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WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

# **A CRITICAL ANALYSIS OF** **CYBERCRIME AGAINST** **WILDLIFE IN INDIA**

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& PRATIBHA MISHRA

## **ABSTRACT**

Wildlife trafficking has become a significant concern in India, exacerbated by its shift to the digital realm. With a vast array of plants and animals, India is among the top 20 countries engaged in this illicit trade, facilitated by the internet's anonymity and accessibility. This study aims to explore the governance of wildlife crime within India's legal system and assess the competence of existing laws in addressing cybercrime. It delves into the reasons behind the internet becoming a hub for wildlife crime and the associated challenges in regulating it effectively. Despite the decline in wildlife trafficking during the COVID-19 pandemic, online platforms have facilitated its resurgence, raising the risk of species extinction. The study also examines international efforts to combat cybercrime against wildlife, offering insights for India to develop its legal framework and collaborate with global entities. The research combines historical perspectives, contemporary laws, and international comparisons to provide a comprehensive analysis of wildlife trafficking in cyberspace within India's context.

**Keywords:** Cybercrime, Wildlife, Wildlife Protection Act, Illegal Trade, International Cooperation

# **1. INTRODUCTION**

India is home to a diverse range of plants and animals. Being the habitat of up to 6% of all known species in the world, more than 7.5 percent of the animal species in the world are known to exist in this country.<sup>1</sup> Further, if current data is to be considered, India ranks fourth in Asia and tenth overall for the diversity of flora.<sup>2</sup> With the vast resources comes the vast risk of them getting exploited and India is no different. India finds itself amongst the top 20 countries in the list of wildlife trafficking, a crime recognised by World Wide Fund of Nature as 4<sup>th</sup> largest form of transnational organised crime.<sup>3</sup> According to TRAFFIC, this transnational crime taking over cyberspace is making the situation grimmer.<sup>4</sup>

According to IFAW's report, "Caught in the Web: Wildlife Trade on the Internet", over 9,000 live animals or items were found to be offered for sale on websites including chatroom and auction sites like eBay within a week. Wildlife crime has upgraded in cyberspace, as evidenced by the startling variety of species being advertised online, from a live gorilla for sale in London to a Siberian tiger on a US website. On websites run out of India, Israel, the UK, the USA, and Germany, there were also items for sale that included hawksbill turtle shells, taxidermy lion and polar bear specimens, ivory products, and traditional medicines made from parts of rhinos and tigers. Internet portals have made the trade easier and in the words of the Director of IFAW, this has resulted in the setting up of "cyber black market where the future of the world's rarest animals is being traded away".<sup>5</sup>

Likewise in India, the sale of illegal wildlife products online was also discovered by a similar investigation conducted by the Wildlife Trust of India (WTI), IFAW's partner in India; examples of Shahtoosh shawls and tiger skin being sold illicitly online were found.<sup>6</sup> Toward the end of 2022, the Directorate of Revenue Intelligence flagged the rise in illegal wildlife trade in India while seizing the dried seahorses, Indian star horse, exotic birds, elephant ivory and red sandalwood in huge quantity;<sup>7</sup> and in its report has claimed the dark web, cryptocurrency and anonymity offered

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<sup>1</sup> Fauna, KNOW INDIA, <https://knowindia.india.gov.in/profile/fauna.php> (last visited Feb. 26, 2023).

<sup>2</sup> Flora, KNOW INDIA, <https://knowindia.india.gov.in/profile/flora.php> (last visited Feb. 26, 2023).

<sup>3</sup> Anusha Krishnan, [Explainer] Why is India a major hub for wildlife trafficking?, MONGABAY (Jun. 8, 2022), <https://india.mongabay.com/2022/06/explainer-why-is-india-a-major-hub-for-wildlife-trafficking/>.

<sup>4</sup> Avantika Bhuyan, Wildlife cyber sleuths to the rescue, LIVEMINT (Sept. 21, 2019), <https://lifestyle.livemint.com/news/talking-point/wildlife-cyber-sleuths-to-the-rescue-111641457605923.html>.

<sup>5</sup> Wildlife Trade in Cyberspace, WTI, <https://www.wti.org.in/news/wildlife-trade-in-cyberspace/> (last visited Feb 26, 2023).

<sup>6</sup> Id.

<sup>7</sup> Sumit Kumar Singh, Wildlife crime goes digital, WCCB increases vigilance, THE INDIAN EXPRESS (Sept. 4, 2022), <https://www.newindianexpress.com/thesundaystandard/2022/sep/04/wildlife-crime-goes-digital-wccb-increases->



by the internet are creating a surge in trade.<sup>8</sup>

Further, the onset of Covid'19 has exacerbated the scenario with wildlife trafficking undergoing the digital transformation adapting the worlds' emerging trend in the lockdown. Due to travel and shipping restrictions, wildlife trafficking declined significantly, but online sales of trafficked items increased.<sup>9</sup> According to the recent reports, the demand for wildlife items has declined and pandemic limitations have reduced on-the-ground activity in Southeast Asia compared to 2019. Yet, social media channels continue to be flooded with adverts and trade, and evidence suggests that some traders may be accumulating animal parts to meet the prospective demands once restrictions are lifted.<sup>10</sup> This signifies that unable to sell their piled-up stock due to lockdown restrictions, the eagerness led the traders' creating profiles on social media platforms like Facebook, Instagram, and Twitter, where they could directly contact interested buyers.

Thus, the internet has given virtual wings to wildlife trafficking across the globe and the situation in India is no better. Dark web, social media and even e-commerce platforms have made wildlife trading simply a click away. And lack of proper regulation here may lead to a lot of species going extinct. But the question arises here is do we have a competent mechanism to deal with the growth of wildlife crime in cyberspace as it is the same technology being used both by the criminals and law enforcement authorities. Further, whether the central legislation that deals with wildlife crime in India, viz., Wildlife Protection Act is exhaustive enough to incorporate cybercrime within the meaning of its terms or are there any other laws prevalent that could cover the digital aspect of the crime including trading and advertisement being carried out online?

