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## THE SCALE OF PANGOLIN TRADE IN INDIA:

**Nearly 6,000 pangolins poached between 2009-2017**

Pangolins, commonly referred to as scaly anteaters, are reported to be among the most trafficked wildlife species globally. A TRAFFIC study has found that close to 6,000 pangolins were seized from illegal trade involving India over the period 2009–2017. However, the estimated total of 5,772 animals is likely to be an under-estimate as an unknown fraction of illegal wildlife trade is detected, while a conservative estimate for the weight of scales per animal was used.

In India, pangolins are poached mainly for international markets in China and Southeast Asia and also for domestic trade that includes consumption of meat. Pangolins are netted, trapped or snared mostly for their meat and scales. Pangolin meat is considered a delicacy and as a “tonic food” because of its alleged medicinal properties. Pangolin scales are used as an ingredient in traditional medicines as they are believed to cure various ailments.

# PANGOLINS IN INDIA:

Pangolins are the only known mammals with large keratin scales covering their skin. They are toothless, nocturnal, live in burrows and feed mainly on ants and termites.

Of the eight species found worldwide (four each in Asia and Africa), two are found in India: **Indian Pangolin *Manis crassicaudata*** and **Chinese Pangolin *Manis pentadactyla***.

## DISTRIBUTION IN INDIA:

The Indian Pangolin is found throughout the country south of the Himalayas, excluding the north-eastern region while the Chinese Pangolin ranges through Assam and the eastern Himalayas.

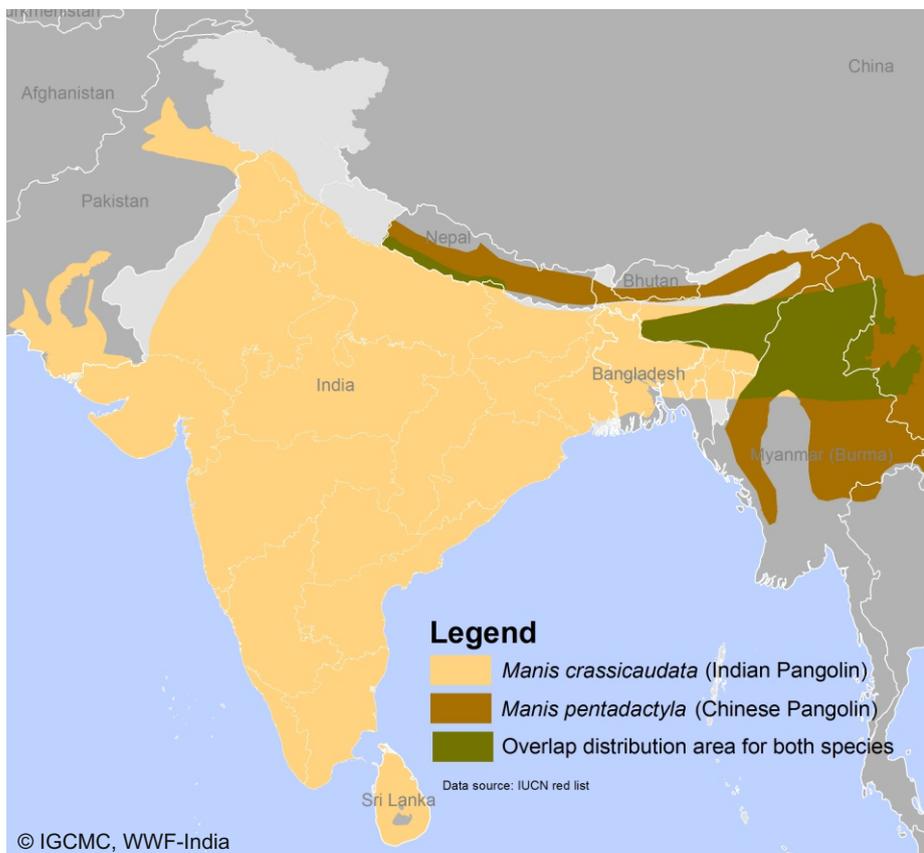
## POPULATION STATUS IN INDIA:

Unknown, as no systematic studies have been conducted so far

## LEGAL STATUS:

**Wildlife (Protection) Act, 1972:** Both Indian Pangolin and Chinese Pangolin are listed in Schedule I of the Act, therefore hunting, trade or any other form of utilisation of the species or their body parts and derivatives is banned.

**Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES):** International trade in pangolin and their body parts and derivatives is prohibited since all pangolin species are now listed in CITES Appendix I.



## NUMBER OF PANGOLINS IN ILLEGAL WILDLIFE TRADE INVOLVING INDIA:

5,772 pangolins during the period 2009-2017.

