Incidence of wildlife trafficking in India and utility of “fauna detector dog” for prevention

Dr. Anees Cherkunnath  BVSc & AH, MVSc, PhD
Assistant Commissioner(P)
National Academy of Customs Excise and Narcotics (NACEN)
Government of India

draneescherkunnath@gmail.com
Background

• Indian subcontinent is one of the richest habitats of rare species of wild fauna

• During the last 2 decades, many of the wild species came under the threat of extinction due to poaching and illicit trade through the international borders (WWF)

• Illegally trafficked wild life products from India includes
  - Rhino horn
  - Pangolin scales,
  - Mongoose hair
  - Snake skins
  - Tiger and Leopard claws
  - Elephant tusks,
  - Caged birds
Commonly Trafficked wild fauna-type species selected for the current study

1. **The Great Indian One Horned Rhinoceros** (*Rhinoceros unicornis*)
   - The population is 3,333 (Census, 2013).
   - The largest population occurs in the Kaziranga National Park in Assam.
   - Threat of extinction is due to high demand for its horn.
   - Included in the Appendix-I of CITES and in the schedule-I of Wildlife (Protection) Act, 1972.

2. **Pangolin** (*Manis crassicaudata*) –
   - Endangered species under the Wildlife Protection Act Schedule I.
   - Listed under Appendix II of CITES.
   - Found in the coastal forests of Orissa, Andhra Pradesh and Tamil Nadu.

3. **Hamilton turtles** (*Geoclemys hamiltonii*)
   - Endangered species as per Appendix I of CITES and Schedule 1 of Indian Wild life Protection Act.
Indian one horned Rhino

http://iamlark.files.wordpress.com/
Indian pangolin

http://awsassets.wwfindia.org/
PURPOSE

To analyze the incidence of illegal wildlife trafficking attempts of endangered species of One horned Rhinoceros (*Rhinoceros unicornis*), Hamilton Turtles and marine species.

To exploit the possibility of specialized ‘Wild fauna detection dogs” to assist Indian customs in preventing this environmental crime.
Methodology....

- Data collected as per preformed questionnaire

- Filed Survey conducted at Kaziranga National Park, Pabitora Wildlife sanctuary (Assam), Indian Customs formations in Assam, Kolkata and Meghalaya.

- A short term study on the poaching and illicit trafficking of endangered Hamilton turtle, Star tortoise and marine animals conducted.

- The utility of ‘fauna detector dogs’ were studied in consultation with Central Board of Excise and Customs, Forest Department, Border Security Force- Dog training centers and expert dog trainers.
Findings & Recommendations
## Annual Poaching of Rhinoceroses

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Gunshot</th>
<th>Pit Poaching</th>
<th>Electrocution</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-89</td>
<td>140</td>
<td>129</td>
<td>3</td>
<td>0</td>
<td>272</td>
</tr>
<tr>
<td>1990</td>
<td>29</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>1991</td>
<td>20</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>1992</td>
<td>44</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>48</td>
</tr>
<tr>
<td>1993</td>
<td>39</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>41</td>
</tr>
<tr>
<td>1994</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>1995</td>
<td>22</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>1996</td>
<td>26</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>1997</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>1998</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>1999</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2001</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>2002</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2003</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2004</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2005</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>2006</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2007</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>2008</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>2009</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>2010</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>2013</td>
<td>26</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>2014</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>TOTAL</td>
<td>458</td>
<td>174</td>
<td>7</td>
<td>1</td>
<td>640</td>
</tr>
</tbody>
</table>
Poaching Vs. natural Mortality of one horned Rhinoceros

Poaching of one horned Rhinoceros - year wise
Various methods of Poaching
An increasing trend of poaching??

Porous border all around.
Lack of sophistication
Lack of conviction of poachers
Growing population around the fringes of the Park.
Low income opportunities
Easy access to international markets through neighboring States

Emerging issues are:

• Rising prices of rhino horn in the international markets (Eg Vietnam)
• Involvement of terrorist outfits in poaching
• Use of sophisticated arms such as AK Series rifles and Silencers
• Poor relations between fringe population and forest staff
• Poor intelligence network
• Lack of motivation among the staff
Transnational trade

Main transit points--:
Airports in Singapore, Thailand, Malaysia and Hong Kong

Destination Countries:
China & Vietnam
Preventive measures

- Strong legal and policy framework

- Central Bureau of Investigation is entrusted to establish forward and backward linkage of the wildlife crime

- An Electronic surveillance system, called the Electronic Eye is under implementation in Kaziranga.