Hence, it is imperative to study the wildlife trafficking in cyberspace in India. An attempt has been made in this study to discuss the factors behind internet favouring such illicit trade, analyse the Indian laws and measures to tackle the same and what can be gathered from the steps taken by international organisations and other countries to curb the online illegal wildlife trade.

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vigilance-2494617.html.

<sup>8</sup> Simran Surrur, Whale 'waste', dried seahorses, ivory: Intelligence agency DRI flags rise in illegal wildlife trade, THE PRINT (Dec. 6, 2022), <https://theprint.in/environment/whale-waste-dried-seahorses-ivory-intelligence-agency-dri-flags-rise-in-illegal-wildlife-trade/1250545/>.

<sup>9</sup> Wildlife trafficking has goes online during pandemic: Report, CNBC TV18 (Jun 26, 2021), <https://www.cnbcv18.com/wildlife/wildlife-trafficking-has-goes-online-during-pandemic-report-9789011.htm>.

<sup>10</sup> Imelda Abano & Leilani Chavez, Wildlife trafficking, like everything else, has gone online during COVID-19, EARTH JOURNALISM NETWORK (Jun. 1, 2021), <https://earthjournalism.net/stories/wildlife-trafficking-like-everything-else-has-gone-online-during-covid-19>.

## 2. WILDLIFE CRIME BEING WORSENING CRISIS WITH EVERY STEP OF EVOLUTION

The conservation of wildlife in India has a long-standing tradition rooted in ancient Hindu scriptures and mythology, which promote peaceful co-existence and reverence for animals. Kings and rulers have taken measures to safeguard wildlife, and ancient texts such as Panchatantra and Buddhist Jataka tales emphasize the importance of animal life.<sup>11</sup> Early laws enacted by Emperor Ashoka in 242 B.C. banned the killing of certain animal species and established sanctuaries for wild animals with strict penalties for offenders. The Arthashastra, written between 321 and 300 BC, also mandated the protection of forests and wildlife.<sup>12</sup> As civilizations evolved, so did the nature of crimes against wildlife, expanding in scope and scale according to human needs. This has resulted in a worsening crisis, as the illegal trade of wild animals and their derivatives continue to threaten India's precious wildlife and biodiversity. As the extent of these wildlife crimes have crossed an unimaginable rate.

In the recent times from 2011 to 2020, more than 70,000 wild animals, including their body parts or derivatives, were discovered, and more than 4,000 kg of wildlife derivatives were seized at Indian airports, according to a report prepared by the United Nations, TRAFFIC, and other international wildlife conservation organizations.<sup>13</sup> The number of wildlife trafficking cases recorded in India over the past ten years has steadily increased, according to the Wildlife Crime Control Bureau (WCCB), a statutory agency under the MoE, Forests, and Climate Change.<sup>14</sup> In total, 2,959 living animals, 10,421 animal parts, and 1,529 skins of different wild animals were seized by the WCCB in India between 2014 and 2019.<sup>15</sup> Subsequently, in 2020 wildlife conservation society documented 522 unique reports of wildlife poaching and trade in India.<sup>16</sup>

The UNODC defines wildlife crime as the illegal act of trading, smuggling, poaching, capturing, or killing of wild animals and plants, which go against national and international laws and

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<sup>11</sup> M. Velmurugan, Historical Development of wildlife protection in India, 2 IJCRME 2455 (2017)

<sup>12</sup> Id.

<sup>13</sup> Dr Saket Badola & Astha Gautam, High flying: insight into wildlife trafficking through India's airports, Rep. of TRAFFIC India, (March 2022).

<sup>14</sup> India's wildlife trade goes underground, thrives online, Mongabay (last visited on Feb. 22, 2022) <https://india.mongabay.com/2020/11/indias-wildlife-trade-goes-underground-thrives-online/>

<sup>15</sup> Id.

<sup>16</sup> K. C. Deepika, Despite pandemic and lockdowns, illegal hunting and trade in wildlife continued across India, (Feb. 26, 2022), <https://www.thehindu.com/news/national/karnataka/despite-pandemic-and-lockdowns-illegal-hunting-and-trade-in-wildlife-continued-across-india-shows-report/article65068674.ece>

regulations.<sup>17</sup> Similarly, CITES identifies wildlife crime as any action or failure to act that violates national or international laws and regulations put in place to safeguard wildlife and plants.<sup>18</sup> According to the World Wide Fund for Nature (WWF), after drug trafficking, human trafficking, and counterfeiting, wildlife trafficking is the fourth most important type of transnational organized crime which has an estimated yearly value up to USD 20 billion.<sup>19</sup> It happens mainly considering the non-human species as food. Fuel. Fodder, handicraft, ornament, medicine. Despite being a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, India is among the top 20 countries engaged in wildlife trafficking (CITES). It is additionally listed among the top 10 nations for wildlife trafficking by air transport.<sup>20</sup>

The Indian legal system has several laws and regulations in place to address wildlife crime. The Wildlife Protection Act of 1972 (WPA) is the primary law for the protection of wildlife in India which came into existence.<sup>21</sup> Under Art. 252 of the Indian Constitution, prohibiting hunting, poaching, and trade of specified species, and establishing protected areas such as national parks and wildlife sanctuaries.<sup>22</sup> Sec 9, 39, and 40, along with other sections explicitly chapter five, govern the scheme of wildlife protection and prevent its illegal trafficking in India.<sup>23</sup>

Other substantial laws include the Indian Penal Code, which punishes offenses related to wildlife crime like poaching, hunting, and trafficking. The Prevention of Cruelty to Animals Act establishes the Animal Welfare Board of India and prohibits cruel treatment of animals. The Customs Act empowers customs officials to seize goods suspected of being involved in illegal wildlife trade and imposes penalties for offenders. The Forest Conservation Act, The Biodiversity Act, The Arms Act, The Foreign Trade Act are the other laws which indirectly deal with the aspect of wildlife trafficking in India.

