

# SOCIO-ECONOMIC SURVEY IN RELATION TO TRADE OF TURTLES IN TWO DISTRICTS OF UTTAR PRADESH, INDIA

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## Abstract

Hunting and trafficking of wildlife, especially turtles, has increased many fold during the last few years in Uttar Pradesh. The Uttar Pradesh Forest Department, Special Task Force and Police Department are constantly keeping a close surveillance on illegal activities related to wildlife. Under this, two villages, Gandhinagar and Pakri of Amethi and Sultanpur districts respectively were identified as the centres for turtle trafficking in the state. People from Kanjar community live in both the villages. It was also pointed out that there is no alternative mode of employment and the skills they have make them dependent on wildlife for their livelihood. Due to this dependence, these people got involved in wildlife crime. The results of the survey and investigation show that during the last four years (2017-2020), Amethi district has reported the highest number of turtle smuggling cases (70%). The most trafficked species of turtles recorded were Indian Softshell Turtle (*Nilssonina gangetica* (Cuvier, 1825)) and Indian Flap-shell Turtle (*Lissemys punctata* (Lacepede, 1788)). Indian Flap-shell turtles are confiscated more often than the Indian softshell turtle.

**Keywords:** Amethi, Sultanpur, *Kanjar* community, turtles, wildlife trafficking

## Introduction

India is known to be a mega biodiversity country. Being a peninsular country, India is home to many amphibians and reptilian species. Turtles are 'keystone species' which illustrates that they are an important part of their surroundings and influence other species around them (Aguirre *et al.*, 2002). In India, 29 species of freshwater turtles and tortoises are found. 25 out of 29 species of freshwater turtles and tortoises of India have been included in the IUCN/SSC category and also included under the Indian Wildlife Protection Act (1972), indicating an action plan is needed for the protection of the species. In continuation with the habitat loss due to

development encroachment in natural habitats, wildlife trade has become a severe threat in a developing country like India. All Indian turtle and tortoise species are also placed under the CITES appendices to prohibit and control international trade. Unfortunately, half of the total 29 species of turtles of India are harvested for local meat consumption and illegal trade worldwide (Mendiratta *et al.*, 2017).

Turtles of India are broadly demarcated in five turtle priority areas which are (a) Indo-Gangetic plains – included the plains of Northern India, the Brahmaputra valley and Mahanadi; (b) Plains of Indus; (c) Moist forests of North-eastern India; (d) The rain

forest of Western Ghats and (e) Hill ranges and riverine plains of east coast (Buhlmann *et al.*, 2009). The Indo-Gangetic belt supports 15 out of 29 species of freshwater turtles and tortoises of India (Dijk & Paul, 2000; Chaudhary, 2019). It is well known that freshwater turtles and tortoises have been historically harvested for meat consumption (Zhao, 1995). Until the 1970s, the trade of freshwater turtles and tortoises in India was not threatening populations but with the development of organized fisheries practices, turtles as an associates species came into greater demand which resulted in the trade reaching a peak in the early 1980s (Choudhury & Bhupathy, 1993).

In India, there are three major routes of turtle trade which are identified by local enforcement agencies (1) Primarily trade of tortoises collected from western India for foreign pet trade via Mumbai (2) Trade from southern India both as pet and meat *via* two routes, the first from Chennai to Singapore and the second from Chennai to Cambodia, Sri Lanka and then to Singapore and (3) Trade in Central and North India mainly for the food markets of south western China from Kolkata to Singapore and Hong Kong (Bhupathy *et al.*, 2000). In Uttar Pradesh, there has been a great increase in the poaching and trade of turtles in the last 10 years. From the point of view of poaching and trade, Uttar Pradesh can be divided into 4 areas. Hunting and smuggling of turtles in Etawah, Mainpuri, Amethi and Sultanpur districts of Central Uttar Pradesh has skyrocketed rapidly. In the past few years cases of confiscation in Uttar Pradesh have surpassed recovery in the rest of the country. In the Indo-Gangetic plains, softshell turtles are mostly harvested for meat consumption and for international trade. While on the other hand, hard shell turtles are usually harvested for the pet trade. Two softshell species of turtles named Indian Softshell Turtle (*Nilssonina gangetica*) and Indian Flap Shell Turtle (*Lissemys punctata*) were mainly

poached for meat consumption by low-income groups (*Kanjar*). Indian Softshell Turtle and other species named Narrow-headed Softshell Turtle (*Chitra indica* (Gray, 1831)) are now poached and killed for the soft cartilaginous part of plastron, which is first dried (calipee) and then transferred to the international market because of high demand in China (Khan *et al.*, 2016). Uttar Pradesh forest department has been continuously monitoring the illegal activities of *Kanjar* community and in last few years some culprits have been arrested and punished under Wildlife Protection Act 1972. Two villages named Gandhinagar and Pakri from Amethi and Sultanpur districts respectively were identified where individuals belonging to the *kanjar* community were involved in most of the turtle trade done in the region.

