EDITORIAL

Emerging trends in wildlife trade in Northeast India: a serious concern

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At the conjunction of the Himalaya and Indo-Burma biodiversity hotspots, the northeast India is endowed with home range of many endemic species. This region of India ranks among the top 25 global biodiversity hotspots in the world, with 106 globally threatened species (Baruah and Sharma, 2010). Recently, the region has been appeared as a hub of illegal trade of many endemic and endangered wild flora and fauna. The major driver for such illegal trade is mostly due to their demand for ethnomedicine in international markets (Heinen and Leisure, 1993; TRAFFIC, 2008).

Wildlife traffickers in India usually poach many wild animals and traffic their body parts for traditional medicines in China and other East Asian countries (Nijman, 2010). Bengal tigers (Panthera tigris tigris) and greater one-horned rhinos (Rhinoceros unicornis) are the prime targets in trade operations. Animal parts like rhino horns, tiger bones, ivory, deer antlers, pangolin scales, lizards, snakes and forest products such as red sander wood are being smuggled to places like China, Myanmar and other Southeast Asian nations through the Northeast India. Hunting in the Northeast gets a boost because the Southeast Asian market for wildlife trade is close at hand. After hunting an animal in Northeast India, it's very easy to cut across the border to Myanmar where there is a ready market (TRAFFIC, 2012). This region is presently used as a corridor by the international smuggler, causing a serious concern to the very existence of wildlife in the Northeast India.

Open trade of bones, claws and skin of tiger, Assamese macaque, elephant tusk, smoked snakes, red panda, etc. is common feature in in northeastern states of India. Presently, not only the rhino horn, but also the ivory or bones of tiger and elephant meat and tusk, has been designated as valuable for poachers and smugglers in Northeast India. Elephants are killed, their meat sundried and smuggled out to Southeast Asia via Bangladesh. Recently, the Slow Loris (Nycticebus bengalensis) continues to be poached in various places and used for food in some of the northeastern states (Radhakrishna et al., 2010). According to a recent source, about 200-300 numbers of snake skins are being smuggled out every year from the state of Assam and its adjacent areas of Bangladesh and later sold in the international market (Forest Department sources, Dhubri).

Rhino poaching becomes a serious concern that has drawn the attention of conservationists in recent past (Saikia, 2011). According to the 2012 census, the Kaziranga National Park has 2,186 rhinos out of a total population of 2,505 in Assam. Unfortunately, a total of 534 rhinos were poached in Kaziranga during 1965 to 1993 (Vigne *et al.*, 1994). The rhino poaching has turned increased from 2007 stood at 20, 16 in 2008, 14 in 2009, 18 in 2010, 5 in 2011 and 25 in 2012 died in Assam (Soud and Talukdar, 2012). In the year 2013, a total of 41 rhinos were killed in Assam by the poacher. Recently, many extremist groups armed with sophisticated weapons of Northeast India have also been involved in both poaching and smuggling of rhino horn.

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In last two years, gecko catchers become active in the northeast Indian states of Manipur, Mizoram, Nagaland and Assam. Myanmar-based traffickers are in the middle of the chain. Tokay geckos (Gekko gecko) locally known as 'keko xaap' are being caught illegally and trafficked from this region to Southeast Asian countries, where many people believe that medicines made from gecko meat can cure diseases such as AIDS, cancer etc.. The lizards have long been traded in countries like China, Malaysia, Indonesia, Japan, since they believe the Gecko gecko could effectively be used against various maladies like diabetes, asthma, skin ailments and cancer. The Gekko gecko is a nocturnal Asian lizard growing up to 40 cm in length and could easily be identified by its orange-spotted, blue-grey skin and unmistakable vocalizations. In the year 2013, this reptile has been seized in large numbers in the state of Assam, Nagaland and Manipur. The International Union for Conservation of Nature (IUCN) has also not assessed the conservation status of the gecko, which is also, distributed in Bangladesh, India, Nepal, Myanmar and other Southeast Asian countries.

In April 2012, skins of two endangered Clouded Leopards (*Neofelis nebulosa*) were seized near Manas National Park in Assam. IUCN estimates that there are fewer than 10,000 mature individuals surviving globally and has listed it as 'Vulnerable'. Illegal hunting for its beautiful coat is one of the major threats to the species today. There is also trade in the bones for medicines, meat for exotic dishes and live animals for the pet trade (TRAFFIC, 2012).