In *State of Bihar v. Murad Ali Baig*,<sup>24</sup> the judiciary took the support of the WPA to prevent the hunting of elephants as falling under the scope of schedule I of the WPA. In the *Wild Life v. Ashok Kumar & Ors*, the defendant was found guilty of trafficking leopard skins illegally and was

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<sup>17</sup> World Wildlife Crime Report 2020: Trafficking in Protected Species, Rep. of United Nations Office on Drugs Crime, (2020).

<sup>18</sup> What is CITES?, CITES, (2018), <https://www.cites.org/eng/disc/what.php>.

<sup>19</sup> The rise of environmental crime: A Growing Threat to Natural Resources, Peace, Development and Security, Rep. of United Nation Environment Programme & INTERPOL (2016)

<sup>20</sup> Sravani Nalluri, et al., A Survey of Identification of Illegal Wildlife Trade, SPRINGER NATURE (2021).

<sup>21</sup> Wildlife Protection Act, No. 53 of 1972, INDIA CODE (1993).

<sup>22</sup> INDIA CONST. art. 252.

<sup>23</sup> Wildlife Protection Act, No. 53 of 1972, § 9, 39 & 40, INDIA CODE (1993).

<sup>24</sup> State of Bihar v. Murad Ali Baig, AIR 1989 SC 1 (India).

sentenced under Section 51 of the legislation. On the basis of a tip-off, law enforcement officials were able to apprehend the suspect.<sup>25</sup> In *Tilak Bahadur Rai v. State of Arunachal Pradesh*, the court held that while it is legal to kill an animal for self-defence, the individual who does so cannot claim ownership of the animal because it belongs to the state.<sup>26</sup> The Supreme Court of India addressed the issue of a tiger being skinned in an Andhra Pradesh zoo in the case of *Naveen Raheja v. Union of India* and directed the central zoo officials to take action to protect tigers.<sup>27</sup> The constitutionality of the wildlife protection act was contested in *Rajendra Kumar v. UOI*. The Rajasthan court upheld the constitutional validity of the ban, declaring it to have been essential and passed in accordance with the provisions of the international convention on international trade in endangered species of wild flora and fauna.<sup>28</sup> In *Ivory Traders and Manufacturers Association v. Union of India* the apex court said that the provisions of Wildlife protection could not be construed as infringing on the rights provided by Art. 19(1) (g) of the Constitution.<sup>29</sup>

Wildlife trafficking being a transnational crime not only needs to focus on domestic laws and regulations but also needs a coordination with adaptability to tackle the trafficking internationally. India is a signatory to several international conventions related to wildlife protection, such as the CITES, United Nations Convention against Transnational Organized Crime (UNTOC), United Nations Convention against Corruption (UNCAC) and the Convention on Biological Diversity (CBD).<sup>30</sup> These international conventions provide a framework for cooperation and action at the global level to combat wildlife trafficking and protect biodiversity. India, as a signatory to these conventions, has a responsibility to implement their provisions and cooperate with other countries to combat wildlife crime.

Enforcement of these laws and regulations is carried out by various agencies such as the Wildlife Crime Control Bureau, state forest departments, and local law enforcement agencies. Penalties for wildlife crime range from fines to imprisonment, and may include forfeiture of property and other assets involved in the crime. In India, there is a robust legal framework for protecting wildlife overall, but the challenge is in effectively enforcing these rules as still the National crime report shows the alarming rate of increasing the crime categorized under wildlife protection act from 507

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<sup>25</sup> *Wild Life v. Ashok Kumar & Ors.* CC No.301845/16 (India).

<sup>26</sup> *Tilak Bahadur Rai v. State of Arunachal Pradesh*, 1979Cr. L. J. 1404 (India).

<sup>27</sup> *Naveen Raheja v. Union of India*, 2001 9 SCC 762 (India).

<sup>28</sup> *Rajendra Kumar v. UOI*, AIR 1998 Raj. 165 (India).

<sup>29</sup> *Ivory Traders and Manufacturers Association v. Union of India*, Civil writ petition Nos. AIR 1997 DEL 267 (India).

<sup>30</sup> J. Kurland et al., *Wildlife crime: a conceptual integration, literature review, and methodological critique*, 6 *CRIME SCI*, 4 (2017).

reported cases in 2020<sup>31</sup> to 615 reported cases in 2021.<sup>32</sup>

### **3. CYBERCRIME AGAINST WILDLIFE: AN INDIAN PERSPECTIVE**

With the advent of the internet, there has been a significant increase in criminal activity on the internet in the past two decades, which has given rise to a number of opportunities, one being wildlife trafficking.<sup>33</sup> Cyberspace acts as a catalyst to wildlife crime as it renders the platform for faster and easier transactions to take place. Several cases of cybercriminals indulging in illegal trade of parakeets, peacocks and turtles, endangered species of owls, rare albino civets, etc. through the internet by communicating through masked phone numbers, online advertisement and many other ways have been witnessed in the country.<sup>34</sup> Further, the report by TRAFFIC added species such as red sand boa, pangolin, tortoises, tokay geckos, corals and shells to the list.<sup>35</sup> Thus, it is imperative to understand the factors supporting the internet to be used as a medium to carry out such illicit trading of animals.

#### **3.1 How does the internet facilitate crime against wildlife?**

Criminal networks are adapting new ways to carry out the illicit trading of wildlife and the internet has opened a number of doors for them. Wildlife trafficking on web platforms can be both on the clear and dark web.