## INTERESTING FACTS:

Pangolins are the only mammals covered in reptile-like scales.

Female pangolins keep their young in burrows until they are old enough to ride on their mother's tail.

When threatened, pangolins curl up into a tight ball.

Pangolins can consume up to 20,000 ants per day. That's about 70 million ants per year!

The stomach of the pangolin has keratinous spines projecting into its interior. Small ingested stones accumulated in the stomach help to mash and grind prey. Pangolins are slow breeders, producing only 1-3 offspring every two years.



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## SCALE OF PANGOLIN TRADE IN INDIA:



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TRAFFIC's research and analysis of illegal pangolin trade involving India found that the equivalent of 5,772 animals were seized during the period 2009–2017. The study also helped assess the extent of poaching, identify trade hotspots, and understand poaching and trade trends through analysing media reports, online literature, and information directly from the field on pangolin seizures.

Most reports included either the total number of scales seized or their total weight. The following conversions were used for computing the number of animals from such reports:

The number of scales was converted to weight using the factor: 1 pangolin scale = 10 g (Mitra 1998).

The weight of scales was converted to the estimated number of animals by assuming the total weight of scales per adult Indian Pangolin is 1kg (Challender and Waterman, 2017).

Since there was no clear species identification from seizure records, TRAFFIC used a conversion factor assuming all scales originated from adult pangolins of the larger Indian Pangolin species (i.e. 1 kg is the equivalent of one adult Indian Pangolin (Challender and Waterman, 2017)) for extrapolating the number of animals seized from illegal wildlife trade. Therefore, the total number of animals derived from the seizures is a conservative estimate because some of the seizures could relate to Chinese Pangolins, for which the average weight of scales per animal is 0.573 kg, (Zhou *et al.*, 2012), plus seizures can also contain juvenile or sub-adult pangolins of either species.

## FINDINGS

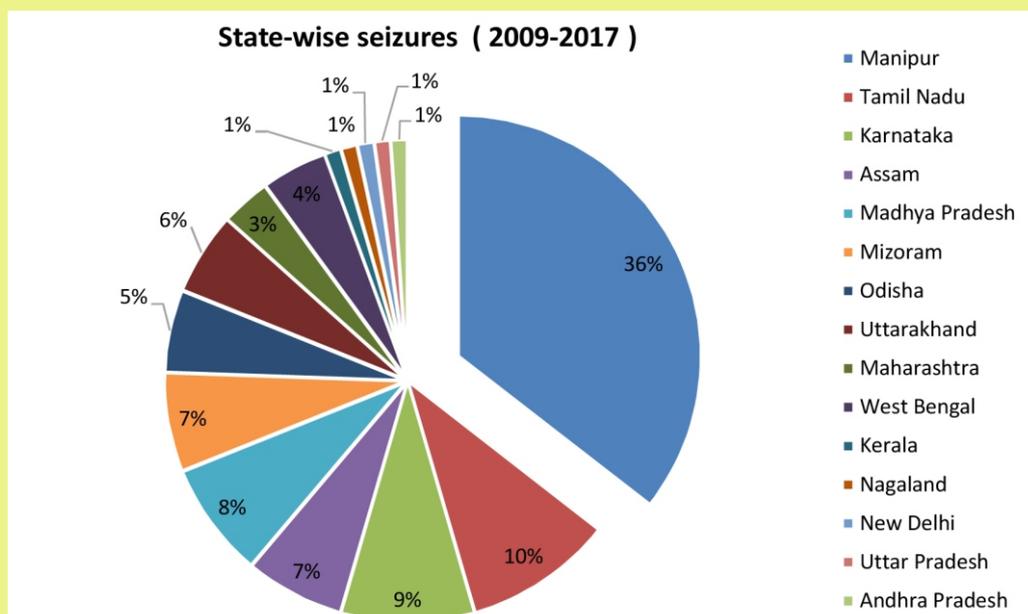
1. In India, the equivalent of 5,772 pangolins were seized during the period 2009–2017. This is a conservative estimate since an unknown fraction of illegal wildlife trade is detected while the conversion factor assumed all scales originated from adult Indian Pangolins.

2. Of the 90 pangolin seizure cases recorded during the nine-year period, 83 were of pangolin scales, the equivalent of an estimated 5,765 kg (equivalent to 5,765 pangolins). The remaining seven seizures included pangolin meat\* (estimated 2 animals), taxidermy specimen (1), a dead pangolin (1) and live pangolins (3).

3. The highest numbers of pangolin-related seizures were reported from the States of Manipur (n=32, 36%) and Tamil Nadu (n=9, 10%).

