol Designs Improve Forensic Reliability*." (SSRN Electronic Journal2010) accessed at https://www.researchgate.net/publication/256007339 Scent Identification in Criminal Investigations and Prosecutions New Protocol Designs Improve Forensic Reliability 13th October 2020

⁵² Ibid.

Lis alit, Anita Oberbauer, James. E. Sutton & Itiel. E. Dror, "Percieved Infallibility of Detection Dog Evidence: *Implication for Juror Decision Making.*" (Routledge Taylour and Francis Group 2019)

John Ensiminger and L.E Pappet,"Cueing and Probable: Research May Increase Attacks on and Judicial Skeptism of Detection Dog Evidence." (Michigan University State College 2011)

55 Ibid

⁵⁶ Supra n57

Bolante T. Erinosho, "Environmental law in Africa." (Kraft Books Publishers 2005).

⁵⁸ Charles F.Sloane."Dogs in War, Police Work and on Patrol." Journal of Criminal Law and Criminology VOL.66(1955) at pp.386-388

Lydia Slobodian, 'Addressing Transnational Wildlife crimes through a protocol to the UN Convention against Transnational Organised Crime' (2014) A Scoping Paper.

Uganda and Tanzania in furtherance of deterrence and conservation of wildlife resources. This is in tandem with the duty of the courts to see that the sentence imposed operates as a powerful factor in preventing commission of similar wildlife crimes.

Detection and sniffer dogs are used by law enforcement agencies and governments however, dog's reliability and probable cause may be challenged on various grounds including that the dog handler had no reason to conduct a sniff; the dog is not sufficiently qualified for an alert to justify a search, or that the handler cued the dog to alert on sniffed item. Different jurisdictions establish reliability and probable cause on different basis including those that accept canine evidence with a mere statement of the handler, accept contradictory evidence to that of the handler, or concerning a dog's training and field records before establishing probable cause as decisions maybe highly fact specific on various corroborative evidence including vehicle searches to sniffing luggage.

There is a relatively uniform standard with respect to circumstances in which tracker dog evidence can be admitted in courts against an accused persons upon proper establishment of the handler's qualification, detailed evidence on skills and reliability of the dog. As such scent line up can now satisfy the *Daubert* standard for admissibility of scientific evidence which extends from *Daubert versus Merreldow Pharmaceuticals* which is further reiterated in the U.S Supreme Court case of 2013, *Florida versus Harris* where the court stated that Evidence of a dog's satisfactory performance in a certification or training programme can itself provide sufficient reason to trust its alert. As such scent lineup and detection during investigations should ensure low error rates for positive identification to be admitted as evidence in criminal prosecutions."

During criminal trials the admissibility of expert evidence in relation to tracker dog behavior and the accuracy of their identification may not be straight forward therefore limiting what is required of the tracker dog to be admissible or have probative value. It has been acknowledged

John Enisminger, "Police and Military Dogs: Criminal Detection, Forensic Evidence and Judicial Admissibility." Taylour and Francis Group(2012) Pp.117

⁶¹ Ibid.

⁶² Supra

⁶³ Supra n57

Daubert versus Mrrelsdow Pharmaceuticals was the first case in the United States which set out the Daubert standard of admissibility of scent line up evidence which has further been applied in determining admissibility in other scent line up and detection dog evidence in other cases.

that scientific advice is important in disputes where the cases were such that the courts lacked sufficient knowledge to draw an informed decision in matters that facts were in dispute. ⁶⁵A dog has no capability of qualifying its own evidence, therefore defense counsel may raise concern on expert witness who is commonly the dog handler attaching to convictions solely based on such evidence due to its uncertainty. ⁶⁶ In the early 1554, an English judge declared that "matters may arise in our law which concern other sciences of faculties, we commonly apply for the aid of that science or faculty that is concerned". ⁶⁷ In 1970 New Zealand court in the case of *R. versus Lindsay* where it was stated that "if a dog handler can establish that a dog has been given proper training over a period of time and its behavior can indicate a reliable pointer of the existence of a scent then the evidence should be properly admitted. ⁶⁸

In 1995 another U.K case in the context of dog tracking *Piertson versus Hallway*⁶⁹ Lord Taylor held that "tracker dog evidence may be admitted if a dog hander can establish that a dog has properly trained and that over a period of time the dog's reaction indicates that it is a reliable pointer to the existence of a scent of a particular individual".⁷⁰ Admissibility of the evidence will be reliant on proof of reliability of the dog and as such be treated with caution as a dog may not be reliable and cannot be cross-examined.⁷¹

Further, in the 1994 U.K the court in the case of *Regina Versus Das Mathew Theodore Patterson*⁷² it was state that "If the dog handler can establish that a dog has been properly trained and that over a period of time the dog's reaction indicate that it's a reliable pointer to the existence of the scent form a particular individual, then that evidence should be properly admitted.⁷³ "Where the court stated that the training of the dog should have been given or the evidence of the reliability of any tests that had been carried out in controlled conditions to see

Tai Golan "Revisiting the History of Scientific Expert Testimony." Brooklyn Law Review (2008) VOLUME ISSUE 3

atPP.88accesseat<<u>https://brooklynworks.brooklaw.edu/blr?utm_source=brooklynworks.brooklaw.edu%2Fblr%2Fvo_173%2Fiss3%2F3&utm_medium=PDF&utm_campaign=PDFCoverPages> 15th_September_2020.</u>

⁶⁶ Ibid

⁶⁷ Supra n61

⁶⁸ Republic Versus Lindsay 1997 Cr App

⁶⁹ 1995) 2 Cr App at PP.530

⁶⁹ Ibid (1995) 2 Cr App at PP.530

⁷⁰ Ibid.

Rodrerick Munday and Rodrecrick C.J Munday(eds)," Evidence." (8th edn, Oxford University Press,2009)

⁷² (1994) EWCA Crim. 5 U.K

⁷³ Ibid

whether the training of the dogs had produced reliable response should have been adduced by prosecution."⁷⁴

The admissibility of dog olfaction evidence can only be admitted as circumstantial evidence. Circumstantial evidence is considered as indirect from which the existence or non-existence of a fact in issue may be inferred which should be corroborated. ⁷⁵ Circumstantial evidence is also indirect evidence is that of one fact from which a second fact is reasonably inferred, although not directly proven. ⁷⁶ In 2012, Uganda court admitted dog olfaction evidence based on the principles set out in dealing with reception of dog evidence on the case of *Uganda versus Muheirwe* ⁷⁷ where the court set the principles to guide trial court with regards to admissibility and reliance of dog evidence. The courts stated that "the circumstances relating to the actual trailing must be demonstrated while the handler is free to describe the behaviour of the dog and can give expert opinion as to the experiences which might properly be drawn from the particular action by the dog." As early as 1967 in Kenya in the matter *Omondi versus Republic* ⁷⁸, dog olfaction evidence was stated to be admissible in certain circumstances and in the nature of opinion evidence proper foundation is laid for admissibility. The admissibility of dog olfaction evidence is reliant on expert opinion and may be corroborated by real evidence including wildlife specimen obtained from scenes of crime.

1.2 Problem Statement

The increasing threat to Kenya, Uganda and Tanzania's wildlife is caused through poaching of endangered species and illegal trade of wildlife species and their parts. Despite the use of mechanisms such as the creation of conservation areas, policies and treaties to enhance conservation generally in the area and combat the wildlife crimes and trade specifically illegal wildlife trade and poaching continues. This major setback is further reflected by weak detection mechanisms and poor enforcement of national and regional provisions meant to curb illegal wildlife crimes and trade, which continues to cause wildlife conservation to suffer.

⁷⁴ Supra

Sowed Juma Mayanja, 'Circumstantial Evidence and its Admissibility in Criminal Proceedings: A Comparative Analysis of the Common Law and Islamic Law Systems' (2017) *Journal of Law, Policy and Globalization*. Vol. 67

⁷⁶ Jefferson L. Ingram," Criminal Evidence." Anderson Publishing 2015

⁷⁷ HCJ-05-CR-CN-0011 of 2012

⁷⁸ (1967) EA 802

Different forms of protecting species including listing of species, creating reserves, community conservation and regulation of trade are measure which has been taken towards the protecting wildlife species.⁷⁹ Several legislations and conventions have been laid to protect wildlife, however if they are not complied with, there must be a substantial level of enforcement for sustainable wildlife protection.⁸⁰Regulations for protection of wildlife without considering the reality of weak enforcement measures may be weak render such regulations blunt environmental instruments.⁸¹

Although different measures have been put in place, wildlife trade and killings of unprotected species continue to be on the rise, thusly, detection and enforcement mechanisms are further needed to fulfil the means to wildlife conservation in Kenya, Uganda and Tanzania. This has seen the need to introduce technological and law enforcement mechanisms of detection and tracker dogs during investigations and arrest of criminals. The dog olfaction evidence can in turn be admitted in courts of law for probable prosecution of criminals.

The involvement of KWS, UWA and TAWA in setting up dog units at points of entry and exit points out the increasing usage of dog olfaction as a tool in the investigations, enforcement and detection of transnational wildlife crimes in an attempt to curb illegal wildlife trade and poaching, there are no clear regional guidelines nor national legislation governing the admissibility of the detection dog evidence in court. Similarly, only a handful of states have the requisite statutory frameworks for the usage this tool generally. Even in instances of success detection and arrests, the admissibility such evidence is not anchored on a uniform legal and institutional frameworks across Kenya, Uganda and Tanzanian Courts.

Evidence of the conduct of a dog tracking or sniffing from a scene of crime is properly admissible if the dog's sufficient training and reliability is established, the trainer/handler has proper qualifications, the circumstances indicate reliability of evidence and proof of sufficient

Bolante T. Erinosho, "Environmental law in Africa." (Kraft Books Publishers 2005).

Ibid.

Michael Faure and Goran Skogh, 'The Economic Analysis of Environmental Policy and Law: An Introduction' (2004) *Journal of Land Use & Environmental Law* Vol. 19, No. 2 (SPRING, 2004), pp. 597-600.

chain of custody for real evidence.⁸² Detection dog evidence is admissible as circumstantial evidence and as such must be corroborated by other evidence which may include video evidence and physical evidence such as wildlife specimens obtained during investigations. The physical evidence i.e. wildlife specimen must be shown to be genuine and authentic by proof careful management and proof of sufficient chain of custody.⁸³ Detection dog evidence is admissible in courts however it is reliant on expert opinion evidence of the handler. This necessitates the need to be backed by statutory provisions in legislative and institutional frameworks especially in criminal law provisions and rules of evidence.

Despite the use of detection and tracker dogs as a law enforcement tool in carrying out investigations of transnational wildlife crimes in Kenya, Uganda and Tanzania, there are inadequate statutory and legal frameworks especially with regards to criminal law procedures and laws of evidence applicable to dog olfaction evidence for purposes of investigations and prosecution of offenders in courts. Courts have a significant role in ensuring compliance through sentencing for purposes of deterrence generally and specifically, however, adopting uniform regional and national legal framework that takes these factors into consideration can lead to a reduction of the number of case loss during trial; enhance protection of endangered species, while strengthening cooperation amongst Kenya, Uganda and Tanzania..

1.3 Research Objectives

The overall objective of the study is to use existing laws and policies in place for transnational wildlife law enforcement to pinpoint the gaps and challenges in the legal and institutional frameworks Kenya, Uganda and Tanzania. The study aims to recommend measures to address these gaps and challenges by incorporating the use of dog olfaction as tool for enhancing transnational wildlife law enforcement and deterrence of wildlife crimes in Kenya, Uganda and Tanzania.

Specific Objectives

i. To assess the legislative and institutional frameworks on dog olfaction as a tool in transnational wildlife law enforcement in Kenya, Uganda and Tanzania.

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Jefferson. L. Ingram, "Criminal Evidence" Anderson Publishing 10th Ed at PP. 242

⁸³ Ibid

- ii. To determine the extent of application of regional and national laws on dog olfaction as a tool in detection and investigations of transnational wildlife crimes.
- iii. To interrogate the capacity of the law enforcement and prosecution departments in presentation of dog olfaction evidence in the courts for prosecution of wildlife crimes.
- iv. To suggest measures to enhance transnational wildlife law enforcement by means of dog olfaction tool.

1.4 Research Questions

In order to meet the objectives specified above, this study attempts to answer the following questions.

- i. What are the national and regional legal frameworks on detection dogs as a tool for transnational wildlife law enforcement in Kenya, Uganda and Tanzania Courts, if any?
- ii. What is the extent of application of regional and national laws in detection and investigations of transnational wildlife crimes using detection dog as a tool in investigations and detection in the three countries?
- iii. What is the capacity of prosecutors and law enforcement institutions in obtaining and presenting dog olfaction evidence in courts for prosecution of wildlife crimes?
- iv. What measures and standards can be adopted to address the challenges in transnational wildlife law enforcement and prosecution of wildlife crimes by enabling the use of dog olfaction tool?

1.5 Justification

There exist several laws that have been used in the protection of wildlife species however implementation and enforcement of these laws still remains an issue. The multi-faceted nature of international environmental laws makes implementation and enforcement of environmental legislations daunting and as such requires the integration of environmental and criminal laws.

This study is significant as it looks into the effectiveness of transnational wildlife law enforcement as a measure for wildlife conservation which is important both for social and economic reasons. There is a gap in the study for enforcement using detection and tracker dogs for deterrence of wildlife crimes which needs to be effectively attempted. The study also brings

into play the significance of criminal law and sanctions and how its effectiveness in protection of wildlife through prosecution and sentencing of individuals charged with wildlife related crimes.

With respect to Kenya, Uganda and Tanzania, very little research has been done on transnational wildlife law enforcement and dog olfactory technology as a tool in investigation of wildlife crimes. However, wildlife resources are a huge contribution to the economy and as such they have to be protected by ensuring the enactment and enforcement of legislation investigation on using detection dogs and prosecution of wildlife crimes using dog olfaction evidence in courts.

This study is carried out with an expectation to make recommendations that would be important in the enforcement of wildlife law using detection and tracker dogs to create deterrence of wildlife crimes and improve wildlife conservation generally in Kenya Uganda and Tanzania.

1.6 Theoretical Framework

The theory informing this study is premised on the argument that statutory provisions including national and regional laws should give clear guidance on the criminal law rules and law of evidence on the use of dog olfaction as a tool in investigation and prosecution of wildlife crimes respectively. The legislative and institutional frameworks should be a means of deterrence of wildlife crime by creating preventive and punitive measures.

The study is underpinned on the deterrence theory. The proponent of deterrence theory argue that society may choose to obey or violate laws based on the capacity of punishment or gain from their violations.84Professor Kameri Mbote defines deterrence as "the coercive power of the state to impose punishment with expected outcome of deterring potential offenders from engaging in a particular activity."85 She reiterates that "deterrence can be created by intentionally stigmatizing actions or conduct to shame the convicted offender specifically and deter others from risking similar disgrace."86

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⁸⁴ Thomas Hobbes, "Deterrence theory." (2010)

Ibid. Ibid.

There are different juristic opinions asserting that deterrence is the underlying basis for inflicting punishment with jurisprudential and comparative analysis of different legal systems advocating for punishment as deterrence.⁸⁷ It is posed that the threat of criminal penalties provides strong incentives to comply with the law.⁸⁸

Thomas Hobbes posits that humans are rational enough and their self-interested nature would lead to crime. He points out that "Humans are rational enough to realize that self-interested nature of people would lead to crime and inevitable conflict due to the alienation and exclusion of some member of society," Thomas Hobbes reiterates that role of the state is to enforce the social contract but crimes are still likely to happen if governments perform their duties and as such punishment given for a criminal offence has to be bigger than the ill-gain achieved from the offence. 90.

Use of criminal sanctions as a deterrent measure of environmental crimes is continuously gaining widespread acceptance as seen by the increased input by law enforcement agencies. Penalties and jail terms determine the deterrent effect of legislation and show the seriousness of pursuit of offences. This is with the view to increase prosecution rates related to wildlife offences in court which in turn creates deterrence. The application of dog olfaction tool is for the purposes of detection of illegal wildlife crimes after which the evidence is used in courts for prosecution with an aim of decimating the illegal wildlife trade.

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Theoretical Basis of Punishment in International Criminal Law.

Kameri Mbote, 'Use of Criminal Law in Enforcing Environmental Law'in C. O Okidi, P. Kameri Mbote, Migai Akech *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers 2008).

⁸⁹ Ibid.

Thora Gutnick Allen, 'Thomas Hobbes' Theory of Crime and Punishment' (A Degree of Doctor of Philosophy, Queen Mary University of London, 2016).

Gavin Hayman and Duncan Brack, 'International Environmental Crime: The Nature and Control of Environmental Black Markets' (2000) < http://ec.europa.eu/environment/legal/crime/pdf/env_crime_workshop.pdf> accessed 19 April 2018.

⁹² Ibid.

Specific and general deterrence are significant in criminal law to regulate environmental offences particularly those that are meant to curb commission of criminal offences. ⁹³ It is argued that environmental protection using criminal law and by severe sanctions is akin to those used to protect property and honour. ⁹⁴ General deterrence is meant to prevent crimes by the members of the society as states punishment is meant to serve as an example and create awareness and fear of official sanctions like hefty penalties, while specific deterrence is meant to prevent the same individual whom punishment is inflicted upon from committing any future crimes. ⁹⁵ Proponents of deterrence argue that punishment is severe, certain and swift thusly any rational human being would without doubt measure the gains and losses and would be deterred from committing the crime. ⁹⁶

Critics of deterrence theory are of the view that rational actor economic model is premised on the argument that individuals are obvious calculators of pain versus gain as criminal acts can be spontaneous and not weighed by the consequences beforehand. Jeremey Bentham critics' deterrence theory by noting that punishment in excess of what is necessary to deter people from violating the law is unjustified. Secsare Beccaria points out that laws should provide the greatest happiness for the greatest number in challenging the rights of the state to punish crimes as excessive severity is only likely to increase crimes. It is further argued that the criminal liability model is not effective enough for detection of all criminal offenders, as environmental regulations are created without consideration of enforcement mechanisms.

⁹³ LeRoy Paddock, Du Qun. Louis J. Kotze. David L. Markell, Kenneth J. MarkwithandDurwoodZaelke, *Compliance and Enforcement in Environmental Law; Towards More Effective Implementation* (Edward Elgar Publishers 2011).

Michael Faure, "The Economic Analysis of Environmental Policy and Law; *An Introduction*." (Edward Elgar Publishers 2003).

⁹⁵ Ibid.

⁹⁶ Ibid.

Thomas Hobbes, 'Deterrence theory' (2010)

https://marisluste.files.wordpress.com/2010/11/deterrence-theory.pdf accessed at 15 August 2020.

⁹⁹ Supra n83

Michael Faure, "The Economic Analysis of Environmental Policy and Law; *An Introduction*." (Edward Elgar Publishers 2003).

mechanisms may be weak or even absent rendering environmental instruments blunt as environmental laws have multifaceted features that are not easy to frame under criminal law.¹⁰¹

1.7 Research Methodology

The research adopted mixed research method. Quantitative method was relevant in discussing and analysing the case laws that emanated from arrests made after detections by dogs during investigations and searches at the ports, airports and parks to realize the role of the law enforcement officers in use of dog olfaction for law enforcement and the courts in realizing prosecutions of such transnational wildlife criminals. Quantitative method was used to determine the number detections and percentages of arrest made using detection and tracker dogs at the various units in Kenya, Uganda and Tanzania. The quantitative analysis was drawn using excel to determine the percentages and numbers. The data was then presented in bar graphs showing percentages and numbers from respondents.

In order to gather sufficient information for this research paper, the researcher used both primary and secondary data collection methods as the sources of the data. Primary data included Non-participant observation method where the researcher was involved non-participatory observations of behavioural activities of detection dogs during inspection, tracking and detection at the port and parks as they are carried out. The observation on behavioural change was to determine the ability of the dog to sniff, track or detect wildlife products during the demonstrations depending on the training received while working with the dog handlers. The researcher carried out structured personal interviews to enable collection of the required information from the respondents on the areas of practice and their knowledge on the topic. This entailed the use of set predetermined questions laid down which were used to interview respondents while recording of their responses.

The study was carried out in Kenya, Uganda and Tanzania. The researcher visited KWS offices in Nairobi, KWS Dog Unit at Jomo Kenyatta International Airport and TAWA offices in

KameriMbote, 'Use of Criminal Law in Enforcing Environmental Law' in C. O Okidi, P. KameriMbote, Migai Akech *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers 2008).

Morogoro and the Ministry of Natural Resources in Dar es Salaam, UWA offices in Kampala and UWA dog unit in Entebbe. The researcher dispatched questionnaires to the respondents as a way of collecting data required. These included prosecutors, investigators and dog handlers who responded to the structured questions.

Secondary data included analysis of the data on topics with relevant information on the use of detection dogs and transnational wildlife law enforcement. The information was found in analysis of books, journals, articles and other authoritative writings. The researcher also used existing and determined case laws from the three countries where there has been prosecution of transnational and national crimes that relied on dog olfaction evidence.

1.8 Scope

The scope of the study shall focus on the wildlife crimes prosecutors and canine units under the wildlife authorities in Kenya, Uganda and Tanzania. This study is further premised on the key assumptions that legislations on use of detection dogs as a tool in investigations and rules on admissibility of dog olfactory evidence are vague and inadequate within the Kenya, Uganda and Tanzanian Courts, making the prosecution of the cross-border wildlife crimes daunting.