The clear web includes putting advertisements on legitimate platforms, using auction sites like eBay and forums. The information pertaining to the wildlife being put for illicit trading is sent to via advertisement, which are present for a specific period of time and later on becomes onerous to trace its source back. Thus, by using this method, potential buyers can be targeted on the web.<sup>36</sup> An operation conducted by Wildlife Trust of India in 2021 revealed that around 19 channels on YouTube had uploaded 50 odd videos about pangolin scales and life pangolin along with the

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<sup>31</sup> NATIONAL CRIME RECORDS BUREAU, MINISTRY OF HOME AFFAIRS, CRIME IN INDIA 2020, 889 (2020).

<sup>32</sup> NATIONAL CRIME RECORDS BUREAU, MINISTRY OF HOME AFFAIRS, CRIME IN INDIA 2021, 889 (2021).

<sup>33</sup> Supra note 20.

<sup>34</sup> PTI, Poachers go high tech, THE TIMES OF INDIA (Jun. 16, 2009), <https://timesofindia.indiatimes.com/home/environment/flora-fauna/poachers-go-high-tech/articleshow/4663167.cms>.

<sup>35</sup> Kiran Reddy Althuru, Visakhapatnam: Illegal Wildlife trade rampant on internet, DECCAN CHRONICLE (Aug 12, 2019), <https://www.deccanchronicle.com/nation/current-affairs/120819/visakhapatnam-illegal-wildlife-trade-rampant-on-internet.html>.

<sup>36</sup> Supra note 20.

phone numbers belonging to various countries like Indonesia, Pakistan Bangladesh, etc. posted on those channels.<sup>37</sup> The preceding year also witnessed such instances where sand boa, tokay gecko and pangolin were advertised for sale through YouTube.<sup>38</sup> Such illicit trading can also be carried out on instant messaging forums such as WhatsApp or Telegram through which messages are exchanged along with the videos of the animal being traded and since it is practiced in close knit groups, they are less likely to get exposed. Additionally, the Internet renders more than just a tool for communication, it offers a unique framework for adapting requirements of trafficking activities to changing market conditions to ensure efficiency.<sup>39</sup> Moreover, multiple e-commerce sites have been flagged by WCCB including Flipkart, Amazon, Snapdeal, Infibeam, Bay and Olx, where protected species and their parts are traded as neatly as purchasing a cosmetic product.<sup>40</sup>

It would not be wrong to say such social media companies serve as a facilitator for wildlife traffickers doing online animal trafficking by enabling the traffickers to advertise their products, establish networks with potential customers, and undertake trade using their platform. They essentially serve as a marketplace making the internet a hub for animal trafficking. What makes it easier to get away with such illicit trading is difficulty faced by the investigating authority to het the social media giants or coordinate/aid in the probe or even if they do, there is a time lapse which helps the offenders to escape; or most they could do in such cases is to remove/close the account indulging in such activities from their platform, however, it is futile in majority of the cases as a fresh account can easily be created and trading be continued. It indicates ignorance on the part of the social media companies to not take any step to curb the trade. When social media like YouTube can have a mechanism to find the copyrighted audio in a video posted on its platform, why can't the algorithm or bots be developed in such a way to not allow the posts pertaining to wildlife trafficking disrupting the ability of the potential offender to network through such platforms.<sup>41</sup>

Furthermore, the dark web is also a route that fuels illegal trade of wildlife. Dark web being an anonymous network enables the cybercriminals to hide their identity making it hard to get caught owing to its encryption technique, which consists of multiple layers. The same is used by both

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<sup>37</sup> Namita Singh, Uncovering the web of illegal wildlife traders operating on social media, INDEPENDENT (Jul. 11, 2021), <https://www.independent.co.uk/stop-the-illegal-wildlife-trade/illegal-wildlife-trade-internet-facebook-b1879656.html>.

<sup>38</sup> WILDLIFE CONSERVATION SOCIETY, INDIA, MEDIA-REPORTED WILDLIFE POACHING AND ILLEGAL TRADE IN INDIA: 2020, 1-83 (2020).

<sup>39</sup> Anita Lavorgna, Wildlife trafficking in the Internet age, 3 LAVORGNA CRIME SCIENCE, 5 (2014).

<sup>40</sup> Supra note 7.

<sup>41</sup> Supra note 37.

vendors as well as the customers to carry out their trading activities.<sup>42</sup> As found out by the WCCB, dark net being the hidden reaches of the Web, is used extensively to sell parts of recognised critically endangered species such as rhino horns, elephant ivory, tiger parts amongst others.<sup>43</sup>

### **3.2 Are Indian laws competent to deal with online illegal wildlife trade?**

The Wildlife Protection Act extensively deals with the illicit trading of wildlife or any part of the same. Sec 40(2) clearly prohibits any person to “acquire, receive, keep in his control custody or possession, sell, offer for sale or otherwise transfer or transport any animal specified in Schedule I or Part II of Schedule II or any uncured trophy or meat derived from such animal, or the salted or dried skins of such animal or the musk of a musk deer or the horn of a rhinoceros, except with the previous permission in writing of the Chief Wildlife Warden or the authorised officer.”<sup>44</sup> However, the word “sell or offer to sell” is not defined under the Act. Neither the Act attempts to provide the marketplace where such sales is taking place to include the ones done through the digital platforms. As was interpreted by the court in *In re: Smuggling and illegal trading of endangered species of birds*, the pet shop was deductible to be including online platforms over which the sales are being carried out as exhaustively covered within the definition of “pet shop” under the Rule 2(1)(k) of the Pet Shop Rules, 2018.<sup>45</sup> Having such a definition of sale under Wildlife Protection Act is also imperative to remove this lacuna.

Further Sec 44(1) and 49B(1) of the aforesaid Act prohibits engaging in the business of manufacturing/dealing in any animal products, captive animal, meat, trophy, etc. without procuring valid license.<sup>46</sup> The provision is still untouched with the cyber aspect of the offences of any trade/business.