Based on the forest department confiscation and followed investigation regarding the wildlife offences carried out by the *Kanjar* community of these two districts Amethi and Sultanpur, a joint approach of Turtle Survival Alliance –India and Uttar Pradesh Forest department was taken to understand the root cause which influence the *Kanjar* community's involvement in the wildlife offence in the state.

## Materials and Methods

### Study area

Based on the forest department record of wildlife offences and other information available in print and on social media, two villages of Uttar Pradesh in Amethi and Sultanpur districts named Gandhinagar and Pakri were selected for the survey-based study. Gandhinagar is a small village in Amethi district. There are 200 houses in the village with a population around 500 persons. Pakri is also a small village of Sultanpur district with 150 houses and a population of 450. In both the villages there are *Kanjar* community who live nomadic lives. They are socially neglected, due to which they could not connect themselves with the mainstream society.

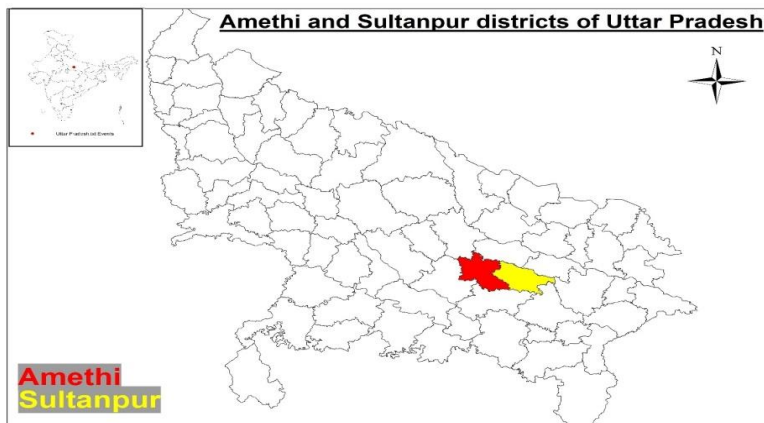


Fig.1. Showing the study site Amethi and Sultanpur district of Uttar Pradesh

### Methods

Uttar Pradesh Forest department, Special Task Force (STF) and the police department are agencies preventing wildlife related offences in the state. Turtle Survival Alliance –India an organization working for the conservation of endangered turtles also provides help to the departments during the operation. A team was formed of forest department and TSA staff for the survey of turtle trade abundance area in Amethi and Sultanpur district.

A team of TSA-India members along with forest department officials have surveyed Gandhinagar village of Amethi district, identified as a turtle-smuggling prone area. As villagers were very reluctant to share any information with outsiders, forest department officers suggested that the team should be in uniform as people might misbehave; however, a few staff members remained in mufti in order to blend in with people. This visit was undertaken to overcome the tense situation and build a connection with villagers in order to get more information. In the end a walk was undertaken in the village to understand the condition and infrastructure of the village. Similarly, Pakri village of Sultanpur was visited the next day.

During the visit, the team members engaged with every age group to discuss their problems, to understand why they are involved in this work, what kind of alternative work they were thinking of in the near future, especially youth.

### Result and Discussion

#### Result

The people of this community gradually gather the turtles in one place and then sell them to the buyer. These people do it especially during winter for smuggling of large number of turtles as the turtles are easily be found due to low water and most of them bury in sand substrate along the edges and its fairly easy to detect them using iron probe etc. In winter, turtles don't feed and show less physical activity which makes them more prone to poaching. It is also seen here that they use different methods for smuggling according to the need such as filling the live turtles in the sack and also by drying their cartilage. We further report smuggling and confiscation of soft-shell turtle meat for the first time within the state. Apart from the survey and interaction with the villagers, the investigation done by department shows methods, technique of the offence. Every family member is involved in the operation. The greatest number of cases related to turtle trade in last four years (2017–

2020) were reported from Amethi district (see Fig. 3).

**Gandhinagar-** the condition of houses was terrible and 2-3 families were residing in single hut/house. In the entire village, there were only two toilets, of which one is not in a condition to use. There were only four water connections and the condition of the roads in the entire village was very bad.