1.9 Limitations

The key impediment that the researcher encountered in the course of this study is the limited availability of both primary and secondary information on this subject. There existed limited studies that have been undertaken on the use of dog olfaction as a tool in transnational wildlife law enforcement in Kenya, Uganda and Tanzania. However the researcher endeavoured to obtain all the relevant information to enable presentation of a credible research at the end of the study.

1.10 Chapter Breakdown

Chapter One introduces the general background of the research topic, area of study and the aims of the research. It also covers the background of the study, statement of the problem, objectives of the study, research questions, theoretical framework, literature review, justification of the study, hypothesis, research methodology, limitations of the study and the chapter breakdown.

Chapter two focuses on Literature Review.

Chapter Three examines the national and regional legal frameworks governing the detection and tracker dogs as a tool in transnational wildlife law enforcement. It analyses the institutional frameworks, case laws and prosecution of wildlife offenders using of dog olfaction evidence in Kenya, Uganda and Tanzania. It further asses the gaps and challenges in legislative and institutional frameworks on the use of detection dogs as a tool in transnational law enforcement in Kenya, Uganda and Tanzania.

Chapter Four looks into the practices by law enforcement officer including prosecutors, investigators and dog handlers using detection and tracker dogs in wildlife law enforcement. It sums up the findings and responses gathered from the field study and the view of the interviewees on the efficiency of the use of detection dog as a tool in transnational wildlife law enforcement.

Chapter Five entails the summary of findings, conclusion and recommendations. It concludes and makes recommendation on the use of tracker and sniffer dogs in detection and deterrence of transnational wildlife crimes. It further points how prosecutions and convictions of transnational wildlife criminals on the basis of the dog olfaction is necessary while giving the way forward.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature discusses the use of detection dogs in transnational wildlife crimes. It sought to answer the research questions including the legislative frameworks on dog olfaction tool in transnational wildlife crimes, the extent of regional and national laws on dog olfaction tool in detection and investigations and to analyze the capacity of prosecution in presentation of dog olfaction evidence in courts. The literature review focuses on three major thematic areas including: Wildlife Conservation, Transnational Wildlife Crimes and Law Enforcement and Prosecution of Wildlife Crimes using Dog Olfaction Evidence.

2.2 Wildlife Conservation

This literature focuses on the underlying goal of the study which is to further enhance wildlife species protection and conservation. **Professor Kameri Mbote** in the book,' *Property Rights and Biodiversity Management in Kenya; The Case of Land Tenure and Wildlife*.' She posits that wildlife protection became a concern in East Africa as early as 1987 amongst the colonial administrator. This pointed out the significance of cross border cooperation in sustainable wildlife management amongst neighboring countries. She reiterates that management of wildlife resources is of significance to both local and international community despite the notion of state sovereignty. **Kameri Mbote** in analyzing weak detection mechanisms argues that it continues to be a cause of wildlife conservation. This literature is significant as it points out gaps in detection mechanisms despite cross border cooperation, however, it doesn't provide for further measures on detection. This study seeks to analyze the enforcement and detection mechanism which in this case is the use of detection dogs while filling the gap on the literature.

Legislative frameworks have been one measure for protection of wildlife and deterrence of transnational wildlife crimes. **Charles Okidi** in his Chapter on *Concept, Function and Structure*

Patricia Kameri Mbote, 'Sustainable Management of Wildlife Resources in East Africa: A critical analysis of the Legal Policy and Institutional Frameworks' (2005) *IELRC Working Paper*.

of Environment,² analyses treaties and agreements on Flora and Fauna management, protection and conservation. This Literature analyzes CITES and other sub-regional agreements under the countenance of the EAC. However, this literature fails to mention measures on implementation and enforcement strategies and the challenges thereof. This study seeks to fill this gap by analyzing the suitability of tracker and detection dogs in conservation of wildlife and transnational wildlife law enforcement.

Nyokabi Gitahi on the Chapter "7 Easements and Wildlife Conservation in Kenya in the book "Land Use for Sustainable Development" identifies wildlife as an important resource in Kenya's economic development. She posits that unregulated land use interferes with wildlife habitat migratory routes and general existence making it necessary to find mechanisms for conservation of wildlife. Nyokabi reiterates that the use of environmental easements as a measures to conserve wildlife outside parks. This literature highlights the significance of wildlife conservation while informing this study. Further, H.H.T Prins, Jan Gece and Thomas Dolan in their Book Wildlife Conservation by Sustainable Use, the authors focus on preservation plan of actions in African countries mainly focusing on protected areas, however, still point out that both inside and outside parks wildlife is decreasing in large numbers in most African countries. This argument informs this study as it points out the need for further measures required for conservation of wildlife in Kenya.

Kaggwa R. Hogan. R and Hall B 6 in the Article *Enhancing Wildlife's Contribution to Growth, Employment and Prosperity* 7 the authors point out that Uganda's biodiversity has been declining with twenty five percent of the wildlife becoming extinct over the decades. This has continued to hinder the contribution of wildlife as a means of poverty reduction. They argue that to enhance conservation there is need for improved coordination of all stakeholders at the national, district and lower governance. This literature focuses on conservation of wildlife as a measure for

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Charles Okidi, 'Concept, Function and Structure of environmental Law on Key Management Concepts' in C. O Okidi, P. Kameri Mbote, Migai Akech *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers 2008).

Mbote P.K, Lye .H.L .Nolor.J. Gitau. N , "Land Use for Suatainable Development (2010)

⁴ Ibid.

⁵ Ibid.

⁶ Kaggwa R., and Hall B., 'Enhancing Wildlife Contribution to Growth Employment and Prosperity' (2009) UNDP/NEMA/UMEP Poverty Environmental Initiative Uganda.

⁷ Ibid.

Poverty Eradication Plan (PEAP) in Uganda. The author posits that Uganda's Wildlife Protected areas were severely encroached and their wildlife population reduced as a result of poaching and wildlife's habitat destruction. The study focuses coordination of stakeholders and decline of wildlife species and its economic impacts on the community. It however lacks in enforcement and investigation measures.

Professor Patricia Kameri Mbote in her paper Sustainable Management of Wildlife Resources in East Africa attributes that the approach that is mostly used by African countries in Wildlife Management and Conservation is by setting protected areas for wildlife leaving a challenges on Wildlife that area outside protected areas. The relevance of this literature is on the analysis of national and legal regimes and institutional frameworks where the author reiterates that wildlife law and policies in East Africa provide limited tools for achieving conservation goals. This literature also focuses on management of transboundary natural resources with the author pointing out that the conceptual and normative frameworks for environmental management draws largely from international environmental agreements while domestic laws are not comprehensive. This literature advocates for consideration of community interest and participation in wildlife conservation to be included international environmental agreements and domestic laws. The gap in this study is that it doesn't focus on law enforcement with regards to wildlife outside protected areas.

Further on Community based Conservation (CBC), **J.R Kidegesho** *on Who Pays for Wildlife Conservation in Tanzania and Who Benefits?*⁸ He argues that land alienation, forceful eviction and damages to locals' properties leads to continued resentment of wildlife by local communities. ⁹He states that economically, the government and wildlife conservation agencies benefit more resources with minimal benefits trickling down from communities. ¹⁰This literature leans more towards community base conservation (CBC) and acceptance of wildlife rather than enforcement of legislative frameworks for deterrence of further crimes. This study seeks to address this gap.

Kidegesho J.R, 'Who Pays for Wildlife Conservation in Tanzania and Who Benefits?' (2008)

⁹ Ibid.

¹⁰ Ibid.

Odote, Ochieng and Makoloo in their paper *The Implications of Property Rights for Sustainable Management in Kenya* discuss the legal frameworks for sustainable use of wetlands in Kenya. The significance of this study is that it informs the need of adequate legislative frameworks and sectoral laws in sustainable conservation. However, this literature only analyzes regulations and provisions on conservation without aspects of law enforcement measures on conservation. This study seeks to fill the gap by recommending enforcement and detection measures to further conservation and management of wildlife resources. Further, **Muigai**, **Wamukoya and Kariuki**¹² on their book on *Natural Resources and Environmental Justice in Kenya* argue that natural resources is a major contributor socio-economic cultural and political development, The literature is significant as the authors argue that current legal frameworks are not adequate to enable sustainable development nor achieve environmental justice in Kenya. It however does not inform this study on issues pertaining to law enforcement and investigation measures in transnational wildlife law enforcement which this study seeks to address which this study seeks to address.

William D. NewMark and John L. Hough in Conserving Wildlife in Africa¹³ posit that Integrated Conservation and Development Projects (ICPDS) are considered effective measures as they address problems of social injustice by developing supportive relationships with the communities. ¹⁴ They authors state that ICPDs is more efficient as other methods of management have no relationships with local communities. They further reiterate that ICPDS are more efficient as other methods of management have not been effective in curbing poaching and have infringed relationships with locals including fence and fines approach. This literature is significant in informing this study as alternative approach which attempts to connect conservation within protected areas to social economic developments outside the protected areas. This literature however confines conservation measures to ICPDS as the only effective measure. It does not recognize law enforcement and detection measures outside protected areas as a possible effective means of conservation of wildlife. The gap in this literature is that it focuses

Odote . C, Ochieng.B and Makoloo. O, "The Implications for Property Rights for Sustainable Management of Wetland sin Kenya" (2008)

Kariuki M., Wamukoya D., Kariuki F., 'Natural Resources and Environmental Justice in Kenya' (GlenwoodPublishers2015)

William D., New Markand, John L. Hough, 'Conserving Wildlife in Africa: Integrated Conservation and Development Project and Beyond' (2000)

Ibid.

on conservation of biological diversity within protected areas leaving out the unprotected areas while poaching and wildlife crimes is on the rise in unprotected areas. This study seeks to fill such gaps by recommending law enforcement measures including detection of crimes both within and outside protected areas.

The need for protection of wildlife species outside protected areas calls for implementation of modern and enhanced tools like detection dogs in transnational wildlife law enforcement to minimize illegal wildlife trade and crimes. Watson, Fitzgerald and Gitahi¹⁵ on their paper Expanding Options for Habitat Conservation outside Protected Areas discuss the options applicable to conservation of wildlife outside protected areas. They argue that protected areas alone can't protect and sustain wildlife species in Kenya. This argument informs this study as it aims to recommend for deterrence of wildlife crimes using detection tools both within and outside protected areas in Kenya, Uganda and Tanzania. There is gap in this literature as it only analyzes mechanisms using easements to enhance conservation outside protected areas while leaving out detection measures and transnational wildlife law enforcement which this study sought to address.

2.3 Transnational Wildlife Crimes and Law Enforcement

This literature focuses on detection and investigations to answer the question on the adequacy of legislative provisions and sub-regulations on detection dogs in transnational wildlife law enforcement. The rise in transnational wildlife crimes creates the need for further measures in detection and prosecution of these crimes. According to **UNODC**¹⁶ wildlife and forest crimes involve the illegal trade, importation, exportation, possession, processing, acquisition, and consumption of wild fauna and flora in contradiction with national or international law.¹⁷ Responses on transnational organized crimes and illicit trade varies according to regions, however, few numbers of prosecutions are a direct indication of the little priority given to transnational organised crimes.¹⁸

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Watson. R, Fitzgerald H.K, and Gitahi. N," *Expanding options for Habitat Conservation Outside Protected Areas in Kenya: The Use of Environmental Easements*. "(Technical Paper No.2 African Wildlife Foundation, 2010)

UNODC, 'Global Programmes for Combating Wildlife and Forest Crimes' (2014)

https://www.unodc.org/documents/Wildlife/WLFC_Annual_Report_2014.pdf> accessed 28 October 2019.

¹⁷ Ibid.

¹⁸ Ibid.

David Karanja¹⁹ in his book *The Role of Kenya Wildlife Services in Protecting Kenya's Wildlife* reiterates that transnational wildlife crimes have been on the rise in the recent past which in turn has a negative impact on the local communities and their livelihoods. He argues that these environmental and wildlife crimes are a threat to national, regional and international conservation efforts. This literature focuses on the institutional frameworks and the capacity of the government agencies in conservation of environment while addressing environmental and wildlife security issues at the national level. The gap in this literature is that it looks at conservation of the environment at the community level and does not indicate the implications of weak legislative frameworks. This study addresses weak legislative frameworks recommending documentation of enhanced enforcement measures outside protected areas.

Jafari Kidegesho²⁰ in his book *Reversing the Trend of Wildlife Crimes in Tanzania* states that the continuous rise in wildlife crimes has seen it gain significant attention and prominence globally stirring environmental discussions and debates with the intention of providing and enhancing efforts to combat this crime. He identifies some of the drivers of wildlife crimes to include poverty, high profit margins from illegal wildlife trade, corruption, inadequate institutional frameworks and poor governance. This literature focuses on the nature of wildlife crimes in Tanzania including its drivers and implications. These gaps in this literature on legislative frameworks and enforcement measures to be filled in this study.

Saba Kassa, Jacopo Costa and Claudia Baez Camango in the paper Corruption and Wildlife Trafficking²¹ describe illegal trafficking as "low risk and high reward business" with low rates of detection and arrests which doesn't get any easier with low penalties when criminals get prosecuted. The authors' analyses impacts of wildlife trafficking including fueling poverty and inequality while hampering development and creating security challenges. The gap in the literature is that it focuses on economic impacts of illegal wildlife trade while pointing out weak enforcement; however, it does not recognize any tools that could be a source of enhancing weak law enforcements to curb illegal wildlife trade. This study sought to fill the gap by recommending law enforcement tool as a means of curbing illegal wildlife trade which in turn

Karanja. D, "The Role of the Kenya Wildlife Service in Protectiong Kenya,s Wildlife." (Springer 2012) 1

Kideghesho R. 'Reversing the trend of Wildlife Crime in Tanzania: Challenges and Opportunities. "
(Springer 2016) 25

Saba. K, Jacopo. C, Claudio Baez Camango, 'Corruption and Wildlife Trafficking: Exploring drivers, facilitators and bet works behind illegal wildlife Trade in East Africa' (2018) *Working Paper 30*.

Claudia point out the nexus between corruption and illegal wildlife trade. The authors discuss that corruption can enable illegal wildlife trafficking in many ways including facilitation of crimes along illegal trade routes, illegal issuing of trade and hunting licenses, bribery of custom officials and law enforcement officers to illegal payments to issue export certificates. This literature informs this study as the findings of the study leans on the fact that dogs cannot be corrupted and as such will make effective law enforcement tool without the element of corruption.

Lydia Slobodan in the Scoping Paper on "Addressing Transnational Wildlife Crimes through a Protocol to the UN Convention against Organized Crimes" mentions the gravity of international wildlife crimes and transnational illegal wildlife trade. She states that there is potential of criminal law to address international wildlife crime. She states that there has been an established connection between transnational wildlife crime and organized crimes and those global instruments and processes that attempt to curb transnational wildlife crimes which have been put in place. This Literature does not address the detection and enforcement challenges or create alternative deterrence measures which gap will be informed this study.²³

Harrison M. et al on the article on *Review of the Evidence on Drivers and Impacts in Uganda*,²⁴ the authors' emphasis that wildlife crime has become an international concern which requires international attention in a period of years because of increased poaching owing to rising demands of wildlife products and increased levels of militarization of criminal activities. They reiterate that wildlife crime including international trade in endangered species seemingly lucrative transnational crime which affects national security and both local and national development.²⁵ The literature focuses on socio-economic impacts of wildlife crimes which significantly inform this study, however, leaves a gap on transnational law enforcement to curb wildlife crimes which is a gap this study seeks to fill.

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Lydia Slobodian, 'Addressing Transnational Wildlife crimes through a protocol to the UN Convention against Transnational Organised Crime' (2014) A Scoping Paper.

Ibid.

Harrison. M, et al, 'Wildlife Crime: A review of the Evidence on drivers and impacts in Uganda' (2015) IIED.

²⁵ Ibid.

Lorraine Bliott and William Schnaedla on their Handbook of *Transnational Environmental Crimes* states that transnational wildlife crime should have wider focus including local circumstances and areas as the contraband are products of particular habitats from specific sites.²⁶ The literature analyzes criminal networks in transnational environmental crimes and analyses patterns of organizational and transaction terms while shifting from law enforcement's focus on end points and kingpins to the owners of warehouses, individuals involved in concealments and cross-border transportation.²⁷ It focuses on wildlife crime facilitators as the underlying issue besides inadequate legislative frameworks without which wildlife crimes would not be possible. However, enforcement mechanisms are not analyzed in this literature which this study sought to address.

Pierre and Sven in the book *International Law and Transnational Organised Crimes* reiterates that increased scale of wildlife crimes has seen the urgent need for more collaboration and cooperation between government and law enforcement agencies.²⁸ They state that poaching by rebel forces is on the rise in several game parks that use transit routes through Kenya and Uganda to facilitate illicit wildlife trade. ²⁹ This study focuses on impacts of wildlife crimes on states and societies while advocating for compliance, control and cooperation as measures of enhances deterrence of illegal wildlife trade and crimes. The literature points out on control and prevention of wildlife crimes however it does not address law enforcement mechanisms when wildlife crimes arise. This study seeks to fill this gap.

The United States Congress' report on *International Wildlife Trafficking Crisis* determined that in Africa mechanisms including area–based protection of wildlife and anti- trafficking dogs must be used to address international wildlife crisis.³⁰ They reiterate that measures taken in Tanzania including Ruaha National Parks with the largest population in East Africa are capacity building of rangers and new technologies. Another measure in Uganda is shutting down transboundary trafficking routes especially in Virunga and Murchison landscapes. This literature informs this

Lorraine B., and William H. S., (Eds) *Handbook of Transnational Environmental Crime* (Edwards Elgar 2016).

²⁷ Ibid

Pierre H., and Sven P., (Eds) *International Law and Transnational Organized Crimes* (Oxford University Press 2016) 266.

²⁹ Ibid.

United States Congress, 'Senate, Committee on Foreign relations. Subcommittee on African Affairs' (2014) International Wildlife Trafficking Crisis: Ecological Economic and National Security issues, 47.

study as it focuses on law enforcement measures including trafficking dogs and capacity building of rangers.

There is a constant endeavor to develop new measures to protect wildlife species and natural resources in Africa.³¹ **Professor Kameri-Mbote** in her chapter on "Use of Criminal law in Enforcing Environmental Law"³² defines environmental crimes to include the destruction of wildlife species. She discusses the relevance of criminal law in the enforcement of environment conservation with a focus on arguments for and against compliance. She states that criminalization of environmental violation draws on three concerns including compliance, culpability and deterrence. Professor Kameri -Mbote states that the threat of criminal sanctions provides a strong incentive for compliance with the law. This literature is important as it provides the arguments for the use of criminal law as a basis for prosecution of wildlife crimes. There is advocacy for effective enforcement of penal provisions in multilateral environmental agreements under municipal laws as environmental crimes have extended beyond national borders. This literature however lacks arguments for alternative means of detection and enforcement mechanisms which will be introduced in this study by use of detection and tracker dogs for transnational wildlife law enforcement.

World Banks' analysis on *Environmental and Natural Resources Global Tools* ³³ points out that the high demand of illegal products has facilitated the rise of illegal wildlife trade. The authors reiterate that investigative tools and resources can advance law enforcement response during investigations. These tools may include intelligence analysis to allow identification connecting persons of interest to crimes committed. This literature is significant as it analyses tools to investigative and enhance transnational wildlife law enforcement and as such it informs this study. The gap in this study is that includes other investigation tools including computers, internet access, mobile phones, radios and patrol vehicles as techniques to enhance enforcement responses. However, this it omits does not include scientific dog olfaction as a tool which this study recommends to enhance increases responses.

William D. Newmark, John L. Hough, 'Conserving Wildlife in Africa: Integrated Conservation and Development Project and Beyond' (2000) 50 *Bioscience*.

Kameri Mbote, 'Use of Criminal Law in Enforcing Environmental Law' in C. O Okidi, P. Kameri Mbote, Migai Akech *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers 2008).

World Bank, 'Environmental and Natural Resources Global Tools'

Jasper Francis and M.L.R Smith³⁴ in the chapter on 'Militarized Response to the Illegal wildlife Trade' talk about the use of deployment of violence including militarization and green violence in combating wildlife crimes. He talks about military conservation with broader national security in a manner which is echoed in today's rhino and ivory wars in South Africa and Kenya respectively. The significance of this literature is that it addresses measures of combating Illegal wildlife crimes and trade. The literature however does not provide for use of detection and tracker evidence obtained for prosecution of wildlife crimes which is addressed in this study.

2.5 Detection Dogs and Prosecution of Wildlife Crimes Using Dog Olfaction Evidence.

Sniffer and detection dogs are continually being used for their olfactory skills by police, security, military and forensic science owing to the value of the canine nose.³⁵ Further, **Boxall J.** in *Understanding Surveillance Technologies: Spy devices, Privacy, History and Applications* the author states that training animals to recognize and respond to particular scents enables it to have selective scents like the ability to select scents of wildlife species and products.³⁶ The Article analyses laws enforcement and detection using wildlife forensic laboratory and scientific scent identification. It has gaps on recommendations of legislative provisions for their law enforcement mechanism which this study addresses as it recommends documentation of detection dogs as a tool in existing regional and national legislative frameworks.