However, no sale would be completed without articles being transported from one place to another and that would in any case be physical even though the business is being carried out online. This would then fall under the contravention of Sec 48A which puts restriction on the transportation of wildlife without ascertaining permission obtained from the authorities specified under the Act.<sup>47</sup>

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<sup>42</sup> Supra note 20.

<sup>43</sup> Supra note 7.

<sup>44</sup> Wildlife Protection Act, No. 53 of 1972, § 40(2), INDIA CODE (1993).

<sup>45</sup> *In re: Smuggling and illegal trading of endangered species of birds*, WPA/10138/2020 (India).

<sup>46</sup> Wildlife Protection Act, No. 53 of 1972, § 44(1) & 49B(1), INDIA CODE (1993).

<sup>47</sup> Wildlife Protection Act, No. 53 of 1972, § 48A, INDIA CODE (1993).

However, the punishments given were not proportionate to the wide extent on which online trading operates. Also, the aforementioned contravention is only putting liability on the person dealing with transport and the trade being a large nexus, still not putting direct imposition on those sitting in front of their computer screen and carrying on these trafficking rackets.

Further, since social media platforms have become a hub of illicit trading of wildlife, regulation of content being put on them is imperative. The obligation of due diligence to be observed on the part of the intermediaries including social media intermediaries by the way of informing its users not to “host, display, upload, modify, upload, transmit, store, update or share” certain information specified under Rule 3(1)(b) of the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021.<sup>48</sup> The same goes for e-commerce platforms as it also falls within the regulatory sphere of the same by the virtue of the Rule 5(1) of the Consumer Protection (E-Commerce) Rules, 2020.<sup>49</sup> Sadly, these rules do not include information pertaining to trading wildlife or their parts. The parent Information Technology Act also does not include publishing or transmitting of material containing any information regarding the illicit wildlife trade in ‘Offence’ as is made for obscene, sexually explicit acts.<sup>50</sup> Moreover, trading on digital space enables the offender to operate from any corner of the world thus making the jurisdiction of enforcement of the laws a roadblock in making the acts punishable.

### **3.3 Where do India stand in taking steps to curb online wildlife trade?**

Sec 38Z of the WPA lays down the powers and functions exercised by the WCCB, a statutory multi-disciplinary body to deal with organized wildlife crime in India; the function of which includes “to collect and collate intelligence related to organized wildlife crime activities and to disseminate the same to State and other enforcement agencies for immediate action so as to apprehend the criminals”. The WCCB plays an active role in conducting investigations in wildlife trade cases.

As a response to the increasing threat of online wildlife trade, the Bureau came up with a multispecies enforcement operation, namely, ‘WILDNET’, under which steps have been taken to draw enforcement agencies’ attention towards uptrend in wildlife trafficking through cyberspace, report cases involving online illegal wildlife trade, identify e-commerce sites, online trade portals

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<sup>48</sup> Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, G.S.R. 139(E), pt. II sec. 3(i), r. 3(1)(b) (Feb. 25, 2021).

<sup>49</sup> Consumer Protection (E-Commerce) Rules, 2020, G.S.R. 462(E), r. 5(1) (Jul. 23, 2020)

<sup>50</sup> The Information Technology Act, No. 21 of 2000, INDIA CODE (1993).



and social media platforms where such illicit trading is being carried, conduct sensitization programs and awareness programmes for representative of Panchayati Raj and members of local communities belonging to the protected areas on issues pertaining to online illegal wildlife trade, amongst others.<sup>51</sup> To cite an example, last year in July, WCCB in collaboration with Odisha Forest Department conducted Sensitization-cum-Awareness Programmes on how online wildlife trafficking can be prevented, target audience being community members/inhabitants of/around Satkosia and Bhubaneswar Tiger Reserves.<sup>52</sup>

In India, technologies that are widely employed by the wildlife experts, officials, and rangers include CCTV for visual monitoring, metal detectors to find open metal snares and traps installed for animals, two-way radio transceivers for communication, drones, animal radio telemetry (which encompasses satellite monitoring, GPS, remote sensing, and GIS), etc. to identify wildlife crimes.<sup>53</sup> Apart from these, anti-poaching cameras are being installed in the national parks, which can detect humans among the motion-activated images.<sup>54</sup> However, these tools fail to meet the standard to combat the organized wildlife crime. Further, with the emerging technologies and the wildlife trade being shifted online as well, there are certain technologies used by both offenders as well as the law enforcement authorities, such as GPS enabled tracking system, Radio Telemetry, Infrared Scopes, Unmanned Aerial Vehicles or Drones, etc.<sup>55</sup> Thus, India lacks in deploying smarter approaches in using technologies which can keep them ahead of offenders.

## **4. GLOBAL EFFORTS TO COMBAT CYBER-ENABLED WILDLIFE CRIME AND INDIA'S URGENT NEED TO JOIN THE FIGHT**

The internet has revolutionized the way people conduct business and trade, offering a level of convenience and anonymity that was previously unavailable.<sup>56</sup> Unfortunately, this technology has also given rise to a new form of criminal activity, allowing perpetrators to carry out illegal

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<sup>51</sup> WILDLIFE CRIME CONTROL BUREAU, OPERATION WILDNET-IV REPORT (2021).

<sup>52</sup> PRI/Awareness Programmes, WCCB NEWSL. (Wildlife Crime Control Bureau, New Delhi) Sept, 2022, at 14.

<sup>53</sup> Maneesha Mishra & Arpita Mitra, Technology and Wildlife Crime: An Appraisal in India, 8(12) IJITEE, 122, 124 (2019).

<sup>54</sup> Anjali Raja K, Can AI help India fight against wildlife trafficking and animal poaching?, INDIA AI, <https://indiaai.gov.in/article/can-ai-help-india-fight-against-wildlife-trafficking-and-animal-poaching>, (last visited Feb. 16, 2023).