Illegal hunting pressure is most intense in northeastern India, compared with the Western Ghats and Nicobar Islands (Velho *et al.*, 2012). Across the Indo-Malayan and Eastern Himalaya biodiversity hotspots, a total of 94 mammal species are reportedly hunted for local consumption and wild-life trade (Velho *et al.*, 2012). In Arunachal Pradesh state of northeast India, 33 mammal species are hunted, with 57% of these being endangered, threatened or vulnerable (Aiyadurai *et al.*, 2010).

Illegal wildlife trade is a multibillion dollar business. Organized criminal networks operate across the biodiversity hotspots in northeast India, aided by corruption, poverty and weak laws. Fortunately, CITES includes varying degrees of protection to more than 30,000 species of animals and plants, whether they are traded as live specimens or as products such as fur coats or dried herbs. Assam and other parts of the Northeast India are losing many of the invaluable flora and fauna with the wildlife crimes assuming alarming dimensions. While habitat loss poses the gravest challenge to the existence of many species in the region, no less disquieting is the spurt in poaching and illegal trade in wildlife and their body parts. Another disturbing trend relates to the poaching and capture of lesser animals, including reptiles, birds, as many such 'less glamorous' wildlife command an equal demand in the illegal trade.

The illegal trade in wildlife could be a genuine and increasing threat to national and global security. Despite high level commitment and significant investments into the conservation of wildlife, population of each species is in the process of decline due to illegal trade (Graham-Rowe, 2011). The decline and loss of flagship species affects not only the balance of nature, but also the livelihoods of people who depend on intact ecosystems. Receiving information in advance on the movement of poachers and wildlife smugglers is extremely crucial in apprehending illegal wildlife traders and disrupting their activities (Talukdar, 2000). To mitigate these potential issues, conservation will need to become a more inclusive endeavour, with greater participation from nationals in countries with demand, particularly with regard to campaign against the demand for illegal wildlife trade, participation of communities on antipoaching activities, conservation networking and stakeholder engagement (Veríssimo et al., 2012).

REFERENCES

Aiyadurai, A., Singh, N., Milner-Gulland, E.J., 2010. Wild-life hunting by indigenous tribes: a case study from Arunachal Pradesh, northeast India. *Oryx* 44, 564–572.

- Baruah, C. and Sharma, D.K. 2010. Checklist of turtle fauna so far recorded from northeast India. *NeBIO Research Journal*, 1 (1):10-13
- Graham-Rowe, D. 2011. Biodiversity: Endangered and in demand. *Nature* 480:S101-S103.
- Heinen, J.T., Leisure, B. 1993. A new look at the Himalayan fur trade. *Oryx* 27, 231–238.
- Nijman, V. 2010. An overview of international wildlife trade from Southeast Asia. *Biodiversity* and Conservation 19:1101-1114.
- Radhakrishna S, Datta-Roy A, Swapna N, Sinha A. 2010. Population survey of the Bengal slow loris, *Nycticebus bengalensis*, in Meghalaya, northeast India. Primate Conservation 25: 105–110.
- Saikia, A. 2011. Kaziranga National Park: History, Landscape and Conservation Practices. *Eco-nomic & Political Weekly* 46 (32):12-13.
- Soud, R and Talukdar, S. 2013. Contemporary Crisis of Rhinoceros in Assam: A Critical Review. *Asian Journal of Conservation Biology*, 2 (1): 82–83.
- Talukdar, B. K. 2000. The current state of rhino in Assam and threats in the 21st century. *Pachy-derm* 29: 39-47.
- TRAFFIC. 2008. "What's Driving the Wildlife Trade? A Review of Expert Opinion on Economic and Social drivers of the Wildlife Trade and Trade Control Efforts in Cambodia, Indonesia, Lao PDR and Vietnam". East Asia and Pacific Region Sustainable Development Discussion Papers. East Asia and Pacific Region Sustainable Development Department, World Bank, Washington, DC
- TRAFFIC. 2012. TRAFFIC adopts multiagency approach to tackle wildlife crime in Arunachal Pradesh. *TRAFFIC POST* 15:1-12.
- Velho, N., Karanth, K.K. and Laurance, W.F.2012. Hunting: A serious and understudied threat in India, a globally significant conservation region. Biological Conservation 148 (2012) 210– 215
- Veríssimo, D, Challender, D.W.S., Nijman, V. 2012. Wildlife trade in Asia: start with the consumer. *Asian Journal of Conservation Biology*, December 2012. 1(2): 49-50.
- Vigne, L., Martin, E. B. 1994. The Greater Onehorned rhino of Assam is threatened by poachers. *Pachyderm* 18: 28-43.