Michael Hochrein in his book *Canine and Scent Identification* posit that the significant aspect of incorporating a qualified search dog team into law enforcement investigations is preparation through cross-training including periodic test of the dogs and the tests of the dogs and their handlers. ³⁷ They further state that crime scene investigators should request for documentation of finds and failed searches by the dogs and the handler as a team for verification and enable further trainings. ³⁸ The authors state that while considering dog searches the conduct, background, behavior and ethics of handlers are usually scrutinized in courts and by law enforcement

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Tuesday Reitano Luwa, Bud Riuz-Benitizde Lugo (Eds), *Militarised Response to TransNational Organised Crime: The War on Crime* (Palgrave Macmillan Publishers 2017).

Tadeusz Jezierski, John Ensminger, and L.E. Papet (Eds), *Canine Olfaction Science Law: Advances in Forensic Science, Medicine, Conservation and Environmental Remediation* (Taylor & Francis Group 2016).

Boxall J., Understanding Surveillance Technologies: Spy Devices, Privacy, History and Applications (Taylor & Francis Group 2010) 91.

Michael Hochrein, 'Canine and Scent Identification' (2019) > accessed 28 October 2019.

³⁸ Ibid.

authorities. This literature however doesn't analyze legislative frameworks and sub-regulations on detection dog as a tool in transnational wildlife law enforcement.

Prosecution of transnational wildlife crimes requires proper collection, management and presentation of evidence in court. In order for detection dog evidence to be admissible in courts the chain of evidence must be well managed and evidence presentation is able to create proof beyond reasonable doubt. **Steffano Ruggeri** in his book³⁹ Gathering Evidence in any transnational crime creates the need to have successful and effective criminal investigations and prosecution thusly facing transnational crime, criminal justice cannot be strictly confined to national territories. He points out that the need to access and use evidence gathered in foreign jurisdictions when a suspect has fled a country, or when a witness lies abroad. 40 He further states that for evidence to be successfully used in the proceedings, gathering criminal evidence must follow legal and procedural rules for it to be admissible in court. In as far as legal rules on evidence vary from state to state and various inconveniences may frustrate the effective criminal prosecution in transnational cases mutual legal assistance should be considered.⁴¹ The importance of this study is that it points out the possibility of evidence gathering abroad and the admissibility of such evidence before domestic courts. The gap in this study is that it does not cover the use of dog olfaction evidence in transnational crimes and the applicability of such foreign evidence in domestic courts of East Africa.

John Ensminger states in his book, *Police and Military Dogs talks on Criminal Detection and Judicial Admissibility*,⁴² that it is important for the criminal justice systems to understand the strengths and weaknesses of canine evidence. He states further that it is important to know canine functions which include tracking, detection and dog-human communication and consider the inherent variability of dog behaviour and the ability of the handlers to identify this variability

³⁹ Stefano Ruggeri, Transnational Evidence and Multicultural Inquiries in Europe: Developments in EU Legislation and New Challenges for Human Right-Oriented Criminal Investigations in Cross-border cases, (Springer International Publishing 2014).

⁴⁰ Ibid

Tadeusz Jezierski, John Ensminger, and L.E. Papet (Eds), *Canine Olfaction Science Law: Advances in Forensic Science, Medicine, Conservation and Environmental Remediation* (Taylor & Francis Group 2016).

John Ensiminger, *Police and Military: Criminal Detection, Forensic Evidence and Judicial Admissibility* (CRC Press Taylor and Francis Group 2012).

in interpreting their action and that the evidence should not be discarded without a review.⁴³ This study is important as it emphasize the challenges facing the acceptability of such evidence in courts. It also stresses the importance of the criminal justice system in understanding the strengths and weaknesses of canine evidence and behavioural changes of canines during scent identification. The gap in this literature is that it only focuses on national legislations and judicial admissibility of evidence of narcotics and explosives detection dogs. It doesn't provide for the challenges of admissibility around tracking and detection of crimes of wildlife products in a transnational arena.

Andrew Rebmann, Edward David and Marcella H. Sorg in their *Handbook on Forensic Training and Tactics for the Recovery of Human Remains*⁴⁴ posits that a canine body language indicates scent changes in the environment and as such the dog handler should have sufficient knowledge of the behavioural changes which a sniffer dog gives when it makes a detection. They are of the view that investigations, acquisition of evidence, and acceptance of that evidence by the court must be within the guidelines set.⁴⁵ They point out that in adversarial procedures defence attorneys may attempt to discredit the credibility of the witness's testimony.⁴⁶ This study is important as it outlines the foundations for credibility of the dog handler's testimony in court in their capacity as expert witnesses in adversarial systems. The lacunae in this study is that it is limited to the applicability of evidence as regards cadaver dog searches for human remains and does not include the detection dog evidence from investigations of wildlife crimes.

Ken Wallentine states in chapter nine of his *Guide on Establishing Reliability of the Tracking Dog Evidence*,⁴⁷ that most courts are of the position that a sniffer dog's detection of contraband established probable cause. This is sufficient to effect an arrest and as such no consent is required for a regional search if there is reasonable cause. He posits that while the detection or sniffer dog's positive alert alone constitutes probable cause to search, reliability of the dog's

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⁴³ Ibid.

Andrew Rebman, Edward David and Manila H.Sorg, *Cadaver Dog Handbook: Forensic Training and Tactics for the recovery of Human Remains* (CRC Press Taylor and Francis Group 2000).

⁴⁵ Ibid.

⁴⁶ Ibid.

Ken Wallentine, A guide to Pre-Trial Criminal Procedure for Police, Prosecutors, and Defenders (ABA Publishing 2007).

training must be established in court with support from its handler much like an expert witness's credentials. He also states that if a dog's training is documented and the dog is certified at the time of the sniff with a successful record, the court will inquire no further. This study is in important as it lays out the general guidelines on reliability of detection dog evidence in courts based on decided cases in courts. The loophole in this study is that it does not look into the use of detection and tracker dogs specifically tailored for transnational wildlife crime. It does not provide for frameworks around international guidelines and rules on cross-border investigations of wildlife crimes.

The courts play a part in transnational wildlife law enforcement by determining the admissibility of detection dog evidence presented before it by prosecution in wildlife crimes. **Sam Weru** in his Report⁴⁸ on Wildlife Protection and Trafficking Assessment in Kenya: *Drivers and Trends of Transnational wildlife crimes in Kenya and its role as a transit point for trafficked species in East Africa* states the lack of understanding on best practice on the presentation of DNA and Forensic evidence frustrates its use even though it is allowed by the law. He points out that subsidiary legislation is needed particularly on presentation of evidence. This literature informs this study.

2.6 Gaps on Existing Literature.

The exiting literature focuses on matters of wildlife conservation, transnational wildlife crime and law enforcement and prosecution of wildlife crimes. The literature review sought to answer the study questions using literature which includes analysis of national and regional legal frameworks. However, the existing frameworks are not tailored to detection dog's tool for transnational wildlife law enforcement. The exiting literature is on national and regional addresses wildlife conservation and sustainable management of wildlife resources. It further analyses the application of regional and national laws including Kenya, Uganda and Tanzania with a focus in Wildlife Conservation and Transnational Wildlife crimes, however, the literature barely marries the aspects of criminal law and wildlife conservation through transnational wildlife law enforcement.

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Sam Weru, 'Wildlife Protection and Trafficking Assessment in Kenya: *Drivers and Trends of Transnational wildlife crimes in Kenya and its role as a transit point for trafficked species in East Africa*' (2016) Traffic Report.

The capacity of prosecution and law enforcement agencies in obtaining and presenting dog olfaction evidence is a question this study sought to address. The available literature however focuses on general detection dogs including cadaver dogs with little literature on dogs trained to sniff, detect and track wildlife specimen and products. This study sought to address the gaps in the existing literature by recommending enhancement of enforcement through institutionalization and incorporation of detection dog units in further literature. The gaps in these literatures are addressed in this study by making recommendations on further research and training of law enforcement officers including judges, magistrates, prosecutors, investigators and dog handlers on the significance and efficacy of this tool in detection and deterrence of wildlife crimes in Kenya Uganda and Tanzania.

2.7 Conclusion

Literature review relevant to this study is either limited to transnational wildlife crimes or law enforcement in environmental conservation while other literature is on the use of detection in dogs in crimes. The significance of the above literature is that it informs the study on the importance of transnational wildlife law enforcement and the need to incorporate dog olfaction tool to further the existent legislative and institutional frameworks. These literatures however fail to address the use of detection dogs in transnational wildlife crimes and transnational wildlife crimes in Africa which creates a gap that this study seeks to fill. This includes formation of policies and establishing legal frameworks to support the use of detection dogs in transnational wildlife law enforcement.

CHAP TER THREE

LEGAL AND INSTITUTIONAL FRAMEWORK GOVERNING TRANSNATIONAL WILDLIFE LAW ENFORCEMENT IN KENYA, UGANDA AND TANZANIA.

3.1 Introduction

This chapter analyses the international and national legal framework governing transnational wildlife law enforcement and the use of the dog olfaction tool in enhancing enforcement of the transnational wildlife law in East Africa. It outlines the constitutional, statutory and policy provisions in Kenya, Uganda and Tanzania on the use of detection and tracker dogs in dealing with transnational wildlife crimes. It also discusses the extent of admissibility of dog olfaction evidence with regards to transnational wildlife crimes in the three countries.

The ultimate objective of this Chapter is to establish whether the legislative framework sufficiently addresses the use of detection dogs as a tool in transnational wildlife law enforcement. In realisation of this objective, it establishes the effectiveness of the legal frameworks while interrogating whether the existing instruments adequately provide for the use of detection and tracker dogs as a tool in transnational wildlife law enforcement. It further highlights the gaps in the current legislative frameworks and establishes ways in which the dog olfaction tool can be used in enhancing enforcement of the transnational wildlife law in East Africa.

3.2 Nature of Transnational Wildlife Crimes

Transnational Crimes have been defined in Article 3(2) of UNCTOC¹ to include; multi-state crimes committed, if it is committed by organized groups; committed in one state but has substantial effects on another state². The term transnational crime was coined at the Fifth UN Congress on Crime Prevention and Treatment of Offenders in 1975 by the UN Crime Prevention

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United Nations Convention Against Transnational Organised Crimes A/RES/ 55/25

² Article 3(2)

and Criminal Justice Branch³ to point out acts transgressing the laws of several states and or transcending international borders.⁴

Wildlife crimes often begin in protected areas and national parks with poachers mostly being local area residents with the intent to supply end user syndicates in other countries and continents including countries in Asia like China and Vietnam. The illegal wildlife products are transited across other country borders from the chain origin states to the end-user states making investigations, arrests and combating of such transnational crimes an international dilemma, when it comes to prosecution of wildlife crimes and mutual legal assistance. The transnational wildlife crime syndicates may include nationals of different states and continents as the illegal products move across different borders to the destination.

Transnational wildlife law enforcement officers should give transit hubs which include borders, airports and sea ports as much attention as the chain origin and end-user states demand states. Illegal wildlife poached from Garamba National Park in the Democratic Republic of Congo (DRC) is usually transited through Uganda, Kenya or Tanzania as transit hubs for products like elephant tusks and pangolin scales. Other wildlife poached in South Sudan and West Africa region is transited through Congo-Uganda borders to Entebbe International Airport and other border crossing between Kenya, to the Mombasa Port or exit to the port of Dar es Salaam.

The chain in transnational wildlife crimes is five step involving poachers, transporters, middlemen, exporters and kingpins who invest in planning, organization, intelligence, packaging, storage and corruption to complete transaction most of different nationalities. In addition to use of machines and human search techniques at transit hubs, the use of detection and tracker dog's tools should be put to effective use by law enforcement officers during investigations and searches. The use of detection dogs as a form of implementation should be provided for in national legal and policy frameworks as necessary for deterrence on the level of transporters and exporters involved in illegal wildlife trade.

https://www.traffic.org/publications/reports/uganda-wildlife-trafficking-assessment/ accessed 13 July 2018.

United Nations Congresses on Crime Prevention and Criminal Justice 1955–2010 55 years of achievement, available at https://www.un.org/en/conf/crimecongress2010/pdf/55years ebook.pdf>accessed 6 August 2018.

⁴ Neil Boister, an Introduction to Transnational Criminal Law (Oxford University Press 2012).

Ledio Cakay and Sasha Lezhen, 'Deadly Profits: Illegal wildlife Trafficking through Uganda and South Sudan' (2017) < https://enoughproject.org/reports/deadly-profits-illegal-wildlife-trafficking accessed 13 July 2018.

Allessandra Rossi, 'Uganda Wildlife Trafficking Assessment' (2018) at

However, the legal provisions prohibiting transnational crimes including illegal wildlife trade unlike core international crimes are purely national as there is no international jurisdiction over the environmental crimes despite its original normative source being international law.⁷ In cases of arrests of transnational wildlife criminals, trials and prosecutions are at the national levels, however, when successful prosecutions and convictions are made, weak legislations in penalties and sanctions may slow enforcement and cooperation.⁸ States should have legal frameworks including punitive and prosecution measures tailored to deter transnational crimes involving multiple states and nationalities.

The international community is in the process of establishing further measures to combat transnational wildlife trade by a task-force to complement national enforcement efforts in a bid to address the cross border impacts of wildlife crimes. The increasing need to combat transnational wildlife crimes has seen the formation of regional institutions including the Lusaka Agreement Task Force and the National Environmental Security Task Force. These Task Forces in their law enforcement capacity should have frameworks of detection and tracker dogs as an essential tool in investigations and deterrence transnational wildlife crimes further discussed in the chapter.

3.3 International and Regional Legislation on Wildlife Transnational Wildlife Crimes

3.3.1 Convention on International Trade in Endangered Species for Wild Fauna and Flora (CITES)

CITES¹⁰ is an international agreement to ensure international trade in specimens of wild animals and plants do not threaten their survival. It was adopted in the 3rd of March 1973 and entered into force on the 1st of July 1975. Kenya ratified this convention on the 13th day of December 1978 and became bound by the provisions of the convention as from 13th day of March 1979.¹¹ Tanzania ratified CITES on the 29th of December 1978 and became bound by the provisions of the convention as from 27th day of February 1980. Uganda was the last East African country to

8 Ibid.

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⁷ Ibid.

Michael Faure, Peter De Smedt, AnStus (Eds), Environmental Enforcement Networks: Concepts, Implementation and Effectiveness (Edward Elgar Publishers 2015) 243.

Convention on International Trade on Endangered Species (CITES) (adopted 3 March 1973, entered into force 1 July 1975) 27 UST 1087.

ratify CITES. It ratified it on the 18th day of July 1991 and became bound by the provisions of the convention as from 16th day of October 1990.

It is an important convention on protection of wildlife species using trade measures as it entirely controls and oversee the endangered species trade through restrictions of illegal wildlife trade in species. ¹² Trade measures have been of great significance in mechanism of protection of wildlife species. However, there still arise issues with enforcement of these trade measures, including management of licenses, detection and identification of species by wildlife law enforcement officers. ¹³This is further proof that existing laws with lack of stringent detection and enforcement measures is not sufficient to curb transnational wildlife crimes. The detection measures are not specific however this provision creates an opportunity for implementation of different measures such as the use of detection dogs by wildlife law enforcement officers.

CITES focuses on regulation of international trade in endangered species. It primarily regulates the extraordinarily diverse commerce in endangered species of Wild Fauna and Flora by issuing licensing system for imports and exports control of the wildlife trade import, export and reexport of live and dead animals, fish, plants and their parts, ¹⁴ and further backed by sanctions. ¹⁵ It is also complex to keep track of foreign wildlife regulations or gather evidence committed on the other side of the world. CITES comes in such instances to enable countries to reciprocally protect on each other's species according to common set of rules among the states. ¹⁶ Transnational wildlife trade may involve persons who commit wildlife crimes across borders. The common set of rules among cites member states may assist in collection and management of detection dog evidence in instances where the criminal has moved across the borders to another state. This is significant in evidence management and collection for prosecution of suspects at national levels.

Kenya was recognised for its conservation efforts during the 70th UN Convention on International Trade in Endangered Species Standing Committee that was held in Sochi Russia.¹⁷

Bolanle T. Enrinosho, *Environmental Law in Africa* (Krafts Book Publishers 2005) 197.

¹³ Ibid.

Neil Boister, an Introduction to Transnational Criminal Law (Oxford University Press 2012).

Article 8(1) CITES.

UNODC, 'Defining Transnational Organized Wildlife Crimes' VOL. 6

Kenya Wildlife Service Website, at http://www.kws.go.ke/content/kenya%E2%80%99s-conservation-efforts-pay-cites-meeting accessed 12 September 2019.

The CITES Standing Committee approved Kenya to be removed from the requirements to implement and report progress in the implementation of a National Ivory Action Plan (NIAP). This came after Kenya, alongside Tanzania and Uganda had previously been identified as countries most implicated in elephant poaching and illegal trafficking and trade at the 16th meeting of the Conference of the Parties to CITES.¹⁸ Kenya's move to establish canine units at its points of entry is one of the major contributions in its efforts to conserve endangered species. Uganda and Tanzania have equally made the moves to establish the canine units in a bid to curb illegal trade especially of endangered species.

3.3.2 United Nations Convention against Transnational Organised Crimes (UNCTOC)

UNCTOC¹⁹ is an international convention which came into force in September 2003, its main aim being fostering international cooperation against organized crime and corruption.²⁰ The Convention criminalizes participation of organized criminal groups to conduct offences.²¹ It creates provisions on international cooperation for the purpose of confiscation which enables different state parties with jurisdictions over an offence assist each other upon request from the relevant authorities for purposes of confiscation on transnational crimes.²²

The Convention make provisions for extradition on offences involving organized criminal groups with the suspect located in the territory of requested state provide the offence for which extradition is sought is punishable by both state parties.²³ Such provisions should be applicable to criminals who have gone across borders however their contraband has been detected to include illegal wildlife products and specimen. Article 18 provides for mutual legal assistance which requires state parties to afford one another the widest measures of mutual legal assistance in investigations, prosecutions and judicial proceedings in relation to the offences covered by the convention where requesting parties has reasonable grounds to suspect that the offence is transnational in nature and it involves an organized criminal group.²⁴ Kenya, Uganda and Tanzania should take such measures to have common institutional frameworks for the canine

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¹⁸ Ibid.

¹⁹ A/RES/55/25.

Henn Decoeur, Confronting the Shadow State: An international Law Perspective on State Organized Crime (Oxford University Press 2018).

Article 5 United Nations Convention Against Organized Crimes and the Protocols thereto.

United Nations Conventions Against Transnational Organized Crime and the Protocols, 2004.

²³ Article 16 UNCTOC.

Ibid.

units to ease mutual legal assistance on matters of detection using dog olfaction tool because of common set of rules and standards for detection.

Law enforcement cooperation is provided under Article 27 of UNCTOC enabling state parties to work with each other with their local administrative and institutional systems to improve their chances of success in the fight against transnational wildlife crimes. Wildlife crimes shares common characteristics of other transnational crimes making it no different from any other forms of illegal activities.²⁵

3.3.3 African Convention on the Conservation of the Nature and Natural Resources

This is a regional convention is also known as the Algiers Convention.²⁶ It was adopted in 1968 and revised in 2003 in Maputo Mozambique. The principle objective of the Convention is the 'conservation' and utilization of flora and fauna with due regard to the best interest of future generations.²⁷Article X of the treaty is premised on protecting ecosystems and ensuring conservation of all species especially those listed in the convention²⁸ Article IX regulates trade in specimens and trophies while looking to prevent trade in specimens and trophies which have been illegally captures, killed or obtained. It further makes the import and transit of such specimens and trophies subject to the presentation of the authorization with provisions for confiscation of specimens and trophies exported illegally.²⁹ The Convention does not provide measures on detection and law enforcement despite its provision to confiscate specimens and trophies which have been illegally trade. This is addressed in this study as it attempts to introduce dog olfaction tool as a detection measure to enable confiscation of illegal specimen and trophies.

3.3.4 Arusha Declaration on Regional Conservation and Combating Wildlife Environmental Crime, 2014

The Arusha Declaration on Regional Conservation and Combating Wildlife Environmental Crime³⁰was set up with the aim of cooperation to fight against illegal wildlife trafficking. It was

African Convention on the Conservation of Nature and Natural Resources of 1968 as Revised in 2003 in Maputo Mozambique (Adopted March 07 2017).

²⁵ Ibid.

African Convention on the Conservation of Nature and Natural Resources, 1969

²⁸ Ibid.

²⁹ Ibid.

Signed November 8th, 2014.

established to implement the provisions on the environmental and wildlife protection in the EAC Treaty.³¹ It provides for the necessary actions to be taken in the fight against transnational wildlife crimes through collaboration with one another across borders.³² Kenya, Uganda and Tanzania which are member state have taken an appropriate measure of establishing dog units in the various airports, ports and parks as a measure to combat illegal trafficking.

3.3.5 Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora, 1994

The Lusaka Agreement was adopted in Lusaka in September 1994 and entered into Force in December 1996.³³ It is a regional treaty which has been ratified by three countries including Kenya, Uganda and Tanzania. It also seek to enforce the provisions of CITES and Convention on Biodiversity with an aim of combating illegal trade. It came up as a proposal on more efficient ways and methods of curbing illegal cross border wildlife trade including establishment of a Task Force to complement national enforcement efforts aimed at curbing illegal wildlife trade.³⁴

Article 5 of the Agreement outlines the main purpose as facilitating cooperative activities between national enforcement officers to carry out investigations including investigation of national laws for protection of wildlife and flora present such evidence gathered during such investigations.³⁵ This enables investigations on cross border crimes while making capacity for evidence including that of detection dogs to be gathered and presented at the national level despite the nature of transnational wildlife crimes.