- Aerial surveillance using Unmanned Aerial Vehicle (UAV)

- A “Special Task Force” under Addl D.G. of Police has been constituted by the Govt. of Assam.
 Trafficking Pangolin Scales

- It is found that as many as 10,000-13,000 pangolins have been captured and smuggled out of the wild in just initial half of this year.

- In East and Southeast Asian consumer countries — chiefly Vietnam and China — scaly anteaters’ flesh is consumed as a delicacy, while their scales are used to create traditional Chinese medicine concoctions.

- The northeast states like Manipur, Mizoram, Nagaland are some of the transit hubs.
 Trafficking Star tortoise

✓ Star tortoise, an endangered species, is not allowed to be exported as it is protected under the Wildlife Protection Act.

✓ Source of illegal trade in most of the cases is South Indian States.

✓ Study revealed that in 90% of the cases, Bangkok was found to be the destination of star tortoise trafficking.
Trafficking of Hamilton Turtles

Several attempts have been recorded during the study period to traffic Hamilton turtles from Eastern Coastal states like Odisha and Andhra pradesh to countries like Bangladesh, China and Thailand.
Trafficking Red Eared Terrpian

- Red-eared terrapin, a semiaquatic turtle and an invasive species is commonly kept as pet in all parts of the world.

- Recently Kolkatta Customs seized Red-eared terrapins trafficked from China.

- Traffic route was from Gangzhou, China to Kolkatta to Tamil Nadu
Trafficking Marine species

- Illegal trade of threatened marine species - especially sea horses and sea cucumbers - is emerging as the new wildlife crime.
- India's coastal waters are fast becoming base for easy poaching by illicit traders who transport them by international flights through passenger luggage.
- International networks, involved in their trafficking, ferry the animals on flights to China and South Eastern Countries.
Constraints in preventing poaching

- Lack of multidisciplinary approaches among enforcement agencies

- Central Industrial Security Force (CISF), Customs Staff and airlines operators need to be more sensitized about the illegal trafficking of wild life products

- Transboundary issue

- So far no agency has come forward to act as the chief coordinator to tackle the issue.
Indian Customs Department is proposed to act as the chief coordinating agency

The Customs will act as a flexible channel coordinating the activities of CBI, Directorate of Enforcement, Bureau of Economic Offences, Army Intelligence, Forest department and Police department.

Proposed line of Action

- Imparting awareness about illegal wildlife trafficking and training on identification of wild life products
- All the employees in Air ports, border and sea ports should be imparted training on identification of commonly smuggled wild life products.
- Good rewarding system for seizure of wild life products should be implemented as existing in the case of seizure of gold or narcotics.
- Finally there is an urgent need for formation of a coordinated ‘Joint task force’ for preventing illegal trade in wild life products.
Task Force...

A joint effort of various security and law enforcement agencies is inevitable considering the peculiar geography of the area.

The coordination may be better organized as

1. preventing the poaching at pre entry stage (before intruding into the habitat of animal)
2. Post entry
3. Post Exit
4. At Borders and check posts

The task force will work with the goal of curtailing the transnational wildlife trafficking.
Strengthening the Land Customs

✓ Newly constructed roads in North Eastern India connect that region to Myanmar and then to Bangkok-----Easy Illegal trafficking through this road.

✓ Need for establishment of well equipped Customs Check post with modern screening facilities.

✓ Specially trained ‘Fauna detection Dogs’ should be deployed in these points

Passenger profiling

Frequent travelling to destination countries identified as the end market for wild life products under question should be documented properly and can be correlated with illegal trade.
Deploying Fauna detection dog

✓ Wild life detector dogs are proved to be highly effective enforcement tool, both to detect smuggled wildlife goods and to act as a deterrent.