<sup>55</sup> Supra note 53.

<sup>56</sup> Wildlife crime linked to the Internet, CITES, [https://cites.org/eng/prog/imp/wildlife\\_crime\\_linked\\_to\\_the\\_internet](https://cites.org/eng/prog/imp/wildlife_crime_linked_to_the_internet) (Last visited on Feb. 25, 2023).

operations under the guise of legitimate transactions. This is particularly true in the realm of wildlife crimes, where the internet has become a haven for those looking to trade in endangered species and their by-products. Wildlife trade that is unlawful and profitable is causing severe harm to animal populations and ecosystems globally. Due to the emergence of the internet and social media, wildlife traffickers can now conveniently target potential buyers, making it challenging for law enforcement authorities to curb this illegal trade.

According to INTERPOL, these crimes are considered "cyber-enabled," as they involve the use of the internet to facilitate traditional criminal activities like financial fraud and terrorism.<sup>57</sup> Monitoring this type of illegal activity is challenging, but TRAFFIC has been closely tracking the illegal trade in wildlife since January 2012.<sup>58</sup> Their research has shown a significant shift from physical markets to online markets for these crimes, highlighting the need for increased efforts to combat these illegal activities on the internet.

There are various positive instances where the international organizations together with collaboration with countries are able to track out the cyber-enabled wildlife crime.

## **4.1 International Organizations**

CITES is an international agreement between 184 countries that aims to prevent the extinction of wildlife as a result of international trade.<sup>59</sup> In 2016, CITES decided to collaborate with these platforms to address the problem after realizing the increasing contribution of social media, search engines, and e-commerce platforms to the illegal trade of species listed under CITES.<sup>60</sup> The International Consortium on Combating Wildlife Crime (ICCWC), formed in 2010, is an alliance among the CITES, INTERPOL, UNODC, the World Customs Organization (WCO), and the World Bank, to support law enforcement agencies in preventing wildlife cybercrime.<sup>61</sup> The ICCWC has developed the Wildlife Incident Support Team (WIST) to assist in rapid response support, training, and capacity building to prevent and combat wildlife cybercrime.<sup>62</sup> The United for Wildlife (UFW) Taskforce, formed in 2014, is another organization that focuses on identifying

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<sup>57</sup> Wildlife crime, INTERPOL, <https://www.interpol.int/en/Crimes/Environmental-crime/Wildlife-crime> (last visited on Feb. 20, 2022).

<sup>58</sup> *Supra* note 13.

<sup>59</sup> *Supra* note 18.

<sup>60</sup> *Supra* note 18.

<sup>61</sup> Sara Alfino & David L. Roberts, Code word usage in the online ivory trade across four European Union member states, 54 *ORYX*, 494–498 (2020).

<sup>62</sup> ICCWC Indicator Framework for Combating Wildlife and Forest Crime, Rep. of International Consortium on Combating Wildlife Crime (2016).

and disrupting the online market for wildlife products.<sup>63</sup> The Cybercrime Subgroup, developed by the UFW Taskforce, has created a toolkit for law enforcement agencies to investigate and prosecute wildlife cybercrime. UFW has also partnered with technology companies, such as Google, to detect and remove illegal wildlife products from online platforms.<sup>64</sup> The WWF has also been actively involved in combating wildlife cybercrime through the Wildlife Crime Scorecard and strengthening laws and policies. While these organizations have made progress in combating wildlife cybercrime, it requires collective effort from governments, law enforcement agencies, technology companies, and civil society to effectively combat this illegal trade.<sup>65</sup>

The UNODC, International Fund for Animal Welfare (IFAW), and TRAFFIC are other international organizations actively involved in the fight against wildlife cybercrime.<sup>66</sup> The UNODC's Global Programme for Combating Wildlife and Forest Crime provides training and technical assistance to law enforcement agencies to combat wildlife cybercrime. Similarly, IFAW's Wildlife Cybercrime Project works to raise awareness of the threat of wildlife cybercrime, train law enforcement agencies, and advocate for stronger laws and policies.<sup>67</sup> TRAFFIC ensures that trade in wild plants and animals are legal, sustainable, and traceable. These organizations collaborate with others, such as the ICCWC, UFW Taskforce, and WWF, to develop tools, initiatives, and partnerships with technology companies to combat wildlife cybercrime.<sup>68</sup> Through their collective efforts, these organizations are making progress in the fight against wildlife cybercrime and helping to protect endangered species.<sup>69</sup>

Interpol, an intergovernmental organization made up of 194 member countries, is dedicated to preventing and combating environmental crime, including wildlife cybercrime.<sup>70</sup> The organization's Environmental Security Programme coordinates its efforts to fight environmental crime, and its Global Wildlife Enforcement Network (GWEN) brings together law enforcement

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<sup>63</sup> Assessing United for Wildlife's Impact, UFW (2022) <https://unitedforwildlife.org/case-studies/assessing-united-for-wildlifes-impact/>. On The Frontline: Combating Online Wildlife Trafficking

<sup>64</sup> On The Frontline: Combating Online Wildlife Trafficking, IFAW (2020), <https://www.ifaw.org/international/campaigns/disrupt-wildlife-cybercrime>.

<sup>65</sup> Coalition to End Wildlife Trafficking Online, WWF, <https://www.worldwildlife.org/pages/coalition-to-end-wildlife-trafficking-online> (last visited on Feb. 19, 2023)

<sup>66</sup> Disrupt: Wildlife Cybercrime, Rep. of International Fund for Animal Welfare (2018).

<sup>67</sup> Project Web: An Investigation into the ivory trade over the internet within the European Union, Rep. of INTERPOL Environmental Crime Programme (2013).