The basic approach in the Lusaka Agreement is to enable wildlife enforcement officers to move between party states to pursue investigations as the best ways to disrupt and eliminate illegal wildlife trade.³⁶ This begs the question whether the approach fits with no proper investigative and prosecution mechanism in the enforcement strategy.

Treaty for the Establishment of the East African Community, Signed on 30th November 1999 Entered into force on 7th July 2000 (Amended on 14th December, 2006 and on 20th August, 2007).

Arusha Declaration on Regional Conservation.

Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora (adopted 8 September 1994, entered into force 10 December 1996) 950 UNTS 35.

Michael Faure, Peter De Smedt, AnStus (Eds), Environmental Enforcement Networks: Concepts, Implementation and Effectiveness (Edward Elgar Publishers 2015).

Jacob Werksman, James Cameron and Peter Broderick, 'Implementing Compliance with International Environmental Law' 198.

Text for New Lusaka Report http://www.mng5.com/papers/LusakaReview.pdf> accessed 9 January 2018.

3.4 International and Regional Institutional Frameworks

Generally, wildlife law enforcement continues to pose a great challenge in developing countries owing to lack of or insufficient institutional capacity or frameworks or lack of enforcement officials. Otherwise, when institutional bodies including joint operations by police, wildlife officers and immigration officials are put in place this could result in seizures of illegally traded wild flora and fauna. In a bid to enhance transnational wildlife law enforcement, African countries are being urged to incorporate the use of dogs to combat wildlife trafficking. ³⁷ Detection and sniffer dogs are trained by the various wildlife law enforcement bodies like KWS, UWA and TAWA in Kenya, Uganda and Tanzania respectively to enhance their ability to track illegal hunters in parks, and disrupt flow of wildlife contraband in vehicles, parcels and containers at points of entry and exit in the countries. ³⁸

3.4.1 International Criminal Police Organisation (INTERPOL)

The International Criminal Police Organisation (INTERPOL) established the National Environmental Security Task Force (NEST) of the United States (US) in 2012 as a multidisciplinary law enforcement Task Force made of experts from different national agencies such as the police.³⁹ INTERPOL further offers member states investigative support deployed to support local law on enforcement authorities in their investigations including means of identification of species and components of transnational wildlife crimes.⁴⁰

There are instances where the transnational nature of wildlife crimes poses a challenge to cross border investigations due to limited mutual legal assistance and jurisdictional differences highlighting the significance on international institutions in the war against transnational wildlife crimes. In the case *Feisal Mohammed Ali* the Interpol issued an environmental crime arrest

Marianne Messina, 'Anti-Poaching Efforts, going to the Dogs' (2017)

³⁸ Ibid

³⁹ INTERPOL, 'Global Wildlife Enforcement Strengthening Law Enforcement Cooperation Against Wildlife Crimes' (2018)

⁴⁰ Ibid.

warrant which led Ali Conviction sentence to 20 year jail term and Kenya Shillings Twenty Million for possession of ivory an equivalent of three hundred elephant tusks.⁴¹

INTERPOL carries out a transnational investigations operation known as "thunderstorm" by police, customs, border and wildlife agencies where investigative crime intelligence is gathered to target hotspots including land and airport border points and wildlife parks. ⁴² The thunderstorm operations have been significant in the increased seizures of wildlife and wildlife specimen in East Africa making it clear that coordinated global cooperation can increase deterrence of transnational wildlife crimes. ⁴³ Interpol stands out as an international investigative institution cutting across all borders which makes it very significant in transnational crime investigations which is a much needed way of combating transnational crimes generally. Interpol being an international investigative tool however needs detection measures especially the use of dog olfaction tool to identify wildlife specimen and trophy.

3.4.2 Lusaka Task Force

The Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora⁴⁴ is a regional institution that has established the Lusaka Agreement Task Force (LATF) to put into perspective the regional context of wildlife crime as a transnational organized crime in a bid to show the linkages between Wildlife Crimes and Transnational Wildlife Crimes.⁴⁵

The International Criminal Police Organisation (INTERPOL) established the National Environmental Security Task Force (NEST) of the United States (US) in 2012 as a multidisciplinary law enforcement Task Force made of experts from different national agencies such as the police.⁴⁶ INTERPOL further offers member states investigative support deployed to

Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora (adopted 8 September 1994, entered into force 10 December 1996) 950 UNTS 35.

Tristan McConnell, 'They are like Mafia: The Supreme gangs behind Africa Poaching Crisis' *The Guardian* Newspaper (2017) < https://www.theguardian.com/environment/2017/aug/19/super-gangs-africa-poaching-crisisaccessed 13 September 2019.

INTERPOL 'Wildlife Crime: Global seizures and arrest in Transnational Operations' (2018)

⁴³ Ibid.

Lusaka Agreement Taskforce Enforcement.
 INTERPOL, 'Global Wildlife Enforcement Strengthening Law Enforcement Cooperation Against Wildlife

Crimes'(2018)

support implementation of local law on enforcement authorities in their investigations including means of identification of species and components of transnational wildlife crimes.⁴⁷

The Lusaka Task Force engages itself in detection of transnational crimes while relying on information provided by state law enforcement officials. This step is essential as it enables authorities especially investigators and rangers to make connections between unrelatable pieces of information. One of the major globally recognized causes of wildlife crimes is mostly the high profits the offenders get from illegal wildlife trade against less risk furthered by lack of detection and/or prevention measures.⁴⁸

The Taskforce takes a basic approach that enables enforcement officer's move between states to pursue investigations to eliminate illegal wildlife trade. ⁴⁹This approach deems it fit for the introduction concept of dog detection should be introduced to improve great detection furthering the objective of this study.

3.5 Gaps and Challenges in International and Regional Legislative Frameworks

Implementation and enforcement processes may in certain instances be impacted by gaps ad irregularities in policy designs and implementation by law enforcement Agencies. This analysis informs the extent on which the application of international and regional legislation on dog olfaction tool in transnational wildlife law enforcement.

CITES is legally binding to Kenya, Uganda and Tanzania as they are member states, however the convention is not self-executing and as such it can only be implemented under the various national laws under set domestic measures by individual states. ⁵⁰Under Article VIII provides that states have the mandate to establish necessary mechanisms to enforce the relevant CITES provisions including penalizing trade in specimen and confiscation on return of export of such specimen.

The Convention further provides that the parties should provide procedures and time frame to adopt measures for implementation. Kenya, Uganda and Tanzania not only need to create

⁴⁷ Ibid.

⁴⁸ Ibid.

¹⁹ Ibid

Convention on International Trade on Endangered Species (CITES) (adopted 3 March 1973, entered into force 1 July 1975) 27 UST 1087

procedures of implementations including investigative measures.⁵¹ CITES regulations leaves a lacunae in that it does not provide for the uniform procedures of investigations, detection, confiscation and mutual legal assistance. This is a platform to create domestic measures on enforcement to include detection dogs as an investigative mechanism. This needs to be a uniform measure to be adopted by all the parties including Kenya, Uganda and Tanzania. Uniform regulations on detection using dogs as a tool would make it a significant tool for investigations which is acceptable without doubt at the national levels by implementing states.

CITES is a convention that regulates trade of species and specimen for preservation and conservation however it doesn't prohibit trade of wildlife species in entirety. Article IV of the convention regulates trade in species and specimen of species included in Appendix II while outlining conditions required for export under Appendix II-listed species. There creates challenge in enforcement in reference to countries which entirely prohibits trade in wildlife species ad specimen including Kenya., Uganda and Tanzania. Enforcement measures may be including setting up detection dog units may be derailed when there are cases where trade of certain species have been permitted to be transport specimen across borders.

The United Nations Convention Against Transnational Organized Crime is to promote cooperation, to prevent and combat transnational organised crimes. It provides for measures to be put in place without prejudice to domestic laws⁵²including law enforcement cooperation between parties.⁵³Article 29 on trainings and technical assistance makes provisions for state parties to initiate or improve specific programmes for law enforcement personnel, including prosecution, including prosecutors, magistrates and custom person for prevention, detection and control of the offences covered by this convention. This section conspicuously leaves out dog handlers from the list of personnel to be trained under this convention. This weakens the use of detection dogs as a law enforcement tool as the detection dogs work together with the dog handlers, This further creates doubt to the role of dog handlers as law enforcement officer in the fight against transnational crimes as they are not provided for under regional and national regulations.

Article VIII, CITES

⁵² Article 4 UNCTOC

⁵³ Article 27 UNCTOC

Article 29(1) further provides that such measures shall be subject to domestic law methods adopted in the control and prevention detection of the offences. It coveres the conviction, collection of evidence and modern law enforcement equipment and techniques including electronic surveillance, controlled deliveries and undercover operations as methods used in combating transnational organized crime through the use of computers, telecommunications networks or other form of modern technology. This provision does not cater for the use of detection dogs as a method to deal with transnational wildlife law enforcement making it difficult to present detection dog evidence as it is not backed by such regional legislation.

The African Convention on the Conservation of Nature and Natural Resources looks to enhance environmental protection, foster conservation and sustainable use of natural resources and to harmonize and coordinate policies. The Convention provides that member states to develop their own guidelines and training capacities on the conservation of natural resources and the environment via regional or sub-regional training institutions, joint training programmes and continuous exchange of information and experiences.⁵⁴ The convention also provides for cooperation whenever national measures are likely to affect the environmental or natural resources and cooperation between states in order to harmonize their policies at the continental and or regional level.⁵⁵

Despite the provisions on trainings, capacity building, development and cooperation between party states to enhance conservation of natural resources by party states. The convention lacks provision on law enforcement measures making it challenging to provide for tools of investigation specific to the provision of this statute. Lack of regulations on law enforcement measure on law enforcement measures reduce the capacity of parties to enhance their institutional frameworks including detection mechanisms like the use of dog olfaction tool.

The Arusha Declaration looks to enhance cooperation ad coordinates in combating illegal and unsustainable use of wildlife and natural resources.⁵⁶ Improve protocols for intelligence and sharing joint investigations while making use of available resources including the forensic

Arusha Declaration on Regional Conservation and Combating Wildlife and Environmental Crimes, 2014

Article XX (2) African Convention on the Conservation of Nature and Natural Resources, 2013.

Article XXII African Convention on the Conservation of Nature ad Natural Resources, 2013.

laboratory in Kenya.⁵⁷ The legislative framework provisions however, do not include specific tailored call on actions for implementation strategies and law enforcement. This gap informs this study with the intention of making recommendations for sub regulations and regional legislations to include the use of detection dogs as an investigative and law enforcement tool.

3.6 National Legal and Institutional Frameworks in Kenya, Uganda and Tanzania

Kenya, Uganda and Tanzania have put in place state institutions with the mandate on implementation of existent laws on protection and conservation of wildlife crimes.

3.6.1 Kenya

Article 42 of the Constitution of Kenya, 2010 lays the basis for protection of wildlife in Kenya. It provides that:

"Every person has the right to a clean environment which includes the right to have the environment protected for the benefit of present and future generations through legislative and other measures." ⁵⁸

It establishes requirements on obligations of the state in ensuring sustainable utilization, management and conservation of the environment and natural resources and eliminates processes and activities that are likely to endanger the environment.⁵⁹ Pursuant to the Constitution, relevant legal frameworks are established. These include the Wildlife (Conservation and Management) Act (WCMA), Cap 376 with implementation and investigative measures on conservation of wildlife in Kenya. The state has further established institutional bodies like Kenya Wildlife Services (KWS) under the WCMA with the mandate to protect and conserve wildlife which in turn has set up the canine unit with detection and tracker dogs as measure to enhance law enforcement.

It further provides that in cases where environmental rights are infringed or threatened the courts may issue redress or legal remedies available in respect of the matter.⁶⁰ The court may also issue orders compelling public officials to take measures to provide or discontinue acts or omissions

⁵⁷ Ibid.

Article 42 of the Constitution of Kenya, 2010

Article 69 of the Constitution of Kenya, 2010

Article 70 of the Constitution of Kenya, 2010

that are harmful to the environment.⁶¹ Penalties for wildlife crimes are provided under of the WCMA for offences against flora and fauna.⁶² The Office of the Director of Public Prosecutions (ODPP) has established the special wildlife crime prosecution unit to prosecute wildlife related crimes in courts,⁶³ as such the prosecutors are seeing to it that detection dog evidence is admitted in prosecuting crimes from which arrests are made using detection and tracker dogs as investigations and search tools.

The WCMA regulates wildlife matters in Kenya while introducing schedules of game animals, birds and protected animals,⁶⁴ such possession and trade in trophies and live animals including import and export.⁶⁵ This creates a requirement for permits in any trade of wildlife products to prevent illegal wildlife products under section 23 of the Act prohibiting import, export and reexport or trade in any wildlife species without a permit.⁶⁶ Despite, the provisions on permits and schedules of protected animals there is an increase illegal trade in wildlife and wildlife trophies across borders begging the question whether the WCMA is sufficient in conservation of wildlife and transnational wildlife law enforcement.

KWS is a state cooperation established under the WCMA 2013 with the mandate to protect wild flora and fauna. It was established in 1989 following massive poaching and insecurity in national parks for efficiency in conservation and management of Kenya's Wildlife.⁶⁷ It has the authority to enforce laws and implement treaties for enhancement of wildlife conservation and protection in Kenya.⁶⁸ KWS works in collaboration with local and regional wildlife law enforcement agencies and other stakeholders like KRA, Immigration department, KAA and Kenya Police to win the fight against wildlife crimes. It has established security in national parks and transit points including canine units where dogs helps to sniff out out wildlife products in transit points and track wildlife offenders in conservation areas. Regionally, KWS works with INTERPOL and Lusaka Task Force to tackle crimes of transnational nature along shared

⁶¹ Ibid.

⁶² Chapter VI Wildlife Conservation and Management Act Cap 376

http://www.odpp.go.ke/new-act-leads-to-reduction-in-wildlife-crimes/ accessed 16 September 2019

⁶⁴ Cyrille de Klemm Barbara J Lausche, *African Wildlife Law* (IUCN Environmental Law Centre 1987) 173

⁶⁵ Ibid

⁶⁶ Section 23 Wildlife Conservation and Management Act Cap 376

David Karanja 'The Role of Kenya Wildlife Service in Protecting Kenya's Wildlife' (2012) *The Kenya Wildlife Service in the21st Century: Protecting Globally Significant Areas and Resources*, Vol. 29, 74-80.

Ibid.

borders.⁶⁹ It addition to the CITES implementation unit under its authority in section 96 of the WCMA, 2013, KWS has set up dog units at KWS Headquarters, JKIA, Mombasa Ports/Mombasa marine Parks and Ol Pejeta Conservancy among other Parks which has resulted in increased interceptions of wildlife offenders at this points.

Conviction of wildlife crimes require sufficient evidence for prosecution of wildlife crimes arising from arrest made using assistance of detection dogs. The Evidence Act, Cap 80 Laws of Kenya under section 5 on admissibility states that, evidence must be reliant on a high degree of relevance and evidence tendered should solely be of the existence or non-existence of a factor issues and any other fact declared by any relevant provisions of the Act.⁷⁰

The KWS canine unit is comprised of dog handlers who undergo adequate training on how to use dogs for searches for illegal wildlife products but most adequately on the collection management and effective presentation of dog olfaction evidence in courts for prosecution of wildlife crimes cases which arise from arrest made by detection and tracker dogs at the airports, ports and parks.

Section 48 of the Evidence Act Cap 80 further allows an expert to produce evidence before the court.⁷¹ However, prosecutors and law enforcement officers are finding it difficult to have dog olfaction evidence admitted in courts as it is largely treated as circumstantial or opinion evidence under the Kenyan legal frameworks.⁷² This is proof that provisions of laws of evidence are not efficient on admissibility of dog evidence in courts for prosecution of wildlife crimes necessitating this study.

The ODPP set up a specialised unit in 2018 specifically tailored to handle offences related to wildlife crimes contrary to the provisions of WCMA, 2013. The WCMA Act sets out prosecution unit and creation of a wildlife crime unit with ODPP.⁷³ The unit is generally trained on the Wildlife Standard Operating Procedures and References guide and detection and tracker dog evidence management and presentation in courts.⁷⁴

⁶⁹ Ibid.

Section 5, Evidence Act Cap 80

Section 48, Evidence Act Cap 80 Laws of Kenya.

⁷² Kennedy Maina v R

Shamini Jayanathan, Analysis of Prosecution of Ivory, Rhino Horn and Sandal Wood Crime in North Central Kenya' (2014) A case Study

Office of the Director of Public Prosecution Website <www.odpp.go.ke> accessed 12 August 2018.

3.6.2 Uganda

The Constitution of Uganda, 1995 is ardent on protection of natural resources. It requires the State to protect important natural resources including flora and fauna.⁷⁵ It provides that the utilization of the natural resources of Uganda shall be managed is such a way to meet environmental needs of present and future generations of Uganda while taking necessary measures to prevent and minimize damage or destruction to environmental resources.⁷⁶ The state has established the Uganda Wildlife Authority (UWA) for enforcement of conservation laws which is a very integral part of conservation. UWA has the mandate to ensure conservation, implementation of wildlife policies control national and international trade by issuing permits and encourage training on wildlife management and protection.⁷⁷ It further prohibits utilisation of wildlife without wildlife user right,⁷⁸ while the CITES Management Authority under the Uganda Wildlife Authority permits the imports and export of any wildlife species.⁷⁹

The Act under Section 4(3) mandates Uganda Wildlife Authority with overall supervision of the ministry responsible and economic incentives for conservation aimed at transnational wildlife conservation. Uganda Wildlife Authority has trained skilled staff to deal with conservation challenges including establishment of the canine unit which has been set up at the Entebbe Airport and Queen Elizabeth Park this in addition to the enforcement initiatives and policy provides a platform for establishment of deterrent tools in this case the use of detection dogs in enforcement.

Office of Public Prosecution subject to Article 120(3) and 4(a) of the constitution and direction of the Director of Public Prosecutions allows for exercise of powers of a prosecutor. The collaboration between Uganda Wildlife Authority and Office of the Director of Prosecution calls to show that deterrence of transnational wildlife crimes do not end with investigation or detection using sniffer and tracker dogs but continues through successful prosecution and conviction of wildlife crime offender in Uganda.

Article XIII of the Constitution of Uganda, 1995.

Article XIII (ii) of the Constitution of Uganda, 1995

Uganda Wildlife Act, 2016

Uganda Wildlife Act, 2016

⁷⁹ Section 62 Uganda Wildlife Act, 2016

The Uganda Wildlife Act, 2019 regulates importation, exportation and re-exportation of wildlife species and /or specimen while creating an offence or illegal trade through exports and imports without permits to customs post or ports structured under the CITES Management Authority. ⁸⁰ It further creates offences relating to taking, hunting, molesting or reducing and imports and exports of protected species. ⁸¹ Uganda being a common transit hub for export of wildlife poached in DRC and other areas in west Africa has set up canine units at the airports working in collaboration with government agencies which are Kenya Airports Authority (KAA), Kenya Revenue Authority (KRA) to conduct searches at posts and ports to use the detection dogs to assist in searches, detection and arrest illegal wildlife traffickers at post and ports of entry.

The new Wildlife Act, 2019 was recently assented by the president H.E Yoweri Mueveni in July 2019 with the aim of strengthening wildlife conservation by providing for stiffer penalties including life sentence for wildlife crimes such as poaching and illegal wildlife trade. There is need for staffing and equipping the Uganda Wildlife Authority with necessary enforcement officers and investigation tools like detection and tracker dogs as a unit for law enforcement otherwise the new wildlife legislation may not be as impactful as it is intended to be.⁸²

The Wildlife Act 2019 with reference to prosecution of wildlife crimes provides that:

"....subject to article 120(3) and 4(a) of the Constitution and directions of the Director of Public Prosecution in any prosecution under this Act an officer shall exercise all the powers of a public prosecutor." 83

There is need to review this section of the Uganda Wildlife Act 2019 to provide for detailed powers of wildlife prosecutors instead of making a blanket provision in the Act. By making specific provisions on powers of wildlife prosecutors, the Act will empower them making their roles in the prosecution of transnational wildlife crimes clear.

Prosecutors rely on criminal procedure and rules of evidence during trials of suspects in wildlife crimes in courts. Prosecutors may present detection dog evidence as corroboration of evidence to

⁸⁰ Section 62, Uganda Wildlife Act, 2019

Section 75 Uganda Wildlife Act, 1996 Cap 200.

Africa Wildlife Foundation, (2019) 'AWF Hosts Ugandan MPs and Senior Wildlife Officials on Benchmarking Tour' (2019) https://www.awf.org/news/awf-hosts-ugandan-mps-and-senior-wildlife-officials-benchmarking-tour (accessed 9/8/2019).

Section 18 Wildlife Act, 2019

create water tight cases for prosecutions from arrest made with the assistance of canine units. The Evidence Act Cap 43, Laws of Uganda under Section 13 as to the admissibility of evidence; "...if the fact proposed to be proven is one of which evidence is admissible only upon proof of some other fact the last mentioned fact must be proved before evidence is given of the fact mentioned unless the party undertakes to give proof of that fact and that the court is satisfied with the undertaking." Prosecutors can rely on the dog's ability to sense wildlife species in an attempt to prove to the courts that the specimen in court which was in possession of the suspect is wildlife species or product.