✓ Dogs can be trained to identify commonly trafficked illegal wildlife goods, such as tiger parts, rhino horn, pangolin scales, live turtles and marine species which are normally concealed in containers, airport luggage conveyer belt and postal center.

✓ Detection dogs can accomplish in minutes what would take a person all day. A quiet dog and enthusiastic handler would also increase public awareness about illegal wild life trade.
Initiatives for establishing fauna detector dogs in India

TRAFFIC, India, an NGO for preventing wildlife crimes has taken initiative for training dogs for wildlife contraband detection. A sniffer dog training programme started in India in the year 2008 and subsequently seven dogs and 14 handlers have been successfully trained.

Recently, Kaziranga National Park started using dog squad to curb poaching activities in 2013.

Currently “Zorba” a trained dog for tracking has been stationed at Kaziranga for investigating wildlife crimes in the Park.
In India there is an urgent need of starting Customs Canine Training Centre. This centre will have facilities for training canine instructors, canine handlers, and canines to assist Indian Customs to prevent illegal trade in wild life.

The centre should also equipped to supply trained dogs to China, Nepal, Myanmar, Thailand, Srilanka, Bangladesh and other South East Asian Countries.

The neighboring countries can enter into MoU for sharing of knowledge, research output and resources.
Wildlife detection dogs should be deployed at all Airports, Sea ports and Lands customs Unit at borders and check posts.

While all the graduate dogs are trained to detect commonly trafficked wildlife items, those specialized in detecting Rhino horns, Pangolin scales and Marine species should be deployed at Vulnerable Ports of the Country.

Vulnerability of trafficking should be calculated based on the statistics of seizure in that station during the last 5-10 years.
Supportive activities by Customs

- WCO should take initiative in organizing regional collaborations to identify vulnerable points for smuggling in the region and suitable strategy should be planned to address the issue.

- Need for dedicated academic institution and courses to study the illegal wildlife trafficking.

- Customs officers and other enforcement staffs should be undergone short term courses on this aspect.
Preventive strategies in Nutshell

✓ The Indian Customs, with its lead role, should take initiative to spread awareness about the variety of fauna smuggled

✓ Fauna detection dogs will work complementary with law enforcement agencies for detecting the crimes.

✓ Co-operation between India and other member countries of the South Asia Wildlife Enforcement Network (SAWEN) is essential to combat the increasingly organized nature of wildlife crime in the region.
CONCLUSION

➢ The illegal trade in wildlife products is on the higher side.
➢ The prevention of the illegal trade is possible only by joint effort of all law enforcement agencies concerned.
➢ Customs department is supposed to act as the chief coordinator of the effort.
➢ Trained fauna detection dogs need to be deployed at vulnerable ports all over the country
➢ An Customs dog training Academy is to be established under the s support of WCO
➢ Academic and research programs focusing wild life/tansboundary crimes is to be designed
Authors

Dr. Menon G Sreekumar the Director General of the National Academy of Customs, Excise & Narcotics, the apex institution for training of the officers of the Indian Revenue Service (Customs & Central Excise).

He holds a doctorate in narcotics.

Dr. Anees Cherkunnath- Assistant Commissioner (Officer Trainee) in the Indian Revenue Service (Customs & Central Excise) , currently undergoing training at the National Academy of Customs, Excise & Narcotics .

He holds a doctorate in Veterinary Sciences.

Dr Ani Bency Jacob- Assistant Professor at Kerala Veterinary and Animal Science University.

She holds a doctorate in Veterinary sciences.

Dr. Divya S Iyer Assistant Commissioner (Officer Trainee) in the Indian Revenue Service (Customs & Central Excise) , currently undergoing training at the National Academy of Customs, Excise & Narcotics .

She is a graduate in Medical Science.
Acknowledgements...

- Central Board of Excise and Customs, Government of India
- Ministry of Environment and Forests, Government of India
- The Assam Regiment of Indian Army
- Border Security Force
- Mr. Rajiv Tandon, Additional Director General, NACEN
- Mr. Panmay, Commissioner of Customs, North East India
- Mr. Sunny Leo Choudhary, Asst Conservator of Forest, Assam
- Mr. Vasudev Ravi, Indian Foreign Service