At the same time, villagers had a positive attitude, the women of the community were concerned about the future of their children. Young and middle-aged people did not want to participate in the illegal trade for running and earning daily bread. All the people of the village wanted to work together with the main society. Women seek employment opportunities in the village itself. The parents had a positive thinking about the education of the children, and children also have some dreams about their future.

**Pakri-** The condition of the houses in Pakri was better compared to Gandhinagar. There were public as well as private toilets in the village. The village had good water supply and roads were also in good condition. Women were concerned about the education of their children and the youngsters wanted to work with the main society. All the people of the village want a system of employment. Youngsters of the village also had some dreams about their future, such as to become an engineer, doctor, soldier, sports person or air hostess.

They have always been neglected from society due to the fact that the ancestors of community have no permanent residence due of which, people could never connect with the main society. People of both the villages use wild animals as a primary source of food on a daily basis, which is the main reason why people of this community are getting involved in various types of wildlife crime.

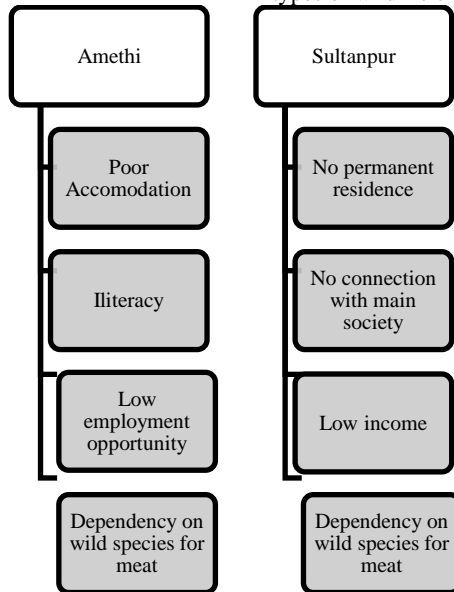


Fig.2: reasons stated for participation in illegal wildlife trade by people of both regions i.e. Amethi and Sultanpur

Evaluating the data statistically, species wise confiscation from 2017-2020 of *L. punctata* is about 9 and *N. gangetica* is approximately 3.4 (Figure 2). The maximum confiscation was

from Amethi (about 70%) and the remaining from Sultanpur district (Figure 3). In addition, the confiscation of the species is mainly done by the police and forest departments (Table 1).

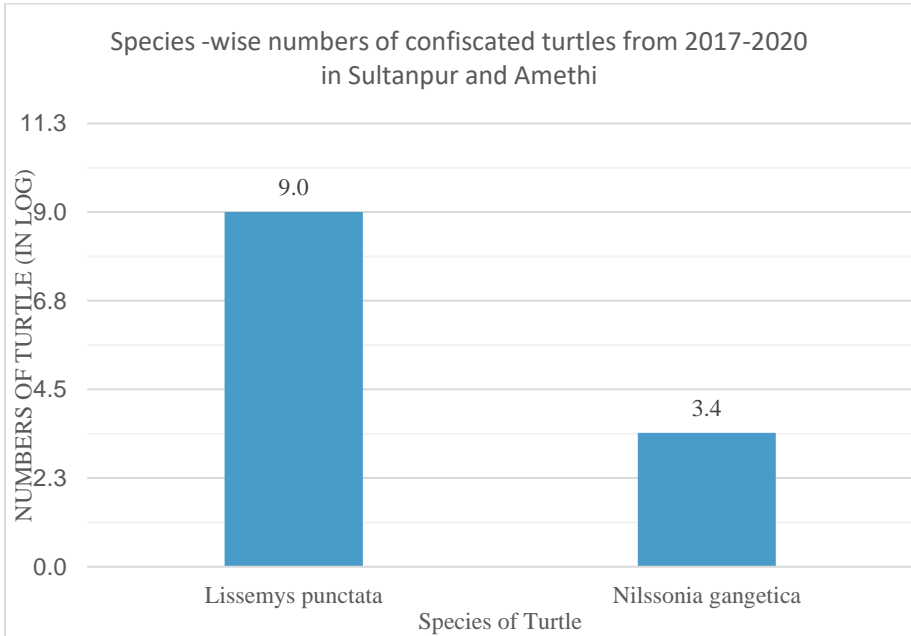
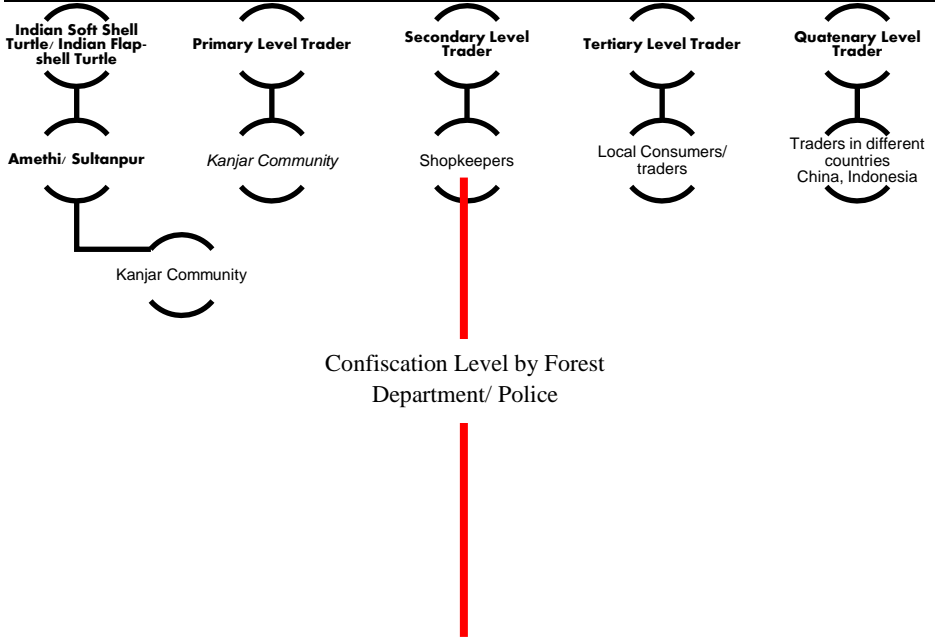