3.6.3 Tanzania

The Constitution of the Republic of Tanzania, 1977 under Article 27(1) provides that every person has the duty to protect the natural resources of the United Republic and all property collectively owned by the people. 84 Pursuant to the Constitution, Tanzania Wildlife Authority is conceptualised under the Wildlife Conservation Act 2013 to make provisions with respect to conservation of biodiversity and wildlife while contributing to international efforts and measures to protect and enhance global biodiversity. The Constitution of URP, 1977 as the grund norm enables the state institutional frameworks which have the mandate to establish measures of enforcement upon which the Tanzania Wildlife Authority has specialised intelligence and investigative units.

The Wildlife Conservation Act, 2013 gives special conservation status to endemic rare or endangered wildlife species while enabling international efforts and measures to protect and enhance global bio-diversity.⁸⁵ The Act regulates international trade in endangered species,⁸⁶ and provides for coordination of undertakings of wildlife authorities to comply with the requirements of the convention on International Trade in endangered species of Flora and Fauna.⁸⁷

Tanzania Wildlife Authority is the autonomous government body set up under the Ministry of Natural Resources mandated with protection, management and administration of matters wildlife.⁸⁸ The Wildlife Protection Unit seeks to protect wildlife against unlawful utilization

The Wildlife Conservation Act, 2013

The Constitution of Tanzania, 1977

Section 36 Wildlife Conservation Act, 2013

Section 35 Wildlife Conservation Act, 2013

Strengthening the aim of the law through judicial training (2015)

involving hunting, capturing and illegal trade. ⁸⁹ Further, TANAPA and the main National Reserve working in the "Mara Triangle" have a dog unit specially trained to sniff out well concealed people and objects. ⁹⁰ The institutions for Wildlife protection and Tanzania have embraced the use of detection dogs for Conservation. The Detection Dog unit was set up in 2016, at Julius Nyerere International Airport and Dar es Salaam Sea Port working together with the , Immigration unit, Tanzania Airports Authority and Tanzania Ports Authority to enhance the use of sniffer dogs in curbing illegal wildlife trade and crimes at points of entry and exit. TAWA works together with the authorities who have mandate under the Wildlife Conservation Act, 2013 giving them the powers of official search, seizure and arrest at the airports and ports.

Department of the Director of Public Prosecutor(DPP) has no specific prosecutors for wildlife related offences however Tanzania Wildlife Authority enforcement officers enjoy a wide prosecutorial power which enables them to prosecute wildlife related offences. ⁹¹The inter-agency cooperation between the state cooperation highlights the interest of the state to take transnational wildlife law enforcement in Tanzania.

The Tanzania Wildlife Authority has the CITES implementation office situated at the Ministry of Natural resources in Dar es Salaam in a bid to contribute to international efforts and measures to protect and enhance wildlife law enforcement. The CITES unit has since seen the implementation of section 47 of the Wildlife Conservation Act which restricts unlawful hinting of endangered species without permits and creates penalties in cases of convictions related to offences under this section.⁹²

Section 5 of the WCA, 2013 allows any authorised officers in the wildlife sector in enforcing provisions under the Act using firearms in enforcement. The Tanzania Wildlife Authority undertakes other measures including the use of dogs at the Julius Nyerere International Airport in Dar es Salaam. The dog unit was set up in 2016 at key border crossings leading to several wildlife seizure including ivory and pangolins. Although the DPP does not have specially

Sue Palminteri, 'How Detection Dogs can Help Wildlife Rangers Curb Crimes in The Maasai Mara National Reserve' (2018) *Pacific Standard*https://psmag.com/environment/dogs-help-rangers-in-kenyas-famous-nature-preserve accessed 13/9/2019.

⁸⁹ Ibid.

David Karanja 'The Role of Kenya Wildlife Service in Protecting Kenya's Wildlife' (2012) *The Kenya Wildlife Service in the21st Century: Protecting Globally Significant Areas and Resources*, Vol. 29, 74-80.

Section 47 Wildlife Conservation Act, 2013

trained prosecutors to deal with poaching cases, there are prosecutors within Tanzania Wildlife Authority carrying out prosecutions of wildlife crimes only while adhering to CPC and Evidence Act in presentation of evidence in courts.

In presentation of detection dog evidence prosecution must aim for the evidence to be admitted thusly adhere to the rules of evidence. The Evidence Act of Tanzania, 1967 (Cap 16) under Section 165 on evidence tending to corroborate evidence of relevant fact admissible provides that when a witness gives evidence that is intended to corroborate given evidence of any relevant fact, he may be questioned as to any other circumstances, if proved, would corroborate his testimony as to the relevant fact about which he testifies.⁹³ The evidence act does not have provisions on admissibility of dog evidence hence the courts rely on decided cases from different jurisdictions.

3.7 Weaknesses and Challenges of National Legislative Frameworks

3.7.1 Kenya

Kenya has in place legislative frameworks governing protection of wildlife species and regulations governing enforcement of both national and regional legislative provisions. However, there are gaps in the legislative frameworks pertaining to the use of detection dogs as an investigative or protective measure. The Wildlife Management and Conservation Act, 2013 under section 110(a) and (d) provides for searches on any person suspected to be in possession of any wildlife specimen, seize and detain and baggage. Searches can be carried out in houses, vessels and vehicles where a person has been suspected to have committed an offence under the Act. This provision does not expressly outline the modes of searches that the law enforcement officers can use leaving the mechanisms of detection dogs as a measure that can be challenged.

Further on enforcement and compliance, the Act has provisions that allows for the use of firearms by law enforcement officers and for training of officers on handling guns during investigations while it doesn't make provisions on training of officers on working with detection dogs. The use of detection dogs by law enforcement officers and training of dog handlers can be

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Section 165 of the Evidence Act Cap 16 Laws of Tanzania.

⁹⁴ Section 110(0) and (b) WCMA 2013

⁹⁵ Ibid.

easily changed even in courts as it is not included in the main legislative framework on Wildlife Conservation and protection

Despite the provisions of section 48 of the Kenyan Evidence Act, Cap 80 allowing for expert opinion, the expertise of dog handlers as law enforcement officers is still challenged in courts begging the question "What does it take to qualify as an expert in handling dogs and at what point is a dog handler considered and expert on this duty?"

3.7.2 Uganda

The president of Uganda recently assented the new Uganda Wildlife Act, 2019 in July 2019 with the aim of providing for the conservation and sustainable management of wildlife. The new Wildlife Act is more comprehensive and repeals the Wildlife Act Cap, 200. Although the Wildlife Act, 2019 repeals the previous Wildlife Act, 2009 there are still several gaps including the lack of provision on sections for general offences related to crimes in wildlife conservation areas. Detection and investigation is not the end of the process of transnational wildlife law enforcement and as such should be backed by legislative provisions creating offences and penalties.

Section 18(4) of the Wildlife Act, 2019 authorises a member of staff to possess a firearm in the course of his or her duties. This section has weak provision on the tools that can be used in investigations and law enforcement as it does not include other modern measures such as detection dogs as investigative and transnational wildlife law enforcement tools. The legislative provision should expressly include detection dogs as a tool and training of the handlers leaving no doubts as to the presentation of such evidence in courts.

The Uganda Evidence Act, Cap 4 Laws of Uganda is the only relevant provision to be relied on for prosecution using dog olfaction evidence. This is not sufficient for serious crimes as transnational wildlife crimes. Dog Olfaction evidence can be presented as circumstantial evidence to corroborate other evidence while dog handlers testify as expert when their expertise is still questionable in courts during trial

3.7.3 Tanzania

The Wildlife Act of Tanzania (No.5 of 2009) has one of the objectives as protecting and conserving wildlife resources and its habitats in game reserves and wildlife management areas. The Wildlife Act under Section 96(1) of allows the Minister by order published in the Gazette to establish training institutions or centers to offer courses for wildlife conservation and management. The provisions however do not include trainings on law enforcement including investigative trainings for dog handlers on the using the tool to fully execute their duties. The Minister as such should by order publish training institutions for dog handlers as the play a crucial role in investigations and transnational wildlife law enforcement.

Section 106 on powers of search and arrest states prohibits against unlawful entry into a house unless there is a warrant and there are witnesses present. The searches into such places as dwelling becomes challenging for dog handlers as they can be challenged as to their capacity as authorised officers. The legislative provisions do not include dog handlers as law enforcement officers with the capacity to conduct searches using detection dogs and arrests suspects during the duties as wildlife law enforcement officers posing further challenges into their ability to conduct their intended duties. Section 13(4) provides that any authorised officers in the wildlife sector in enforcing the provisions of this Act may use a firearm against the person who commits wildlife related offences. The Act however, lacks provisions on detection, search measures and / training of law enforcement officers in use of specific investigative tools.

The presentation of dog olfaction evidence in courts relies on decided cases as it is not expressly provided under the Evidence Act of Tanzania (Cap 16). The dog olfaction evidence can only be presented as circumstantial but not direct evidence which is a provision under section 167 of the Act. The Wildlife Act, 1967 which is the main Act for protection and Conservation of wildlife species in Tanzania has no provision on prosecution of wildlife crimes and as such does not create a special unit under the legislation dealing in wildlife crimes. This weakens the law enforcement as prosecutors have a myriad of matters to focus on and not delegating wildlife crimes to a special unit does not aim at strengthening the fight against transnational wildlife crimes.

3.8 Conclusion

The use of detection and tracker dogs as a tool in transnational wildlife law enforcement can be used as a measure of investigation where possible while creating legislative provisions for admissibility of detection dog evidence for prosecution of wildlife criminals in courts. However, looking at the legal frameworks above, it is possible to argue that Kenya, Uganda and Tanzania have not adopted any special legislative frameworks or institutional mechanisms on the use of detection and tracker dogs as a tool in transnational wildlife law enforcement or any rules of evidence on the admissibility of dog evidence in courts for prosecution of wildlife crimes.

The frameworks include provisions on protection and conservation of wildlife species and specimens while creating offences on illegal trade and hunting, however, they lack specific provisions on the use of detection dogs as a tool for investigation individually or in the transnational aspect. This further shows why the use of detection and tracker dogs for transnational wildlife law enforcement is limited, making it evident as to why admissibility of detection dogs olfaction evidence remains a challenge in the Courts of Kenya, Uganda and Tanzania.

Several other challenges also arise from the ever increasing wildlife crimes rates with minimal prosecutions based on dog olfaction tool with the question on whether there are adequate universal rules of evidence to prosecute such transnational crimes within East Africa. As to the regulatory frameworks at the regional and international level a general and internationally accepted approach may be developed in Kenya, Uganda and Tanzania on dog olfaction evidence as a concept; however, setting specific rules on the procedure may not easily be accepted internationally or regionally.

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UNODC, 'Wildlife and Forest Crime Analytic Toolkit: Report of UNODC Mission to Vietnam' (2015)

CHAPTER FOUR

THE USE OF DOG OLFACTION TOOL IN TRANSNATIONAL WILDLIFE LAW ENFORCEMENT IN KENYA, UGANDA AND TANZANIA.

4.1 Introduction

This Chapter interrogates the impact and consequences of using detection and tracker dogs in investigation and use of dog evidence in prosecution of transnational wildlife crimes in Kenya, Uganda and Tanzania. It is based on results from fieldwork analysis and relies on the responses from the interviewees on the experiences and views on detection dogs as a tool and various case laws on the use of dog evidence in Kenya, Uganda, and Tanzania. The findings are a presentation of a field study carried out by sampling Prosecutors, Investigators and dog handlers from KWS, UWA and TAWA in Kenya, Uganda and Tanzania respectively.

4.2 The extent to which institutions use detection dogs as a tool in transnational wildlife

Law Enforcement Kenya, Uganda and Tanzania

The general use of dogs is widespread by law enforcement agencies especially police departments during investigations of crimes and searches owing to their highly developed sense of smell which can be backed up by providing rapid and reliable means with good training for the dogs and their handlers.¹ Additionally, there has been constant need for better tools for transnational wildlife law enforcement and detection of trafficked wildlife and wildlife specimens with an emphasis on law enforcement officials at transit points to discriminate illicit containments.² This should be seen as a necessary measure to match the more sophisticated ways of criminals including concealment methods like turning ivory into powder form or beads to prevent detection at exit points.³

World Bank, 'Tools and Resources to combat Illegal Wildlife Trade' (2018) 21.

² Ibid

Africa Wildlife Foundation, 'stop the trafficking: Blocking the supply of illicit wildlife products and prosecuting criminals' (2018) https://www.awf.org/stop-trafficking> accessed September 13 2019.

Detection dogs are useful in criminal investigations and searches at transit points owing to their neither unmatched sensory abilities by neither use of detection machines nor general human search abilities. This is indicated by successful searches by detection dogs leading to arrest of suspects on wildlife related offences are prosecuted in national courts of jurisdictions' of arrest.

The study sought to find out the extent to which Kenya, Uganda and Tanzania have incorporated the concept of detection dogs in transnational wildlife law enforcement into their institutions. This objective is backed by the decision in *Florida versus Harris*⁴ where the Supreme Court of the United States addressed the reliability of use of detection dogs trained to identify narcotics. The US Supreme Court held that evidence by a certified trained dog with satisfactory performance in a certification or training program is admissible in court and can be relied upon.

The Table below indicates the number of respondents interviewed in Kenya, Uganda, and Tanzania.

Figure 1: Number of Respondents in each country

Country	Frequency	Percent
Kenya	30	54. 55
Uganda	15	27.7
Tanzania	10	18.18
Total	55	100

The table 1 above shows that there were thirty (30) Respondents in Kenya which is 54.55% (percent) of the interviewees, fifteen (15) in Uganda which 27.7% (percent) of the interviewees in Uganda and ten (10) making 18.18 % (percent). This shows that the study captures different perspectives from different institutional actors based in the various wildlife institutions tasked with the responsibility of curbing transnational wildlife crimes in Kenya, Uganda, and Tanzania.

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^{4 568} U.S 237

4.3 Institutional incorporation of Detection dogs in Transnational Wildlife Law Enforcement in Kenya, Uganda and Tanzania

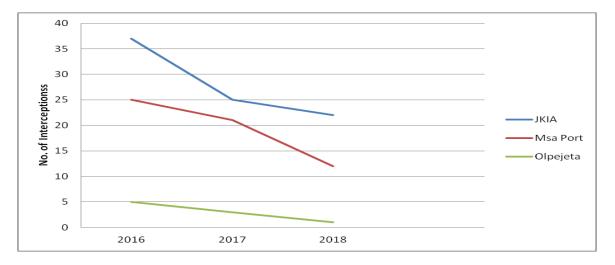
The study also aimed at finding out the extent to which the institutions mandated by the governments for protection and conservation have incorporated the use of detection dogs. It further sought to find whether there is a decline or incline of interceptions and arrests at points of exit, entry and national parks where the various canine units are established by the conservation and protection institutions. This is in line with the extent of use of dogs in different regions for law enforcement including the 1983 Supreme Court Case of *United States versus Place*⁵ which set the initial standards on how and when the police could use dogs at airports and other areas. The US Supreme Court held that a sniff by a detection dog in a public did not amount to a 'search' under the meaning of the Fourth Amendment of the United States Constitution. However, where law enforcement has reasonable suspicion to believe a suspect is in possession of illegal substance, then the use of a detection dog is allowed and the evidence is admissible in court.

4.3.1 Kenya Wildlife Service's Canine Units

Kenya Wildlife Service is the institution mandated for protection and conservation of wildlife under the provisions of WCMA, Cap 376. It has the canine unit set up under it. KWS has set up several units within the country. However the stations which are included in the study are KWS HQ, JKIA canine unit, Ol pejeta Conservancy and the Mombasa Marine Park/ Port Unit. The study illustrated in the table below was carried out to show the deterrent effect of the use of dog olfaction in law enforcement. The study period is five (5) years from 2015 to 2019 reflecting the effect when the dogs were first introduced to the current effect. The figure below illustrates the decline and incline of interceptions and arrests using detection dogs three areas /units of study including Jomo Kenyatta International Airport(JKIA), Mombasa Ports and Ol Pejeta Conservancy.

⁵ United States versus Place





The figures illustrates the number of interceptions at the various KWS canineunits including JKIA, Mombasa Port and Olpejeta Conservancy. These detections and interceptions were made during searches with the team the team of dog handlers and the dogs. The canine unites in Kenya were set up in 2016 however the figures illustrated approximante interceptions/arrests from 2016 at JKIA were seventy eight(78), Mombasa Ports were fifty eight (58) while those made at Olpejeta Conservancy were four(9). The variation in figures shows the changing trend in interception of wildlife crimes and presumed reaction of individuals involved in illegal wildlife trade. The rate of interceptions/arrests at the units started 2014 when the KWS detection units were introduced are relatively high at this however this has continued to decline with time. The Olpejeta Conservancy has tracker dogs which are used in large tracts of fields unlike the detection dogs at JKIA and Mombasa Ports used to sniff luggages and containers respectively. The rate of interceptions using the tracker dogs at Ol Pejeta is relatively low as they engage othe measures like community based conservations where the community alert the rangers in cases of suspicion of any poaching of wildlife in the area. Generally, the rates of interceptions are higher when the canine units are introduced indicating the effectiveness of the olfaction tool in investigations and the significant decline in the following years which is an indication of the detterent effect of the dogs as criminals are likely to seek alternative routes owing to the presence of detection dogs at these points..

4.3.1.1 Jomo Kenyatta International Airport (JKIA) Unit

KWS set up a unit at JKIA where the dog handlers stated that they work with other agencies at the airport including Kenya Airports Authority, Kenya Revenue Authority (Customs) and Immigration. The JKIA unit interviewees included one (1) technical advisor and two (2) dog handlers. The number of interceptions at JKIA using detection dogs in 2016 are thirty seven (37) in 2017 the numbers reduced to twenty five (25) and sharply decline to sixteen (16) in 2018 According to one respondent this is the deterrent effect of the presence of the dogs at the airport. The respondent stated.

"Since introduction and full support of the dogs the outcome has varied from the beginning. When the dogs were first introduced to the airport with the aim of sniffing out and detecting wildlife species and specimens, the numbers of interceptions and arrests of wildlife offenders was very high. However, the presence of the dogs seemingly sent a message which made the traffickers become aware of their presence at the airport and the likelihood to be caught. Lately the numbers have significantly reduced. There are still arrests and interceptions but the numbers have reduced yearly."

JKIA is a major transit point for wildlife trafficking of wildlife and wildlife products from West Africa. According to the findings detection dogs has been an important factor in reducing cases of wildlife trafficking through JKIA not only by the number of arrests and interceptions leading to seizures and prosecutions but also by creating deterrent effects.

4.3.1.2 Mombasa Ports Unit

The response on the decline/incline in numbers of interceptions using detection and tracker dogs are quite similar with the respondents at Mombasa Ports and where the respondents are of that interceptions are high at the beginning when canine units are introduced at the port and the conservancy respectively. The total number of respondents at Mombasa Ports Unit was twelve (12) including two (2) investigators, one (1) prosecutor and nine (9) dog handlers. An investigator stated that:

"Several interceptions have been done during searches using the sniffer dogs that led to the discovery of ivory at the Mombasa Port. However, the number of interceptions fluctuates as they rely on information from other intelligence units."

A dog handler stated that;

"Whenever there is suspicion on the content of a cargo, the officers will do the search in the cargo area using the sniffer dogs. I have observed that most of the time when the dogs indicate by behavioural acts that there could be something in the container, upon further searches i will always been found that there is existence of illegal wildlife products."

These findings indicate that when dogs are sufficiently trained to detect a particular scent, they have the ability to identify the scent which can be determined through the behavioural changes. The olfactory abilities of dogs combined with their training, have led to their use to detect and discriminate odours in a wide variety of settings and purposes not only in transnational wildlife crimes.⁶

4.3.1.3 Ol Pejeta Conservancy Unit

At Ol Pejeta Conservancy the detection dogs are usually bigger in size with longer legs as they are trained for detection in larger tracks and areas. They are larger in size with longer legs as they in the fields while covering large tracks of land. There were a total of five (5) respondents from Ol Pejeta Conservations all of whom are dog handlers. There was no consensus on the effect of detection dogs at Ol Pejeta Conservancy by the respondents. One stated;

"The number of arrests at the park using the tracker dogs has increased as the dogs are effective."

While the other stated that:

"The number of arrests are decreasing especially due fear of be caught using the tracker dogs."

These contrasting statements indicate that the detection dogs at Ol Pejeta are both effective and deterrent of wildlife crimes. The increase in arrests indicates that the dog olfaction tool is an effective tool in transnational wildlife law enforcement as dogs are capable of using the high sensory smell to track down poachers in the fields of national parks while the decline indicates that a deterrent effect is created by presence of the dogs at the parks which is important as the outcome justifies the use of the tool in wildlife law enforcement and conservation generally.

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Richard Doty, *Handbook on Olfaction and Gustation*, (Wiley Publishers, 2015) 597

4.3.2 Uganda Wildlife Authority Canine Units

A similar study was conducted in Uganda to find out to what extent Uganda Wildlife Authority (UWA) has incorporated the use of detection dogs into their structure and if it has any deterrent effect with regards to transnational wildlife crimes.