<sup>68</sup> Tania McCrea-Steele, Global Wildlife Cybercrime Action Plan brings together critical actors in the fight against online wildlife trafficking, IFAW (Oct. 12, 2018) <https://www.ifaw.org/international/news/global-wildlife-cybercrime-action>.

<sup>69</sup> Supra note 13.

<sup>70</sup> Research identifies illegal wildlife trade on the Darknet, Rep. of INTERPOL (2017).

agencies, NGOs, and other stakeholders to combat wildlife crime, including cybercrime.<sup>71</sup> Interpol provides training and capacity building to law enforcement agencies to help them investigate and prosecute wildlife cybercrime. Its initiatives, such as Operation Thunderball<sup>72</sup>, target the online trade in endangered and protected species, while partnerships with technology companies like Facebook help to identify and report illegal wildlife products on social media. Interpol aims to prevent the exploitation and extinction of endangered species and promote legal and sustainable trade in wildlife.<sup>73</sup>

## 4.2 Foreign Countries

Several countries, including the European Union, the United States, Australia, and the United Kingdom, are taking measures to combat wildlife cybercrime at their respective levels and in collaboration with international organizations. The United States has partnered with eBay to remove listings for illegal wildlife products and prosecute sellers.<sup>74</sup> Australia's Wildlife Trade Intelligence Unit gathers information on the illegal wildlife trade,<sup>75</sup> including online trafficking, to work with law enforcement and international partners to disrupt trafficking networks.<sup>76</sup> The European Union and United Kingdom's Digital Services Act aims to hold online platforms accountable for illegal content, including wildlife trafficking, by requiring proactive measures to identify and remove such content, with non-compliance resulting in fines.<sup>77</sup>

## 4.3 Online platforms

Innovative steps have been taken by online platforms and websites to combat cybercrime wildlife globally. They have incorporated AI-powered detection tools to detect and eliminate illegal wildlife products from their platforms.<sup>78</sup> For instance, Facebook has initiated the Wildlife Trafficking Response, a global coalition aimed at reducing the demand for and supply of illegal

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<sup>71</sup> Id.

<sup>72</sup> Supra note 57.

<sup>73</sup>Stepping up the global fight against wildlife crime through a united response, INTERPOL, <https://www.interpol.int/en/News-and-Events/News/2022/Stepping-up-the-global-fight-against-wildlife-crime-through-a-united-response>, (Oct. 4 2022).

<sup>74</sup> Stephen Guertin, Wildlife Trafficking and the Growing Online Marketplace, US FISH & WILDLIFE SERVICE, <https://www.fws.gov/testimony/wildlife-trafficking-and-growing-online-marketplace> (Apr. 2021).

<sup>75</sup> STOPPING THE ILLEGAL TRAFFICKING OF AUSTRALIAN WILDLIFE, DEPARTMENT OF AGRICULTURE, WATER AND THE ENVIRONMENT, AUSTRALIAN GOVERNMENT (2020)

<sup>76</sup> Pirotta Vanessa, et al., Detecting illegal wildlife trafficking via real time tomography 3D X-ray imaging and automated algorithms, 3 FRONTIERS IN CONSERVATION SCIENCE (2022).

<sup>77</sup> Ilaria Di Silvestre, The Digital Services Act and the Challenging Fight against Wildlife Cybercrime, IFAW (Jul. 14, 2022), <https://www.ifaw.org/international/people/opinions/digital-services-act-and-the-challenging-fight-against-wildlife-cybercrime>.

<sup>78</sup> Maria Pascual & Jim Wingard, Assessing Online Wildlife Marketing a Tool for Monitoring Illegality, Rep. of Global Initiative Against Transnational Organized Crime (2021).

wildlife products.<sup>79</sup> Additionally, Facebook and eBay use machine learning algorithms and computer vision technology, respectively, to report and identify illegal wildlife products.<sup>80</sup> Ebay has prevented the sale of ivory on its platform.<sup>81</sup> Google has launched the Global Wildlife Trafficking Tech Challenge, which seeks to employ technology to combat wildlife trafficking, and has enforced a policy banning ads promoting products derived from endangered or threatened species.<sup>82</sup> Instagram and online marketplaces like Alibaba, Amazon, and Etsy have implemented features and guidelines to report and prevent the sale of illegal wildlife products.<sup>83</sup>

Other technologies like Wildchain, which uses blockchain-based systems to track wildlife products, can prevent the sale of counterfeit products and ensure legal and sustainable purchases.<sup>84</sup> The Wildlife Crime Scorecard, developed by the WWF, uses gamification to simulate a wildlife crime investigator's experience and educate users about different types of wildlife crime and challenges faced by law enforcement.<sup>85</sup> These efforts are carried out in collaboration with international organizations such as CITES, ICCWC, Interpol, and UNODC to prevent endangered species' exploitation and extinction.<sup>86</sup>

#### **4.4 What India can borrow?**

India could glean from the experience of other nations and international groups in the fight against wildlife cybercrime. One of the approaches is to establish rapid response teams that provide technical assistance, intelligence gathering, and analysis to identify and prosecute cybercriminals involved in wildlife cybercrime. This approach has been employed by organizations such as the ICCWC and UFW Taskforce. Technology tools such as AI-powered detection tools for illegal wildlife products on online platforms can also be utilized.<sup>87</sup> Facilitating training and capacity

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<sup>79</sup> Alexander Nicolas, New Facebook alert informs users about wildlife trafficking, WWF (Dec. 21, 2020) <https://www.worldwildlife.org/stories/new-facebook-alert-informs-users-about-wildlife-trafficking>

<sup>80</sup> Mike Carson, How eBay Blocked 257,000 Listings that Violated Prohibited Wildlife Policies in 2020, WWF (Jun. 1, 2021), <https://www.worldwildlife.org/blogs/sustainability-works/posts/how-ebay-blocked-257-000-listings-that-violated-prohibited-wildlife-policies-in-2020>.