4. Between 2009 to 2013, the majority of the 46 seizures that took place were from eastern or north-eastern parts of India including Assam, Manipur, Mizoram, and West Bengal. While between 2014–2017, the majority of 44 seizures that took place was from southern and central parts of India including Karnataka, Madhya Pradesh, Odisha and Tamil Nadu.

5. Manipur, where 36% of all seizures were recorded, has not reported any seizures in the last three years (2015–2017).



The number of pangolins in illegal wildlife trade in India is of concern, but without accurate population estimates, the impact of such trade is unclear. Based on increasing harvest and trade from Africa to offset declines in supply from China and South-east Asia pangolin range countries, TRAFFIC believes that precautionary measures must be put in place to safeguard India's remaining wild populations (Heinrich *et al.*, 2017). An increase in law enforcement effectiveness remains paramount among a range of actions to secure the future of India's pangolins.

## WAY FORWARD

1. Enhance awareness among law enforcement agencies and the judiciary regarding the illicit pangolin trade in India.

2. Improve co-operation and co-ordination among various enforcement agencies including the forest department, Customs, police, Border Security Force (BSF), Sashastra Seema Bal (SSB), Railway Protection Force (RPF) and others.

3. Enhance regional co-operation among South Asian countries to curtail pangolin smuggling across borders.

4. Undertake a population census of pangolins in India to understand the conservation status of the species in the wild.

5. Raise awareness among local communities and the general public of the ecological role played by pangolins in the wild.

## References:

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 Total number of pangolins poached in India during the period 2009–2017: 5,772 (5765 kg of scales, the estimated equivalent of 5765 pangolins + 7 pangolins (1 dead, 3 live, 1 taxidermy specimen, 2.5 kg of meat in 2 seizures, considered the equivalent of 2 pangolins)).

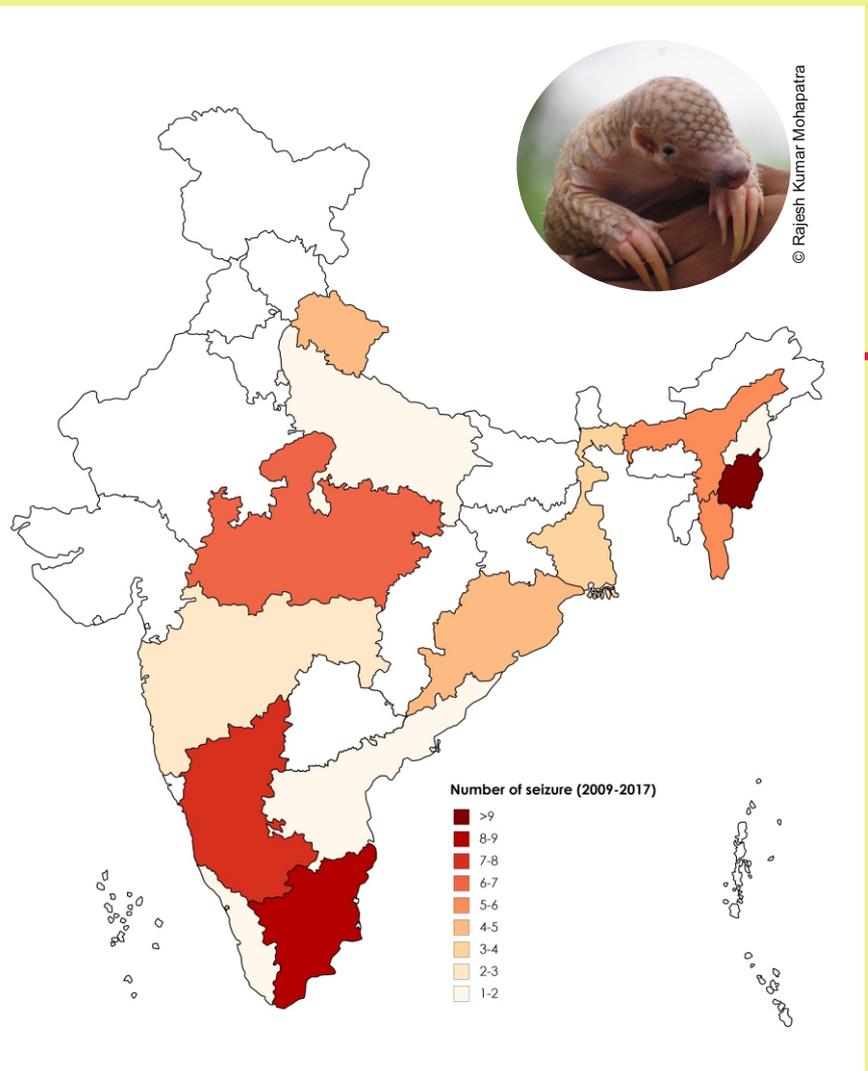
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