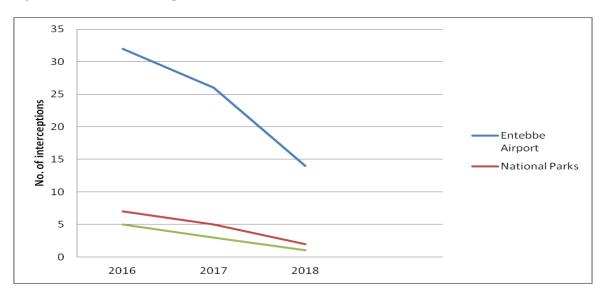


Figure 3: Number of interceptions at UWA units

The figures illustrates the number of interceptions at the various UWA canine units mainly at Entebbe Airports, National Parks and Other areas in the country. The number of interceptions/arrests approximately made since the units were set up at Entebbe Airport were seventy two(72), National Parks were fourteen (14) while those made at Olpejeta in other areas were four(4). These detections and interceptions were made during searches with the team of do handlers and the dogs. The variation in figures shows the changing trend in interception of wildlife crimes and presumed reaction individuals involved in illegal wildlife trade. The rate of interceptions/arrests at Entebbe started 2016 when the UWA detection units were introduced are relatively high however this declined with time. Similarly, the rate of interceptions using the tracker dogs at the UWA canine units decline with the number of years with 2018 showing the lowest rates of interceptions compared to 2016 when the united were first introduced.

4.3.2.1 Entebbe Airport Canine Unit

The study was conducted at the Entebbe Canine Unit and Uganda Wildlife Authority headquarters. The interviewees included prosecutors, investigators and dog handlers. The interviewees' respond to activities at the airport and national parks generally. The interviewees included one (1) investigator, two (2) prosecutors and five (5) dog handlers. The investigator state that:

"The number of arrests using dogs has gone up as there is reduced connivance with internal persons who may engage in assisting in smuggling besides reducing instances of corruption with the internal sources as dogs are not corruptible. Dogs may also assist where machines have failed."

Another dog handler who has experience working both at Entebbe Airport and Queen Elizabeth National Park stated that:

"The number of arrests started high but with time the arrests are going down which could be a result of the fear created by the presence of the dogs."

From these responses we can conclude that the use of tracker dogs at the Entebbe Airport and Queen Elizabeth National Park have been successful as the number of arrests have been significant and has also led to the deterrence of poachers and smugglers using the Entebbe Airport to illegally export wildlife artefacts and specimens..

This analysis is supported by the Uganda TRAFFIC report of 2018 which stated that there had been an overall increase in arrests, prosecutions and convictions in Uganda.⁷ The report attributed this increase to increased capacity and efficiency in enforcement of wildlife crimes by the Uganda Wildlife Association. The report also indicated that ivory seizures were reported in seven separate incidents from 2013 to March 2016, and in all cases but one the seizure taking place at Entebbe international airport.⁸

4.3.3 Tanzania Wildlife Authority Canine Units

A similar study was conducted in Tanzania to find out to what extent Tanzania Wildlife Management Authority (TAWA) has incorporated the use of detection dogs into their structure and if it has any deterrent effect with regards to transnational wildlife crimes.

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Alessandra Rossi, 'Uganda Wildlife Trafficking Assessment' (2018) Traffic Report

⁸ Ibid

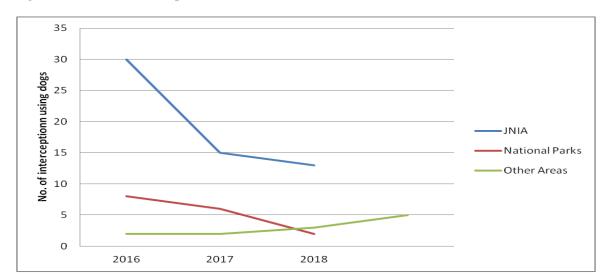


Figure 4: Number of interceptions at TAWA units

The figures illustrates the number of interceptions at the various KWS canineunits including JKIA, Mombasa Port and Olpejeta Conservancy. The TAWA canine Units wers introduced and put to work since 2016. The number of interceptions/ arrests approximately made since the units were set up at Julius Nyerere International Airport were fifty eight(58), National Parks were twenty two(22) while those made at other areas were nine(9). These detections and interceptions in Tanzania are still relatively low as compared to Uganda and Tanzania showing that the canine unit has not been put much into use. However, the number of arrest continue to decline after the introduction of dogs with years showing the the dog can be a great investigations and detterent tool.

4.3.3.1 Tanzania Wildlife Management Authority (TAWA)

This study was conducted at the Tanzania Wildlife Management Authority (TAWA) headquarters. The interviewees who responded included two (2) prosecutors, four (4) handlers, and one (1) technical advisor.

When asked whether the use of detection dogs has increased the number of arrests or prosecutions in Tanzania on prosecutor stated;

"Yes. Using dogs during searches is effective as they can detect products that are hidden in different places which humans or machines and normal patrol may not be able to detect. An

example is where luggage belonging to an Omani citizen passed through airport scanners without detection but the dogs managed to sniff and detect."

When asked the same question as the prosecutor, one dog handler stated;

"Increasing. The use of dogs is effective especially in verification and confirmation of what the exhibits are."

Another dog handler stated;

"Number of arrests is decreasing. The market for products is slowly dying and as such the illegal traders are engaging less to lack of market. The fear of being arrested as their routes has mostly been discovered by law enforcement officers using sniffer dogs."

From these responses the researcher concluded that the use of tracker dogs by TAWA has been successful leading to the deterrence of poachers and smugglers to illegally export wildlife artefacts making it an effective tool in transnational wildlife law enforcement.

4.4 Prosecution using Detection Dog Evidence in Courts

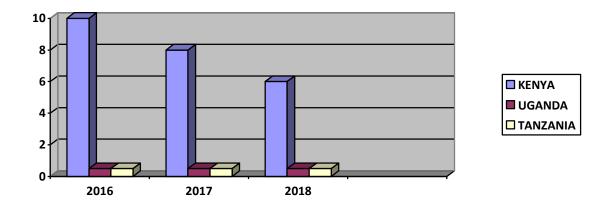
The capacity of prosecutors and law enforcement officers in obtaining and presenting dog olfaction evidence for prosecution of wildlife crimes is assessed in this study. The Wildlife Conservation and Management Act, 2013 under section 107 delegates powers of prosecution to KWS officers. The Uganda Wildlife Act, 2019 provides for prosecution under section 18(5) subject to article 120(3) and 4(a) of the Constitution and directions of the Director of Public Prosecutions by public prosecutors appointed under any law in force. The Wildlife Conservation Act, 2013 of Tanzania does not have express provisions on prosecution. Scent identification involves the use of detection and tracker dogs to match an odour to an item that it has been specifically trained to identify in investigations of crimes⁹ and in this case study wildlife products. Identification can be determined when the dog stops or has behavioural changes depending on the training. In addition, law enforcement officers must ensure proper collection, management and presentation of obtained evidence in courts.

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Michael McCullen et, al 'Scent identification in Criminal Investigations and Prosecutions: New Proocol Desisgns Improve Forensic Reliability' SSRN Tadeus Jozirsk.

The aim of deterrence of transnational wildlife crime does not end with detection and interception using the dog olfaction tool. In order to make the tool more efficient there is further need for prosecution of criminals using dog olfaction in courts for convictions of criminals. This has seen the government institutions introduce canine units and training of handlers at KWS, UWA and TAWA to work with the detection dogs at the various exit and entry points. The study sought to find out the number of prosecutions between 2016 to 2018 in Kenya, Uganda and Tanzania. The responses were obtained from five prosecutors in Kenya, two (2) prosecutors KWS prosecutors and one (1) TAWA prosecutor.

Figure 5: Number of prosecutions using dog olfaction evidence in Kenya Uganda and Tanzania.



The findings above show that prosecution using dog olfaction evidence is higher in Kenya compared to Uganda and Tanzania. This owes to the fact that most arrests in Uganda and Tanzania have ended up in pleas of guilt and as such there were no trials. The penalty provisions in Uganda and Tanzania have been low and offenders found it easy to pay penalties and walk away as opposed to going for trial as it is possible for them to afford fines as from the money they make from proceeds of wildlife crimes.

This is further seen by the general penalty provisions whereas in Kenya Section 92 of the WCMA, 2013 creates offences related endangered species where it states that any person who commits an offence in respect of and endangered or threatened species or in respect of ant

trophies shall be liable upon conviction to a fine of not less than 20 million shillings of imprisonment for life. Further in R v. Feisal Mohamed Ali¹⁰ the accused on charges of possession of ivory was sentenced to 20 years imprisonment and a fine of 20 million Kenya shillings. The findings in Uganda on pleas of guilt are likely to change a the new Wildlife Act, 2019 has stiffer penalties under section 71 which states that persons who commits offences related to species which are extinct in the wild or critically endangered shall be liable to a maximum fine of one million currency points or life imprisonment or both. On the other hand, Tanzania Wildlife Act, 2013 under section 43 which only provide for general penalties on persons who contravenes the Act on conviction to be liable to a maximum fine of 5million and maximum of 5years imprisonment making it likely to have more pleas of guilt subject to payment of fines in Tanzania.

a. Collection. Handling and Management of Primary Evidence (Chain of Custody).

During investigation of wildlife crimes pieces of wildlife species or specimen also known as exhibits are collected at the scene of crime and must be properly managed and stored to be presented in courts. These are the primary evidence which are further corroborated by detection dog evidence and as such must. The collection, management and presentation of real evidence must follow proper procedure of chain of evidence and must not be tampered with in order to create water tight cases for prosecution.

With regards to collection and management of the chain of evidence an investigator stated that;

"The exhibit is marked in the presence of the police. The exhibits are then counted, measured, filed and indicated in the search certificate. It is then taken to the police. An expert is then called to identify for verification and giving opinion reports e.g. if it is ivory. The report is then attached to the file which accompanies the suspect to court. The exhibit is usually taken to be kept in the strong room at Uganda Wildlife Authority when it is received with the detailed information. Lateran inventory is done according to the CITES regulations."

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¹⁰ Misc. Appeal No. 75 of 2015

Another investigator stated;

The Chain of Custody form is followed by filling the exhibit from showing its movement. Upon recording the form is handed over to the strong room for storage under the KWS Authority. When need be it is taken to the expert to verify the product and confirm it to be a atrophy at the National Museum of Kenya in Nairobi. The exhibit is the taken back to KWS strong room for storage or produced in courts during trial.

These responses indicate that there is proper management of the chain of custody of real evidence confiscated during investigations and arrests of wildlife criminals. This evidence if corroborated by detection dog evidence creates a high probability for prosecution of wildlife crimes. In other legislative frameworks canine evidence is used to corroborate other primary evidence. In *Buck* v. *State*, the court determined that dog evidence is admissible in court as long as it used to corroborate primary evidence presented by the state on whether proper training and tests of tracking ability is shown to be accurate in more than one occasion.

This finding further show that the management of chain of custody of real evidence is of great significance in prosecutions of cases. Investigators and law enforcement officers must ensure that real evidence is not tampered with. When a suspect is arrested as a result of detections made by the sniffer dogs, prosecution often relies on the courts to admit the dog olfaction evidence as corroboration to the real evidence presented in courts which may result to convictions of wildlife crime offenders. This response is backed by court's decision in evidence in the case of *Uganda* v. *Juvenile*, ¹³ in the High Court of Uganda; the court stated that evidence of the police dog is circumstantial evidence, as such must be treated with utmost caution and corroborated by some other evidence. The evidence must be properly stored and managed and not tampered with in any manner. This is further seen in the case of *Feisal Mohammed Ali*¹⁴appeal where the defense appealed on the basis that the court had relied on tampered evidence.

John Ensiminger, Police and Military: Criminal Detection, Forensic Evidence and Judicial Admissibility (Taylor and Francis Group 2012).

¹⁹⁴³ OK CR 65 138.

¹³ HCT-02-CR-SC-0377 OF 2017

¹⁴ Misc. Appeal no. 75 of 2015

b. Expert Opinion

The Evidence Act of Kenya Cap 80 under Section 48 when courts has courts has to form an opinion on science if the persons are specially skilled in such science or in questions as to identify the evidence it is referred to as expert opinion. This provision is similar under section 47 of the Tanzania Evidence Act, 1967 and section 48 of the Uganda Evidence Act, Cap 6. KWS, UWA and TAWA have established canine units at various ports and points of entry where both the dogs and the handlers are trained as officers with both of their records and history put into account during investigations and prosecutions. These canine units includes dog handlers and dogs who are both trained as officers it with tailor specific trainings to the dog unit on handling sniffer dogs and detection of wildlife products respectively. The dogs and the handers are certified upon completion of training. Dog handlers are usually required to give expert testimony on presentation of dog olfaction evidence.

A prosecutor stated that:

"In most cases detection dog handlers must testify as expert witnesses in courts. When the dog and its handler are working together, when a dog makes behavioural changes during a search by the law enforcement officers, it is likely that there is contraband. It is effective when the two work together."

Another prosecutor stated:

"There is requirement of certification of handlers by courts as defense attorneys may bring this up as a challenge when KWS handlers are just trained and not certified showing lack of proof n their expertise and qualifications as law enforcement officers. If the dogs do not have certification it may be difficult to prove their capability."

Expert witnesses give evidence of facts to provide a basis for the opinion which he is to express.¹⁶ In another decision at the EACJ in the case of *Omondi* v. *Republic*,¹⁷ stated sniffer or detection dog evidence may be admissible in certain circumstances. It was further held that such

David Karanja 'The Role of Kenya Wildlife Service in Protecting Kenya's Wildlife' (2012) *The Kenya Wildlife Service in the21st Century: Protecting Globally Significant Areas and Resources*, Vol. 29, 74-80.

J.J Doyle Q. C, 'Admissibility of Opinion Evidence' (1987) South General for South Australia, 688
 [1967] EA 802

evidence should be admitted with caution with the court making sure the credibility of the dog has been ascertained.

A dog handler stated;

"Handlers mostly testify on what they have done in the past and how the past and how they have worked with the dog in the past and how the dog detected the specimen including canine behaviour when they detect wildlife specimen. They thereafter leave it up to the prosecutors to prove beyond reasonable doubt."

These findings show that handlers must be trained besides the sniffer dogs as the two works as a team and given certification subject to their qualifications. The detection dog evidence can be admitted in courts for prosecution of crimes. However, it needs to be corroborated often by expert opinion testimony in this case the dog handlers in the *Virginia case of 1982* where the court stated that "A handler qualifies as an expert in training handling and reading of tracking dogs." This position was further reiterated by the Kenyan courts in the case *Kennedy Maina* v. *Republic*, 19 in which the Court held that a dog handler is competent to testify as to the tracking ability and its reliability. The issues that arose included the admissibility of dog evidence and its evidential value. 20 The court in its decision stated that:

"... We are conscious of the assistance which can be rendered by trained police dogs in tracking down and pursuit of fugitives. We do not wish it to be thought that we rule out absolutely evidence of this character as improper in all circumstances but we certainly think that it should be accompanied by the evidence of the person who trained it."

This is further backed by the courts decision in the case of *John Njogu Weru v. Republic* the court refers to the decision in *Regina* v. *Das Mathew Theodore Peterson* (1994) where the courts stated that:

¹⁸ Ibid.

¹⁹ Criminal Appeal No. 14 of 2005

²⁰ Ibid

"....In our judgement, if a dog handler can establish that a dog has been properly trained and that over a period of time the dogs reaction indicates that it is a reliable pointer to the existence of a scent from a particular individual, then that evidence should be properly admitted."

A prosecutor stated that:

"Generally the evidence is corroborated with expert opinion and there is usually more than one person testifying and may include additional video evidence in certain instances. Other stakeholders are required to be present including officers from Airports Authority and Immigration during searches at the airports"

The findings indicate that dogs are also trained and certified as law enforcement officers which certification, qualification and experience must be proven in court. In the case of *Abdallah Wendo* v. *Republic*²¹ the East Africa Court of Appeal opined that evidence of identification by police dogs is admissible and can corroborate other evidence but the dog must qualify as an expert with the records of its training put into account in weighing the value of its evidence.²²

c. Admissibility of dog olfaction evidence in Kenya, Uganda and Tanzania.

The position on the admissibility of dog evidence in court is similar in Kenya, Uganda and Tanzania. Dog olfaction evidence can only be admitted as circumstantial evidence. Circumstantial evidence is considered as indirect from which the existence or non-existence of a fact in issue may be inferred which should be corroborated. ²³ Black's law dictionary defines circumstantial evidence as;

"....evidence which inferentially proves the principal part by establishing condition of surrounding and limiting circumstances whose existence is a premise from which the existence of the principal fact may be proven."

Abdullah Wendo v. Republic (1953) 20 EACA 166

²² Ibid.

Sowed Juma Mayanja, 'Circumstantial Evidence and its Admissibility in Criminal Proceedings: A Comparative Analysis of the Common Law and Islamic Law Systems' (2017) *Journal of Law, Policy and Globalization*. Vol. 67

The principles set out in dealing with reception of dog evidence on the case of *Uganda versus Muheirwe* ²⁴ where the court set the principles to guide trial court with regards to admissibility and reliance of dog evidence. The courts stated that:

"....The principles that may govern the consideration for the exclusion on admissibility of the weight attached to sniffer and tracker dog evidence are that; the evidence must be treated with utmost care(caution) by court and given the fullest or of explanation by prosecution; the most material before the court establishing the experience and qualifications of the dog handler; there must be material before the court establishing the experience and qualification of the dog handler; there must be material before the court establishing the experience and qualification of the dog handler; the reputation skills and training of the tracker dog is required to be proved before the court by the handler/ trainer who is familiar with the characteristics of the dog; the circumstances relating to the actual trailing must be demonstrated: the handler is free to describe the behaviour of the dog and can give expert opinion as to the experiences which might properly be drawn from the particular action by the dog: according to the circumstances the canine might be at the forefront of the prosecution case or a lesser link in the chain of evidence."

A respondent stated

"The dogs have been used as mechanisms for detecting while the human comes in to identify and confirm the exhibit and as such the evidence is not challenged. In other instances the evidence is further corroborated by DNA evidence and documentary evidence."

An investigator stated;

"Investigating officers testify on their findings surrounding the dog evidence and as such it is more corroboration evidence and not direct evidence."

A prosecutor stated;

"Proof beyond reasonable doubt is a challenge."

Another respondent stated

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"Testimony by handlers on training which touches on events from inception to tracking including proof. Sometimes demonstrations are required with the dogs accompanying the handlers. This is meant for proof beyond reasonable doubt."

One respondent from Tanzania stated

"Dog handlers may be taken to courts as witnesses but dogs aren't allowed in courts in Tanzania. Theo dog handlers are not gazetted like other officers therefore defense lawyers' challenge their expertise making proof beyond reasonable doubt a challenge in courts as this evidence is meant to corroborate other evidence."

One respondent (a prosecutor) stated;

"I haven't been in a position to present detection dog evidence in court as most of the arrest that have been made from the searches carried out using the dogs which were able to detect products, the suspects always plead guilty. I assume these pleas of guilt are as result of the low penalties set by the regulations which the offenders are able to afford considering the huge amounts of money they make from illegal trade of wildlife products. Another reason may be because the dog unit was only introduced in 2016 and we haven't had a major precedent on the wildlife crime cases in relation to detection dogs."

The response indicates that dog olfaction evidence is only admissible as circumstantial evidence and as such there has to be proof beyond reasonable doubt. Generally, the responses received from the various respondents interviewed and the available case law in the jurisdiction. From the responses from the interviewees and the available reported case law on the admissibility of dog evidence in court particularly in Kenya and Uganda, the researcher concluded that generally, dog olfaction evidence is admissible in the courts but this may not be specific to wildlife crimes only. The rules are however applicable to dog olfaction evidence in wildlife crime matters in courts. The dog olfaction evidence can therefore be a significant piece of evidence in prosecution of wildlife crimes to further create deterrence of transnational wildlife crimes. In determining the admissibility of dog olfaction evidence the courts rely on decided cases and not statutory provisions.

4.5 Challenges facing Mutual Legal Assistance in Transnational Wildlife Law Enforcement in East Africa

Mutual Legal Assistance is a crucial element in transnational law enforcement. Institutional frameworks ought to substantiate MLA in order to achieve successful arrest and prosecution of cross border wildlife law offenders. The study seeks to find out if there is any form of Mutual Legal Assistance and determine if it is adequate for investigations and cross border arrests and investigations. The question on Mutual Legal Assistance was similar to all prosecutors, dog handlers and investigators.

Tanzania, Kenya and Uganda are the founder states of the East African Community (EAC). They have long co-existed and enjoyed a history of cooperation under successive regional integration arrangements.²⁵ The EAC established the Treaty for the Establishment of the East African Community which came into force on July 7, 2000. ²⁶

Article 116 of the EAC Treaty makes provision for member states to develop a collective and coordinate policy for the conservation and sustainable utilisation of wildlife and other tourist sites in the EAC.²⁷ This means that EAC member states are required; to harmonise their existing policies to ensure conservation of wildlife in and outside protected areas; be in constant communication exchanging information and adopt common policies on wildlife management and development; and co-ordinate in their efforts in the control and monitoring of encroachment and poaching activities.²⁸

The EAC also has the EAC Protocol on Environment and Natural Resources Management which came into force in 2006.²⁹ Article 12 of the Protocol provides for the management of wildlife resources with key emphasis on the development, harmonisation and adoption of common laws, policies and strategies for the conservation and utilization of wildlife resources in the EAC.³⁰

Isabelle Wafubwa (ed), 'Towards Political Federation in the East African Community: Achievements and Challenges' (2015)

²⁶ Ibid. Cf. Treaty for the Establishment of the East African Community

Article 116 of the Treaty for the Establishment of the East African Community

Elvis Mbembe Bida, 'The Legal Framework of the EAC' in Emmanuel Ugisharebuja, John Eudes, and Tom Ottervarger, *East Africa Community Law: Institutional, Substantive, and Comparative EU Aspects* (Brill Publishers 2017).

