



# Combating illegal trade of scaly giants through community participation in Manipur, India

A progress report submitted  
to  
Rufford Small Grant

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## **Introduction**

Pangolin belongs to genus *Manis* Linnaeus, (1758) and is derived from Malayan phrase ‘Pen Gulling’ meaning ‘rolling ball’, while the term Pholidota came from a Greek word meaning ‘scaled animals’. They are also known as Scaly Anteaters because of their structure and food habits. Having no teeth and an inability to chew, pangolins feed mostly on ants and termites using their long tongue to catch them. They are solitary, nocturnal creatures and are known to be good climbers (Kaspal, 2009).

There are three species of pangolin found in Asia. Among them two species are found in India. They are Chinese pangolin *Manis pentadactyla*, Indian pangolin *Manis crassicaudata*. Both species are threatened animals protected by Wildlife Protection Act, 1972. Illegal trading has been a major aspect for declination of several endangered species across the globe. Different organization such as The International Union for Conservation of Nature (IUCN), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), WWF-TRAFFIC and in India the Wildlife Protection Act has been set up to check the illegal trading and poaching of wild animals. However, such activities are still in large and several species are still hunted and traded for their body parts in both national and international markets. Major threats to pangolins in India include hunting and poaching for local consumptive use (Bush meat as protein source and an ingredient in traditional medicine), and for international trade (Challender et al., 2014; Challender, 2011; Baillie et al., 2014; Mohanty, 2011).

## **Study area**

Situated in north-eastern part of the country, Manipur lies between 23°50' and 25°42' N and 92°59' and 94°46' E sharing international border with Myanmar. Its geographic area is 2.23 million ha which comprises 0.2 million ha flat plateau of alluvial valley and 2.03 million ha of hill territory. The recorded forest area of the state is 17,418 km<sup>2</sup>, which is 78.01 % of the geographic area of the State. By legal status, Reserved Forests constitute 8.42 %, Protected Forests, 23.95 %, and Un-Classified Forests, 67.63%. Major forest types occurring in the State are Tropical Semi-Evergreen, Subtropical Pine, and Montane Wet temperate forests. Shifting cultivation is widely practiced in the state. The faunal diversity of the state includes tigers, leopards, panthers, Sangai deer and muntjac. The slow loris occurs in scattered pockets on the hills.



## **Results**

During the initial 90 days of the project “combating illegal trade of scaly giants (*Manis pentadactyla*) in Manipur state of India”, four districts of the states namely Ukhrul (25° 12’ N, 94° 37’ E), Churachandpur (24° 20’ N, 93° 41’ E), Tamanglong (24° 59’ 26.39 N, 93° 30’ 3.26 E), and Chandel (24° 19’ N, 93° 59’ E) were selected for the tracking and surveying of Chinese Pangolin (*Manis pentadactyla*). Working order and permission from the forest department of Manipur state was obtained for all the four districts (Memo No. 3/22/2016-WL/372) dated 10th November, 2017. Maps of forest blocks in the state were also acquired from the forest head office in Imphal.

During the questionnaire survey from four villages a total 117 individuals were interviewed comprising of 93 male and 24 females (Chingai, n=48, Khamasom, n=31 and Khamjong, n= 38). Male members of age groups 20-40 yrs and 40-60 yrs were mostly interviewed due to their larger exposure to forest resources and more experience in fields. In all the villages selected for the survey, it was found that 68.4% of the villagers carry-out agricultural practices (Slash burning and paddy plantation) for their livelihood while 31.6% were involved in other occupation’s such as pastoralism, teaching, driving, Government services and students.

Based on the respondent answers it was observed that illegal trading of scales of Chinese pangolin has been the primary reason for the decline in their population as the scales fetch an amount as many as 18,000 to 23, 000 INR (280-360 USD) per kg of scale. Pangolins in the region are although hunted since decades for bushmeat, the high increase in hunting cases is mainly due to the high value of their scales.

During this period, field survey was carried out in three villages and numbers of burrows were identified as fresh, old, very old and feeding burrows. The village Shiroy was covered twice as Shiroy North and Shiroy Community forest. Zingsui was the other village where the survey was carried out. Apart from field survey 20 individual’s hunters were also questioned through design questionnaire format to gather information on availability and distribution of Chinese pangolin as well as data on other wild species and hunting techniques used. Awareness programs were conducted in two schools namely Ukhrul Public School and Shiroy High School. During the awareness program school students

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were asked to give speech on wildlife conservation with reference to Chinese pangolin. Painting or drawing competitions were also held as part of the program and prizes were given accordingly.





**Indirect Evidences (Burrows) of Chinese Pangolin**



### Hunting Techniques for Chinese Pangolin



**Awareness program**

<b>Villages</b>	<b>Date</b>	<b>No. of participants</b>
Ukhrul Public School	24/3/18	70+ 8 Teachers
Shiroi High School	26/3/18	80 + 11 Teachers

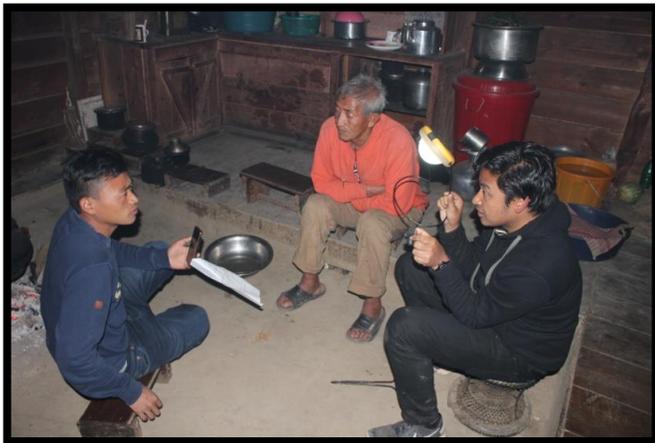
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Awareness program and Quiz Contest programmes conducted in School



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Indirect Evidences and Questionnaire survey.