<sup>81</sup> Andy Coghlan, Ebay moves to ban sales of ivory. 200 NEW SCIENTIST 10 (2008).

<sup>82</sup> Karthik Jayachandran and Winnie Lam, Google Employees Search for Prohibited Wildlife Products Online While Remote, WWF (Jul. 14, 2020), <https://www.worldwildlife.org/blogs/sustainability-works/posts/google-employees-search-for-prohibited-wildlife-products-online-while-remote>.

<sup>83</sup> Supra note 39.

<sup>84</sup> Esteve Corbera, Smart, Commodified and Encoded: Blockchain Technology for Environmental Sustainability and Nature Conservation, *Conservation & Society* (2022), <https://www.conservationandsociety.org.in/article.asp>.

<sup>85</sup> Assessing the commitment of countries to STOP illegal wildlife trade, WWF, [https://wwf.panda.org/discover/our\\_focus/wildlife\\_practice/problems/illegal\\_trade/wildlife\\_trade\\_campaign/scorecard/](https://wwf.panda.org/discover/our_focus/wildlife_practice/problems/illegal_trade/wildlife_trade_campaign/scorecard/) (last visited on Feb 21, 2023).

<sup>86</sup> Supra note 78.

<sup>87</sup> Supra note 73.

building for law enforcement entities to investigate and prosecute wildlife cybercrime, forming partnerships with governments and NGOs, and promoting stronger laws and policies to prevent and combat wildlife cybercrime can also be beneficial. This includes training on digital forensics, cybercrime investigation techniques, and legal frameworks for wildlife crime. International organizations such as INTERPOL and the UNODC provide such training and capacity building.<sup>88</sup> India could form partnerships with governments, NGOs, and other stakeholders to spread awareness of the threat of wildlife cybercrime and to promote sustainable wildlife trade. These partnerships help to promote best practices for preventing and combating wildlife cybercrime and to promote legal and sustainable trade in wildlife. India could advocate for stronger laws and policies to prevent and combat wildlife cybercrime.<sup>89</sup> This includes advocating for increased penalties for wildlife cybercrime, strengthening border controls to prevent the import and export of illegal wildlife products, and promoting international cooperation to combat wildlife cybercrime.

Adopting a multi-pronged approach using these strategies can help India effectively combat wildlife cybercrime and protect endangered species from exploitation and extinction.

## **5. CONCLUSION AND SUGGESTIONS**

The journey of wildlife conservation has been a complex one, with a strong commitment to protect wildlife at its roots but becoming increasingly challenging over time. Today, wildlife crime has become one of the top four crimes committed globally, and it has now spread from traditional on-ground activities to online platforms. India's conservation efforts reflect its cultural heritage that prioritizes coexistence and respect for animals. Despite having a legal framework to protect wildlife, India is encountering a growing number of wildlife crimes, like illegal trade. To combat the evolving nature of such crimes, India needs to enforce and enhance current laws, necessitating global collaboration.

Wildlife trafficking in India has evolved to transform and adapt the requirements and opportunities offered by cyberspace. The internet renders a platform where traders can easily establish communications with the potential buyers through advertisement on social media or instant messaging forums, putting it out for sale on e-commerce platforms or auction sites, dark web, etc.

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<sup>88</sup> Supra note 39.

<sup>89</sup> Supra note 13.

The anonymity furnished by the webspace oils the wheel of online illicit trade of wildlife. Thus, higher probability of not getting caught has made the internet hub of wildlife trafficking. Covid'19 pandemic and restrictions imposed therewith is an add-on factor for the same. However, the Indian legal system has yet not come to grips with the uptrend of illegal wildlife trading by its digital transformation. Both Wildlife Protection Act, 1972 and IT Act, 2000 are silent on the matter, and so are the Rules made to regulate social media and e-commerce. The Wildlife Crime Control Bureau has definitely taken few measures to combat this cybercrime, however, India is still lacking in the technology used to battle the surge in crime.

The internet has presented both opportunities and challenges for combating wildlife crime. While it has facilitated the illicit trade of endangered species and its articles, international organizations such as CITES, WWF, IFAC, law enforcement agencies, technology companies, and civil society have come together to address the problem. Several countries such as Australia, USA, EU and online platforms like Facebook and eBay have taken measures to tackle wildlife cybercrime in their innovative ways. India's fight against wildlife cybercrime could benefit from the experiences of other nations and international organizations. India could also push for tougher regulations, heavier fines, tighter border controls, and greater international cooperation to fight wildlife cybercrime. It is crucial that these initiatives keep developing and growing in order to keep up with how wildlife cybercrime is evolving.

After the in-depth analysis of the topic, the researchers have come up with the following recommendations:

1. The term 'sell' or 'sale' in the Wildlife Protection Act should be expanded to include the online market. Further, the provision for wildlife trafficking should also be introduced under 'Offences' in IT Act, 2000, thereby increasing the scope of governance in order to curb the cybercrime against wildlife.
2. The regulations made for social media in the intermediary guidelines should also include wildlife trafficking and social media and e-commerce platforms should be accountable for blocking or scrutinizing content with certain keywords that could possibly be dealing with this illicit trade.
3. To combat the illegal trading in cyberspace, the partnership with online websites, the AI-powered detection tools, the formation of specialized strategic task forces, and the provision of capacity building to law enforcement organizations should be used to develop a potential strategy and practical countermeasures.

4. Cybercrime being a transnational crime would be tackled in the better manner by collaborative and cooperative efforts of the global community. Thus, India should take into consideration the measures taken by international organisations, foreign countries, online platforms and collaborate with them to respond to the threat of wildlife extinction posed by cybercrime.

India must take a robust approach in its legal framework and join hands with the global communities as it is the need of the hour in the fight against digital transformation of wildlife crimes.