Wauna Oluoch, the Legitimacy of the East African Community (Cambridge University Press 2009).

Article 12of the EAC Protocol on Environment and Natural Resources Management

Currently Kenya, Tanzania, Uganda, Rwanda, Burundi, and South Sudan are in the process of harmonising their wildlife policies to help curb and limit encroachment and poaching activities.³¹ They are also in the process of creating a Regional Wildlife Conservation Information Management System. This will help ensure easier sharing of information and go a long way in the successful protection of wildlife in the EAC region.³² However, there are still some challenges that need to be addressed.

4.5.1. Kenya

Kenya can provide Mutual Legal Assistance based on the principle of reciprocity and mutual cooperation under section 50 of the MLA Act, 2011. Kenya enacted the Mutual Legal Assistance Act, 2011 to provide mutual legal assistance in transnational wildlife criminal matters. The institutions listed the respondents to be involved in inter-agency and cross border legal assistance in Kenya included Kenya Police, Kenya Revenue Authority (Customs), Kenya Airport Authority (KAA), Kenya Forest, Kenya Ports Authority (KPA) and Africa Wildlife Foundation (AWF).

Inter-agency cooperation and mutual legal assistance is crucial in the fight to curb illegal wildlife poaching and export of game trophies. However, respondents interviewed indicated that inter agency cooperation in Kenya is still wanting.

One respondent stated that;

"Inter- Agency Cooperation is not adequate as other agencies may not be cooperative. Other agencies may indicate that wildlife crime is not a threat to the state and that they would give priority to matters that deal with security threats and search they don't need detection dogs to sniff out wildlife products. Airline policies may not be in line with detection dog searches."

This is further impacted by the provisions under Section 25 of the Mutual Legal Assistance Act, 2011 of on refusal of cooperation when the other party feels that the value of the exhibit is insignificant. Detection dog evidence highly relies on corroboration and refusal of cooperation may weaken the prosecution's case.

Another respondent stated that;

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East African Community 'Tourism and wildlife management' < https://www.eac.int/tourism/wildlife-management accessed 13 September 2019

³² Ibid.

"There is poor public relation of agents and lack of motivation across all agencies to pursue wildlife related crimes and trafficking. Other agencies and law enforcement officers may not be willing to participate in the searches using the detection dogs or issue related materials or videos to support the detection dog evidence."

This may be attributed by the ignorance of the value of our wildlife and the significance of conservation generally.

A third respondent stated;

"Other Agencies may not handle the issue to the fullest as they state that such duties are not parts of their obligations of job specification like security and their lack of awareness of the importance of wildlife and its conservation."

The findings the Respondents' interviewed show that Inter-Agency Cooperation and collaboration is present. However, it is very wanting and not as adequate as it could possibly in Kenya.³³ This claim is supported by a report by Wildlife Direct, a Kenyan and US registered charitable organisation which analysed data collected from Kenyan courts between 2016 and 2017. The report found that lack of cooperation in tackling transnational crimes has led to wildlife traffickers on Interpol's most wanted list to escape arrest and prosecution.³⁴

Further transnational cooperation outside the country is almost nonexistent as one would be forced to seek extradition process under the Extradition (contiguous and foreign countries) Act Cap 77 Revised Edition 2012 [1987] which is also quite cumbersome while slowing down the process of transnational wildlife law enforcement.

4.5.2 Uganda

Uganda Mutual Legal Assistance Act 2010 Laws of Uganda provides that Uganda can participate in Mutual Legal Assistance on reciprocity. Mutual Legal Assistance can be include transit of persons under section 7 of the Act and gathering evidence using video links as provide under section 9 of the Mutual Legal Assistance Act, 2010.

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Caroline Chebet, 'Lack of transnational cooperation stalling wildlife crime cases in Kenyan courts' < https://spaceforgiants.org/2019/01/08/lack-of-transnational-cooperation-stalling-wildlife-crime-cases-in-kenyan-courts/ accessed 29 October 2019.

Ibid.

The respondents listed government agencies that are involved in Mutual Legal Assistance to include: Uganda Police, Immigration, Uganda Airport Authority (UAA) and Africa Wildlife Foundation (AWF). From the respondents interviewed there was a general consensus that interagency cooperation was a major challenge. From the 15 respondents interviewed 12 of the indicated that there was limited inter-agency cooperation in the country.

A dog handler stated that;

"The agencies may challenge the handlers to prove the behavioural changes on the dog upon sniffing and detection hence creating doubts. A number of people are not aware of the dog's behaviour when it detects wildlife specimen and its training to detect that particular wildlife product for instance ivory."

A prosecutor;

"Lack of responses from counter parts or limited responses by the counter parts hindering interagency cooperation this is likely to be due to their lack of knowledge value for wildlife products poses a challenge on the use of dogs in detection of wildlife crime."

The consensus on the lack on interagency cooperation by the Respondents in Uganda can be further supported by a report by TRAFFIC³⁵ prepared in 2018.³⁶ The report highlighted the need for the Uganda National Wildlife Crime Coordination Taskforce to develop a national coordinated system for the relevant institutions, organizations, agencies and stakeholders to help curb transnational wildlife crimes.³⁷

From the responses received by the respondents' interviewed, the researcher concluded that inter-agency cooperation in Uganda is still weak as a result of unwillingness of other agencies due to their ignorance and naivety of wildlife and conservation generally. Their unwillingness to work with the detection dog units at the points of entry and exit may frustrate the efforts of using detection dogs in transnational wildlife law enforcement. The lack of knowledge of the dog

Alessandra Rossi, 'Uganda Wildlife Trafficking Assessment' (2018) TRAFFIC Report

Environmental Investigation Agency, 'Uganda should be commended for major progress in tackling ivory trafficking; however, there remain important actions which need to be implemented to tackle ivory trade flows from and through Uganda' (2019) < https://eia-international.org/wp-content/uploads/EIA-report-NIAP-2018.pdf> accessed 29 October 2019.

³⁷ Ibid n35

olfaction ability may be a reason of doubt on the ability of the dog to detect, track and find wildlife products that it has been trained to sniff out.

4.5.3 Tanzania

The institutions listed by the respondents to be involved in inter-agency and cross border legal assistance included the Tanzania National Authority (TANAPA), Tanzania Police, Tanzania Ports Authority (TPA), Tanzania Airport Authority (TAA) and Africa Wildlife Foundation (AWF). From the respondents interviewed, there was a general consensus that there was successful inter-agency cooperation.

One respondent stated;

"In some instances where protocol is needed working with other agencies like Immigration and the Tanzania Police has made it easier as requirements like letters and permits may not be necessary as there is permission to go straight to the issue."

While another stated;

"Sharing experiences from different institutions and reduction of cost and work processes is a plus when working with other agencies."

A third respondent stated;

"There is ease of work as every agency focuses on what they are better at. Working together ensures that investigations are carried out comprehensively."

Tanzania has also established a national strategy to combat poaching and illegal wildlife trade. This has led to the establishment of a multi-agency task team (MATT) to help improve cooperation with the relevant national and international law enforcement agencies tasked with the responsibility of tackling transnational wildlife crime.³⁸

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Daniel Gumbo, et. al., 'Wildlife Judicial and Prosecutorial Assistance Trainings Series (Tanzania)' (2016)

https://www.awf.org/sites/default/files/media/Resources/Books%20and%20Papers/BAGAMOYO%20WORKSHOP%20PROCEEDINGS%20DRAFT%201.pdf> accessed 29 October 2019.

From the Respondents responses, the researcher concluded that unlike it counterpart's, i.e. Kenya and Uganda, inter-agency cooperation in Tanzania is fairly successful and plays a very significant role in the fight against illegal wildlife poaching and exporting of illegal wildlife game. This is likely to encourage and strengthen the detection dog units that have been set up to work with other state agencies in combating transnational wildlife crimes.

4.6 Challenges in Gathering Dog Evidence for Prosecution of Wildlife Crimes in Courts in Kenya, Uganda and Tanzania

This study also sought out to find the consequent challenges or difficulties in the collection of evidence when the crime is cross boarder in nature and involving more than one state and in matters where mutual legal assistance would be required to aid law enforcement authorities in gathering of material related to dog olfaction evidence for prosecution of wildlife crimes at the national level. The findings below show that the main challenge faced in the collection of dog evidence for prosecution of wildlife crimes was the issue on jurisdiction. Wildlife crimes are usually cross-border in nature and this means that offenders usually move from one country to the next smuggling illegal game and trophies. In each jurisdiction there is different procedure on how to deal with suspects and offenders. Since there is no uniform regional legislation governing wildlife crimes in Kenya, Uganda and Tanzania it becomes very challenging for collection of dog evidence one suspects cross boarders from one country to another.

4.6.1 Kenya

Twenty (20) respondents including four (4) prosecutors, four (4) investigators and twelve (12) dog handlers gave their opinion based on their experiences. One respondent while referring to inter agency cooperation between the government institutions and mutual legal assistance between states responded that;

"There are cases of non-cooperation between the different state agencies. This is because of conflicting legislations between the states and in some cases competing interests among the agencies on who to get credit."

Another stated;

"In instances where the suspects cross the borders or are instances of other countries, different countries may have different ways and permits. Whereas trophies may be illegal in Kenya they

may not be illegal in other countries. Other countries may also not be members of CITES making it difficult to cooperate with CITES members states.

Another respondent stated that challenge may arise in the collection of dog evidence to be used in prosecution in court was the tampering of crime scenes and evidence making findings of investigations inconclusive and thus not credible to be used as evidence in court. Section 20 of the Mutual Legal Assistance Act, 2012 provides for presumption of continuity where the burden of proving that an exhibit has been tampered with relies with the lending authority. Such legislation may bring about laxity in interstate mutual legal assistance.

4.6.2 Uganda

In Uganda, a total of ten (10) interviewees/respondents commented on the challenges facing collection of dog evidence to be used in prosecution in court. They included three (3) prosecutors, two (2) investigators, and five (5) dog handlers.

The main challenge according to the respondents was lack of inter-agency cooperation where suspects cross the border.

One respondent stated,

. Lack of inter-agency cooperation. Wildlife cases are neglected and it poses difficulty on following up on the chain of custody and management from police or other law enforcement authorities in different countries. Hindrances including lack of response from counterparts or they may respond but give very little information."

Another respondent stated,

"Other agencies or states may not value the exhibits to be produced in court as evidence and as such the exhibits may not be taken care of. There are also the challenge of collusion between wild life traffickers and border patrol officers which led to tampering of evidence and even in some cases switching of evidence while in police custody. For example, when rhino horns are switched with buffalo horns while in police custody or when they are requested for from other countries of destination making it hard to maintain the chain of evidence."

In the case of *Uganda versus Muheirwe*,³⁹ the courts stated that preservation of the scene is crucial and that the trail must not have become stale. The conclusion of the court shows how crucial the preservation of the chain of evidence is before presentation of detection dog evidence is required. The findings show that even in instances where mutual legal assistance is available maintaining the chain of evidence and thusly presenting water tight case based on the dog olfaction evidence becomes a daunting task.

4.6.3 Tanzania

In Tanzania, a total of seven (7) interviewees/respondents commented on the challenges in collection of dog evidence for prosecution in court. These included two (2) prosecutors, four (4) dog handlers and one (1) technical advisor.

As the case in both Kenya and Uganda, respondents from Tanzania stated that inter-agency cooperation with agencies from other states was their major in the collection of dog evidence to be used as evidence in court.

One respondent stated,

"In instances where the suspects go across borders or are citizens of other countries it is difficult to coordinate with agencies from these countries as different countries have different ways and permits e.g. some trophies may not be illegal in another country however they are illegal in Tanzania."

The lack of regional legislation governing wildlife crimes in Kenya, Uganda, and Tanzania is also another challenge. A respondent stated:

"Mostly there are no laws on arrests using dogs and the law does not recognise that our prosecution can use dog evidence thus making it difficult for such evidence to be admissible in courts of Tanzania."

From the responses, the researcher concluded there is the need for the establishment of a regional legislation to address the cross-border challenges of collection of dog evidence and any other evidence e.g. exhibits and specimen enable prosecution of offenders. This would enable the law

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³⁹ Ibid.

enforcement officers assist each other in collection, management and presentation of evidence for prosecution in Kenya, Uganda and Tanzania.

4.7 Impact of use dog olfaction tool in Transnational Wildlife Law Enforcement in Kenya, Uganda and Tanzania

This Chapter has sought to investigate and analyse the impact of the use of detection and sniffer dogs in transnational wildlife law enforcement in Kenya, Uganda, and Tanzania. It has relied on the responses from questionnaire interviews from prosecutors, investigators, and dog handlers from these three countries on their own experiences in relation to the use of detection and sniffer dogs in the fight against illegal wildlife trafficking and game hunting. Table 2 below provides an analysis on the impact the use of detection and sniffer dogs has had in transnational wildlife enforcement in Kenya, Uganda, and Tanzania.

Figure 6: Rate of arrests using detections dogs in each country

Are there increased numbers of arrests and/or prosecutions of wildlife crimes as a result of use of detection/tracker doges at ports, airports and parks?	Yes	No	N/A
Kenya	80% (24)	16.7% (5)	3.3% (1)
Uganda	80% (12)	20% (3)	0% (0)
Tanzania	60% (6)	20% (2)	20% (2)

As illustrated in Table 2, a majority of 24 (80%) of the 30 respondents interviewed in Kenya agreed that the number of arrests and/or prosecutions of wildlife crimes as a result of use of

tracker and dogs at ports, airports and parks. 5 (16.7) of the 30 respondents indicated that arrests and prosecutions had increased.

In Uganda, a majority of 12 (80%) of the interviewed 15 respondents agreed the number of arrests and/or prosecutions of wildlife crimes as a result of use of detection/tracker dogs at ports, airports and parks. 3 (20%) of the respondents indicated that arrests and or prosecutions had decreased.

In Tanzania, 6 (60%) of the interviewed 10 respondents also agreed that the number of arrests and/or prosecutions of wildlife crimes as a result of use of detection/tracker dogs at ports, airports and parks. 2 (20%) of the respondents stated that arrests and or prosecutions had decreased while 2 (20%) did not comment.

It is important to note that the respondents who indicated that arrests and or prosecutions had reduced since the introduction of detection and sniffer dogs argued that it could be because of the introduction of detection and sniffer dogs acting as deterrence and forcing poachers and smugglers to find alternative means. From these statistics above, it is clear that the introduction of detection and sniffer dogs has had a positive impact in transnational wildlife law enforcement

4.8 Conclusion

The establishment of detection dog unit under the Law enforcement institutions in Kenya, Uganda and Tanzania is a significant process in enhancing transnational wildlife law enforcement in the East African region. However, the number of units should be increased in other exit and entry points while formulating simple rules of procedure for presentation of dog olfaction evidence in courts. There should be sub regulations on implementation and mutual legal assistance in cross border investigations in matters involving more than one state.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study has sought to establish the adequacy and efficacy of the legal and institutional frameworks on the use of detection and tracker dogs in investigation and such evidence in prosecution of transnational wildlife crimes in Kenya, Uganda and Tanzania. It has interrogated the legal provisions and effectiveness as well as institutional functions including agencies and authorities and their capacity to carry out their mandate in detection, prosecution of wildlife crimes and conservation of wildlife species. It has explored the extent to which law enforcement officers in Kenya, Uganda, and Tanzania use detection and tracker dogs in wildlife crime detection and the extent to which such dog olfaction evidence is admissible in courts for prosecution. The study focused on law enforcement agencies based on their daily practice and experience on prosecution of wildlife crimes.

The study sought to discuss at least four (4) research objectives. The study sought to discuss the legal regime for transnational wildlife law enforcement, conservation and protection of wildlife species in Kenya, Uganda and Tanzania. It further sought to critically examine the extent of the use of detection dogs as a tool in investigations and prosecution of wildlife crimes in the three countries. It also sought to examine the capacity of the investigation institutions and prosecution departments to use dog olfaction evidence in prosecution and conviction of wildlife offenders in Kenya, Uganda and Tanzania. Finally, to identify the weaknesses and challenges in legal and institutional frameworks for wildlife law enforcement and prosecution of wildlife crimes in relation the use of detection and tracker dogs in transnational wildlife law enforcement. This chapter presents the summary of findings, conclusions and recommendations based on the findings, analysis and discussion of preceding chapters.

5.2 Summary of Findings.

From the discussions in Chapter 3, it is evident that detection and sniffer dogs have played a very huge role in the fight against transnational wildlife crimes. Their use has led to increased arrests of poachers and illegal game trophies in Kenya, Uganda, and Tanzania. The rise in the increase

of arrests has led to the reduction of illegal exporting and smuggling at airports, ports and border check points. In order to have effective detections handlers must be trained hand in hand with the dogs as officers as the presentation of evidence in courts is crucial in getting prosecution of crimes.

Different means and strategies used by criminals should in turn be approached by intense measure to combat the illegal trade and trafficking of wildlife species and specimen. When dogs are sufficiently trained to detect wildlife specimen they develop the ability to identify the scents. This can be confirmed by the changes in their behaviour which also depends on the trainings including sitting at the place where specimen is likely to be located.

The rise in transnational wildlife crime is a challenge that can be reduced introducing and increasing detection dogs in different port and points of entry in Tanzania, Kenya and Uganda, but globally. The use of detection and tracker dogs is increasingly finding usage as an effective tool in the detection and investigation of transnational crimes to curb illegal wildlife trade and poaching in the three countries. Even in instances of success detection and arrests, the admissibility such evidence is not anchored on a uniform framework across East African Courts. In order to make the use of detection dogs as a tool in transnational wildlife law enforcement there is need for further trainings for law enforcement officers including judges, magistrates, investigators and dog handlers as the courts play a big role in deterrence of crimes.

Lack of clear national legislative provision or regional frameworks governing the use of detection dogs in transnational wildlife law enforcement is a contributing factor to the increase in illegal wildlife trade and trafficking of wildlife species and products. Similarly, Kenya, Uganda and Tanzania do not have the sufficient statutory frameworks for the usage this technology generally.

The transnational nature of wildlife crimes make it necessary for states and agency to work together and collaborate their efforts in order to defeat illegal trade and trafficking of wildlife crimes. Mutual legal assistance in combating wildlife crimes should be more intense ranging from sharing information between state agencies to cross border arrest with the help of law

enforcement agencies from both the country of origin and destination countries. Majority of the respondents interviewed from all the three countries indicated that the lack of cooperation by other agencies make it difficult to prosecute wildlife crimes using dog evidence particularly where the poachers cross boundaries and thus change in jurisdiction. There is Mutual Legal assistance between states and agencies in the fight against transnational wildlife crimes, however, this not sufficient and almost non–existent in certain instances.

5.3 Conclusion

International and transnational wildlife crimes are not only on the rise, but have taken a more intense and sophisticated nature. This is evident from the activities carried out by smugglers in concealing wildlife products into different spaces and shapes including putting products between timber spaces and using spices on products to compromise the detection dog's olfaction abilities. Even with different regional conventions and national legislation and law enforcement institutions in place, detection of the criminals still remains a daunting task. This has warranted the need to modern detection and investigation measures such as scent identification by use detection and tracker dogs to sniff out wildlife products and track wildlife criminals.

Detection and tracker dogs are already being used in conservation areas and transit points as a law enforcement tool in carrying out investigations of transnational wildlife crimes in Kenya, Uganda and Tanzania. However, inadequate legal provisional and institutional frameworks on the use of tracker and sniffer dogs and dog evidence for purposes of investigations and prosecution of offenders in courts. In addition to detection dogs in investigation of wildlife crimes, the courts have a significant role in ensuring compliance through sentencing for purposes of deterrence generally and specifically. It is necessary those legal frameworks which are adopted for conservation of wildlife crimes these factors into consideration to reduce the number of cases lost during trial and enhance the deterrent effect through prosecution of criminals in involved in illegal wildlife trade and trafficking.

The frameworks available in Kenya, Uganda and Tanzania include provisions on protection and conservation of wildlife species and specimens while creating offences on illegal trade and hunting. However, they lack specific provisions on the use of detection dogs as a tool for

investigation individually or in the transnational aspect. This further shows why the use of detection and tracker dogs for transnational wildlife law enforcement is limited, making it evident as to why admissibility of detection dogs olfaction evidence remains a challenge in the Courts of Kenya, Uganda and Tanzania.

The use of dogs in the fight against transnational wildlife crime has had its fair share of challenges in Uganda, Tanzania and Kenya. Lack of a regional legislation governing the use of detection dogs and the use of dog evidence in prosecution of cases in court has been a major challenge especially where the wildlife crimes are trans-border. In each jurisdiction there is different procedure on how to deal with suspects and offenders. Since there is no uniform legislation governing wildlife crimes in Kenya, Uganda and Tanzania it becomes very challenging for collection of dog evidence one suspects cross boarders from one country to another.

The challenge in the use of detection and sniffer dogs in Kenya, Uganda, and Tanzania mainly stems from the lack of sufficient inter-agency-cooperation and mutual legal assistance amongst the three countries. There is therefore need to establish a good information network sharing system amongst the three countries to assist in the prosecution of wildlife crimes using dog evidence in East African courts to enhance mutual legal assistance as a measure to enhance transnational wildlife crimes...

5.3 Recommendations

From the above discussions and arguments, this study makes the following recommendations.

I. Development and Harmonization of Legislative Frameworks

There is need for the development, and adaptation of a regional legislation governing the management and protection of wildlife resources in Kenya, Uganda, and Tanzania using detection and sniffer dogs. All these three countries are members of the EAC alongside Burundi, Rwanda and South Sudan. There are currently efforts underway to harmonize the existing wildlife policies in all these countries to help curb and limit encroachment and poaching activities. There is also an initiative of creating a Regional Wildlife Conservation Information Management System. This will help ensure easier sharing of information and go a long way in

the successful protection of wildlife in the EAC region. This harmonization of wildlife policies and the inclusion of provisions on the use of detection and sniffer dogs and use of sniffer dog evidence in prosecution of cases in court will help in mutual legal assistance and intergovernment and inter-agency cooperation.

II. Uniform Regional Training of Dog Handlers and Law Enforcement Agencies.

Training of detection and sniffer dogs and handlers in Kenya, Uganda, and Tanzania should be uniform. Uniform training of the dogs and handlers will help in instances of inter-agency cooperation helping reduce the high number of evidence tampering, destruction and contamination of crime scenes and evidence. The trainings should be on legislative frameworks handling of detection dogs, and presentation of detection dog evidence in courts. Law enforcement officers including judges, magistrates and prosecutors should be further trained on dog olfaction as a tool in transnational wildlife law enforcement and its impacts in deterrence of the menace of transnational wildlife crimes in the region. A regional training institution and facility should be created to further understanding and incorporation of the use of detection, tracker and sniffer dogs in investigations and law enforcement. Individual training institutions should be established under national legislative frameworks.

III. Development of a regional canine unit information sharing system

There is need for development of a cross-border canine unit information sharing system of the canine unit agencies in Kenya, Uganda and Tanzania. As discussed throughout this study, poaching and illegal game trafficking is a cross-border operation used coordinated by well-organized cartels. These cartels rely on the lack of inter-agency coordination between Kenya, Uganda and Tanzania and the lack of mutual legal assistance to traffic illegal game and trophies. A cross-border wildlife information sharing system will help in ensuring adequate assistance for investigations and cross border arrests. This will lead to regional cooperation at border points upon any alerts from any agency in Kenya, Uganda, and Tanzania.

IV. Amendment of existing regional and national legislation.

There is need to review the already existing legislations in Uganda, Tanzania and Kenya to include the use of sniffer and detection dogs and creates procedures on how to administer dog

evidence in prosecution of cases in court. Currently, there is no clear procedure on the use of detection dogs as an tool in law enforcement and on how to deal with dog evidence and its admissibility in court in all these three countries. The inclusion of sniffer and detection dogs in wildlife legislation and admissibility of dog evidence will help increase the number of convictions of poachers and reduce illegal game hunting and poaching.

V. Training of Judicial Officers.

The courts play a crucial role in the fight against wildlife crimes and deterrence of crimes through effective prosecutions as they determine the admissibility of dog olfaction evidence during court trials. Judicial officers including judges and magistrates should have a better understanding on scientific scent identification and foundations for credibility of dog handler's testimony in their capacity as expert witnesses. Kenya, Uganda and Tanzania are adversarial systems and as such defense attorneys may attempt to discredit canine olfaction ability in courts. Judicial officers should be informed that sniffer dog's positive alert alone constitutes probable cause in searches if reliability of its training is established in courts by dog handlers as expert witnesses during trials, as this reduces the chances of defense attorneys discrediting witness testimony.

VI. Mutual Legal Assistance Agreements.

Mutual Legal Assistance is a crucial component of fighting transnational wildlife crimes in East Africa. There is need to have successful and effective cross-border criminal investigations which calls for creation of sub-regulations to enable access and use of evidence gathered in foreign jurisdictions when witnesses lie abroad and in other instances where suspects flee to another country. There is need for standard procedural rules for gathering evidence abroad to be admitted in domestic courts within East Africa. In order to achieve mutual legal assistance for arrests, investigations and prosecutions of transnational crimes there is need for agreements among the three East African countries and with other states a step to further the fight against transnational wildlife crimes.

BIBLIOGRAPHY

Books

Allen T. G, 'Thomas Hobbe's Theory of Crime and Punishment' (A Degree of Doctor of Philosophy, Queen Mary University of London, 2016)

Bida. E. M, 'The Legal Framework of the EAC' in Ugisharebuja.E, Etudes', and Ottervarger. T, *East Africa Community Law: Institutional, Substantive, and Comparative EU Aspects* (Brill Publishers 2017).

Boister. N, "An Introduction to Transnational Criminal Law" (Oxford University Press 2012). Boxall J., *Understanding Surveillance Technologies: Spy Devices, Privacy, History and Applications* (Taylor & Francis Group 2010) 91.

Cablk. M. E, Sagebiel. J. C, Heaton. J. S and Vertatan. C, 'Olfaction-based Detection Distance: A Quantitative Analysis of How Far Away Dogs recognize Tortoise Odor and Follow It' (2008) Sensor, 2208-2222.

Decoeur.H, Confronting the Shadow State: An international Law Perspective on State Organized Crime (Oxford University Press 2018).

Doty. R, Handbook on Olfaction and Gustation, (Wiley Publishers, 2015) 597

Ensiminger. J, Police and Military: Criminal Detection, Forensic Evidence and Judicial Admissibility (Taylor and Francis Group 2012).

Ensiminger. J, Police and Military: Criminal Detection, Forensic Evidence and Judicial Admissibility (CRC Press Taylor and Francis Group 2012).

Erinosho. B. T, *Environmental law in Africa* (Kraft Books Publishers 2005).

Faure. M and Skogh. G, 'The Economic Analysis of Environmental Policy and Law: An Introduction' (2004) *Journal of Land Use & Environmental Law* Vol. 19, No. 2 (SPRING, 2004)

Faure. M, "The Economic Analysis of Environmental Policy and Law; An Introduction "(Edward Elgar Publishers 2003).

Faure. M, Smedt. P, Astus (Eds), *Environmental Enforcement a Networks: Concepts, Implementation and Effectiveness* (Edward Elgar Publishers 2015).

Hobbes. T, 'Deterrence Theory' (2010)

Jezierski.T, Ensminger. J, and Papet . L. E (Eds), Canine Olfaction Science Law: Advances in Forensic Science, Medicine, Conservation and Environmental Remediation (Taylor & Francis Group 2016).

Karanja.D, 'The Role of Kenya Wildlife Service in Protecting Kenya's Wildlife' (2012) *The Kenya Wildlife Service in the21st Century: Protecting Globally Significant Areas and Resources*, Vol. 29, 74-80

Kariuki M., Wamukoya D., Kariuki F., 'Natural Resources and Environmental Justice in Kenya' (Glenwood Publishers 2015)

Lorraine B., and William H. S.,(Eds) *Handbook of Transnational Environmental Crime* (Edwards Elgar 2016).

Luwa. T. R and Lugo B. R (Eds), "Militarised Response to Transnational Organised Crime: *The War on Crime*" (Palgrave Macmillan Publishers 2017).

Mbote. K, 'Use of Criminal Law in Enforcing Environmental Law' in Okidi. C. O, Kameri. P. M, Akech. M, "Environmental Governance in Kenya: *Implementing the Framework Law* (East African Educational Publishers 2008).

Mbote. P.K, Property Rights and Biodiversity Management in Kenya (ACTS Press 2002) 87-88

Okidi.C.O, 'Concept,'Function and Structure of environmental Law on Key Management Concepts' in Okidi.C.O, Mbote. P. K, Akech. M "Environmental Governance in Kenya: *Implementing the Framework Law.*" (East African Educational Publishers 2008).

Oluoch. W,"The Legitimacy of the East African Community" (Cambridge University Press 2009).

Paddock. L, Louis. D. Q J. Kotze.D.L. Markell, Kenneth J. Markwith and Durwood.Z, Compliance and Enforcement in Environmental Law; *Towards More Effective Implementation* (Edward Elgar Publishers 2011).

Pierre H., and Sven P., (Eds) *International Law and Transnational Organized Crimes* (Oxford University Press 2016) 266.

Rebman. A, David. E and Sorg. M.H, Cadaver Dog Handbook: Forensic Training and Tactics for the recovery of Human Remains (CRC Press Taylor and Francis Group 2000).

Ruggeri. S, "Transnational Evidence and Multicultural Inquiries in Europe: Developments in EU Legislation and New Challenges for Human Right-Oriented Criminal Investigations in Crossborder cases." (Springer International Publishing 2014).

Journals Articles

C. Odote, B. Ochieng and B Makoloo, 'The Implications of Property Rights for Sustainable Property Rights for Sustainable Management in Kenya' (2008)

Couzens. E, 'Environmental Law: Good Practices from Africa and Asia '(2017) Vol II

Cyrille de Klemm Barbara J Lausche, *African Wildlife Law* (IUCN Environmental Law Centre 1987) 173.

Doyle Q. C, 'Admissibility of Opinion Evidence' (1987) South General for South Australia, 688.

Gumbo. D, et. al., 'Wildlife Judicial And Prosecutorial Assistance Trainings Series (Tanzania)'(2016

Harrison. M, *et al*, 'Wildlife Crime: A review of the Evidence on drivers and impacts in Uganda' (2015) IIED

Hayman. G and Brack. D, 'International Environmental Crime: The Nature and Control of Environmental Black Markets' (2000)

Werksman. J, Cameron.J and Broderick. P, Implementing Compliance with International Environmental Law 198.

John Ensiminger, Tadeuse Jezierski and Michael McCulloch, 'Scent Identification in Criminal Investigation and Prosecution: New Protocol Designs Improve Forensic Reliability' (2010)

Kaggwa R., and Hall B., 'Enhancing Wildlife Contribution to Growth Employment and Prosperity' (2009) UNDP/NEMA/UMEP Poverty Environmental Initiative Uganda.

Kidegesho J.R, 'Who Pays for Wildlife Conservation in Tanzania and Who Benefits?' (2008). Kimberly Brice O'donell, 'Military Working Dogs, Past, Present and Future' (2014).

Ledio Cakay and Sasha Lezhen, 'Deadly Profits: Illegal wildlife Trafficking through Uganda and South Sudan' (2017)

Lemieux A. & Clarke R, 'The International Ban on Ivory Sales and its effects on elephant Poaching in Africa' [2001] 49 *Journal of Criminology*.

Lydia Slobodian, 'Addressing Transnational Wildlife crimes through a protocol to the UN Convention against Transnational Organised Crime' (2014) A Scoping Paper.

Mbote P. K, 'Sustainable Management of Wildlife Resources in East Africa: A critical analysis of the Legal Policy and Institutional Frameworks' (2005) *IELRC Working Paper*.

McCullen. M et, al 'Scent identification in Criminal Investigations and Prosecutions: New Proocol Designs Improve Forensic Reliability' SSRN Tadeus Jozirsk

NewMark and Hough. J. L, 'Conserving Wildlife in Africa: Integrated Conservation and Development Project and Beyond' (2000)

Okello. M. M, 'Economic Contribution: Challanges and Way Forward for Wildlife Based Tourism Industry in Eastern African Countries(2014) Journals of Tourism and Hospitality.

Reports

Resolution of the East Africa Wildlife Directors Meeting, Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora 'Fighting Wildlife Crimes in Africa' (2016).

Rossi. A, 'Uganda Wildlife Trafficking Assessment' (2018)

Saba. K, Jacopo. C, Claudio Baez Camango, 'Corruption and Wildlife Trafficking: Exploring drivers, facilitators and bet works behind illegal wildlife Trade in East Africa' (2018) *Working Paper 30*.

Weru. S, 'Wildlife Protection and Trafficking Assessment in Kenya: Drivers and Trends of Transnational wildlife crimes in Kenya and its role as a transit point for trafficked species in East Africa' (2016) Traffic Report

Jayanathan. S, 'Analysis of Prosecution of Ivory, Rhino Horn and Sandal Wood Crime in North Central Kenya' (2014) A case Study

Mayanja. S. J, 'Circumstantial Evidence and its Admissibility in Criminal Proceedings: A Comparative Analysis of the Common Law and Islamic Law Systems' (2017) Journal of Law, Policy and Globalization. Vol. 67.

UNEP, Fighting Wildlife crime and offences within and beyond border (CMS/Resolution 11.31, 2014).

United States Congress, 'Senate, Committee on Foreign relations. Subcommittee on African Affairs' (2014) International Wildlife Trafficking Crisis: Ecological Economic and National Security issues, 47.

UNODC, 'Defining Transnational Organized Wildlife Crimes' VOL. 6

UNODC, 'Global Programmes for Combating Wildlife and Forest Crimes' (2014).

UNODC, 'Wildlife and Forest Crime Analytic Toolkit: Report of UNODC Mission to Vietnam' (2015

Wafubwa. I., (ed), 'Towards Political Federation in the East African Community: Achievements and Challenges' (2015)

William D. Newmark, John L. Hough, 'Conserving Wildlife in Africa: Integrated Conservation and Development Project and Beyond' (2000) 50 *Bioscience*.

World Bank, 'Tools and Resources to combat Illegal Wildlife Trade' (2018) 21.

Internet Sources

Africa Wildlife Foundation, 'Stop the trafficking: Blocking the supply of illicit wildlife products and prosecuting criminals' (2018) < https://www.awf.org/stop-trafficking> accessed September 13 2019.

Africa Wildlife Foundation, 'AWF Hosts Ugandan MPs and Senior Wildlife Officials on Benchmarking Tour' (2019) https://www.awf.org/news/awf-hosts-ugandan-mps-and-senior-wildlife-officials-benchmarking-tour (accessed 9/8/2019).

Chebet. C, 'Lack of transnational cooperation stalling wildlife crime cases in Kenyan courts' < https://spaceforgiants.org/2019/01/08/lack-of-transnational-cooperation-stalling-wildlife-crime-cases-in-kenyan-courts/ accessed 29 October 2019.

EastAfricanCommunity'Tourismandwildlifemanagement' < https://www.eac.int/tourism/wildlife-management accessed 13 September 2019.

Environmental Investigation Agency, 'Uganda should be commended for major progress in tackling ivory trafficking; however, there remain important actions which need to be implemented to tackle ivory trade flows from and through Uganda' (2019) < https://eia-international.org/wp-content/uploads/EIA-report-NIAP-2018.pdf> accessed 29 October 2019.

INTERPOL, 'Global Wildlife Enforcement Strengthening Law Enforcement Cooperation AgainstWildlifeCrimes'(2018)<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=w
eb&cd=9&ved=2ahUKEwik6PAl9_gAhUM0RoKHfgoBwIQFjAIegQIABAC&url=https%3A%
2F%2Fwww.interpol.int%2Fen%2FNews-and-media%2FPublications2%2FLeaflets-and-brochures%2FGlobalWildlife=Enforcement%2F&usg=AOvVaw3rUc6avKAk1i3U7oK1PLVW

>accessed 1 March 2019

Kaaya. S.and K, 'Uganda: Museveni Orders use of sniffer dogs to track VIPs' (2017)<<u>http://observer.ug/news/headlines/54627-museveni-orders-use-of-sniffer-dogs-to-track-vips.html</u>>accessed 8 December 2017.

Kenya Wildlife Service Website, at <<u>http://www.kws.go.ke/content/kenya%E2%80%99s-conservation-efforts-pay-cites-meeting>accessed 12 September 2019</u>).

Kenya: Investing in Enforcement, https://eia-international.org/wp-content/uploads/eia_iwtp-report-kenya.pdfaccessed 8 December 2011).

McConnell. T, 'They are like Mafia: The Supreme gangs behind Africa Poaching Crisis' *TheGuardian*Newspaper (2017) < https://www.theguardian.com/environment/2017/aug/19/supergangs-africa-poaching-crisis accessed 13 September 2019.

Messina. M, 'AntiPoachingEfforts, going to the Dogs' (2017) accessed 9 August 2019.">https://www.huffpost.com/entry/part-2-anti-poaching-efforts-going-to-the-dogs_b_5a0d94dfe4b023a796fed441>accessed 9 August 2019.

Palminteri. S, 'How Detection Dogs can Help Wildlife Rangers Curb Crimes in The Maasai Mara National Reserve' (2018) *Pacific Standard* https://psmag.com/environment/dogs-help-rangers-in-kenyas-famous-nature-preserve accessed 13/9/2019.

Tanzania: Investing in Enforcement,https://eia-international.org/wp-content/uploads/eia_iwtp-report-tanzania.pdf>accessed 8 December 2017.

United Nations Congresses on Crime Prevention and Criminal Justice 1955–2010 55 years of achievement, available at https://www.un.org/en/conf/crimecongress2010/pdf/55years_ebook.pdf <a href="https://www.un.org/en/conf/crimecongress2010/pdf/sold-parter-parter-parter-parter-parter-parter-parter-parter-parter-parter-parter-parter-parter-p

UNODC, 'South Asia: Fighting tooth and nail to address wildlife crimes in Kenya' (2011)https://www.unodc.org/southasia/frontpage/2011/june/interview-samir-sinha-on-wildlife-crime.html>accessed 13 September 2019.

Ubwania. Z, 'East Africa: Poaching Poses Security Threat in East Africa' (2016) The Citizen http://allafrica.com/stories/201609130548.htmlitizen>accessed 29 September 2017.

APPENDICES

QUESTIONNAIRE ON THE STUDY ON USE OF TRACKER AND DETECTION DOGS IN TRANSNATIONAL WILDLIFE LAW ENFORCEMENT AND THE ADMISSIBILITY OF SUCH EVIDENCE IN COURTS.

The study explores the extent to which law enforcement officers use detection and tracker dogs in wildlife crime detection and the extent to which such dog olfaction evidence is admissible in courts for prosecution. This study is carried out in pursuit of sustainable conservation of wildlife species. The study focuses on law enforcement agencies based on their daily practice and experience on prosecution of such crimes. The information collected will be used for academic purposes only and as such will be treated with high degree of confidentiality and privacy.

I. GENERAL INFORMATION

The scientific use of dogs in detection of wildlife crimes, also called dog olfactory technology, can be quintessential if properly applied in Kenya, Uganda and Tanzania. Proper application of this technique encompasses the adoption of international principles and best practices across the three countries. In addition, the input of law enforcement officers with relevant practical experience is recognized as crucial to obtaining a fully informed picture of the legal problems which may be arising in this field. Your completion of this questionnaire will therefore provide a valuable contribution to the use of tracker and detection dog's evidence in courts and eventual deterrence of transnational wildlife crimes.

This questionnaire will request some basic information about you. It will also require information concerning practical experiences of cases involving international transnational (cross-border) crimes and the use of detection and tracker dogs and any such related cases in Kenya, Uganda and Tanzania and for the possible future suggestions work in this area. I hope to use this information to make recommendations on the most desirable and appropriate principles and rules on use of detection/tracker dogs in wildlife law enforcement and in furtherance of prosecution of such crimes.

PART I: Personal Information.

1. What is your role in transnational wildlife law enforcement?
a) I am a prosecution counsel.
b) I am an investigator.
c) I am a dog handler
e) Other: Please specify:
2. In which country are you qualified to practice law/work?
a) Kenya
b) Uganda
c) Tanzania
d) Other: Please specify;
3. Indicate your duty station;
a) Law Courts
b) Kenya/Uganda/Tanzania/Wildlife Authority.
c) Airport.
d) Port.
e) Park
d) Other: Please specify;

PART II:	Practical	experiences/challe	nges of case	s involving	transnational	wildlife	crimes	and
the use of d	log evider	ice in court.						

4. List the number of cases prosecuted investigated or searches done using detection and tracker dogs in cross-border wildlife law enforcement during and the number of states involved.

If you do not have exact number of cases please provides an estimate in the box.

Year	2013	2014	2015	2016	2017	2018
No. of						
Cases						
No. of						
States						
involved						

5. List some of the institutions that are involved in countering transhational wildnie law
enforcement and briefly explain their mandate?
6. What is the procedure of use of detection/ tracker dogs in cross-border wildlife law
enforcement?

7. What are the procedural steps taken in collection, management and/or presentation of evidence
in courts?
8. Are there increased numbers of arrests and/or prosecutions of wildlife crimes as a result of use
of detection/tracker dogs at ports, airports and parks? Explain;
9. What are the consequent challenges difficulties in collection of evidence and presentation o
detection dog evidence in courts in your country?

10. Explain some of the reasons that limit the admissibility of detection and tracker dogs' evidence in courts?
11. Briefly explain why you find detection and tracker dog technology an effective tool for transnational wildlife law enforcement?
12. Briefly describe why you find the detection and tracker dog olfaction evidence effective for prosecution of transnational wildlife crimes during trials?
13. Briefly describe some of the hindrances/strengths with regards to Mutual Legal Assistance in

cross-border Wildlife Law Enforcement?

14. List your suggestions on possible principles and provisions that should be incorporated into
national legislation or regional instruments for more effective use of detection/tracker dogs as
tool in transboundary wildlife law enforcement?
If you agree to participate in this survey, the information you provide will be kept confidential
and will be used only for purposes for this study.
It is possible that a follow up may be done. Would you be willing to participate in such follow-
up study? I so, please provide us with your name and current address.
Yes. I would participate in a future follow up.
No. I don't want to participate in a future follow up;
Thank you for your time and cooperation.
Signature