Fig.3. Graph showing the species wise numbers of turtle confiscated from 2017-2020 in Sultanpur and Amethi

Table 1. Case study data of three years (2017-2020) showing the numbers of turtles confiscated and Villagers Involved

Sr. No.	Date	Village/Block of Culprit	Department Involved	Numbers and Species of Turtle Confiscated
1	10.01.2017	Chatripur/Amethi	STF and forest department	6334 turtles (6332 <i>L. punctata</i> and 2 <i>N. gangetica</i> )
2	17.02.2018	Gandhinagar/Amethi	Forest department	8 <i>L. punctata</i>
3	05.06.2018	Gandhinagar/Amethi	Police department	125 <i>L. punctata</i>

4	24.07.2018	Gandhinagar/Amethi	Police and forest departments	10 <i>L. punctata</i>
5	17.11.2018	Mhesuva/Sultanpur	Police department	73 turtles (72 <i>L. punctata</i> and 1 <i>Nilssonina gangetica</i> )
6	02.01.2019	Gandhinagar/Amethi	Police and forest departments	825 <i>L. punctata</i>
7	10.01.2019	Chatripur/Amethi	Forest department	78 turtles <i>L. punctata</i>
8	11.01.2019	Pakri/Sultanpur	Police department	159 <i>L. punctata</i>
9	13.01.2019	Mhesuva/Sultanpur	Police and forest departments	162 <i>L. punctata</i>
10	12.08.2020	Gandhinagar/Amethi	Forest department	502 turtles ( 475 <i>L. punctata</i> and 27 <i>N. gangetica</i> )





**Plate 1: Confiscated turtle species**

### Discussion

After the survey and interaction with people of *Kanjar* community, it is clear that due to not having any working skills and separation from the mainstream of society, the *Kanjar* community has been involved in wildlife offences. Elders of the villages are changing their perception: they want to live a life of honesty and want the younger generation to lead an honest, upright life.

It should be noted that the community is historically a hunter/gatherer community and changing wildlife laws meant that today their traditional way of life is criminalized. The reason for diminishing wildlife has largely to do with reduction of habitat and pollution of waterways rather than the activities of tribal communities, yet they are seen as the cause of diminishing wildlife while the real reason, the evolution of an industrial society with a vast

appetite for natural resources, is seen as legitimate. That the *Kanjars* and other similar communities and tribes hold a vast store of valuable knowledge of natural history is overlooked in the. For the first time this community has been seen from this perspective.

The survey result suggests that giving them alternative livelihood and more chance to work and interaction with society can change their thinking and their situation can be improved. In order to get out of their criminal image of the *Kanjar* community, the thinking and mind-set of government departments and the mainstream society should be changed, and they will have to behave positively and sympathetically towards the marginalized community.

The people of the *Kanjar* community gradually gather the turtles in one place and

then sell them to the buyer. These people do it especially during winter, as the turtles are easily found due to their sluggish behavior due to the cold. In winter, turtles do not feed, which also helps the *Kanjars* to accumulate turtles in large numbers. It is also seen here that they use different methods for smuggling according to need, such as stuffing the live tortoises into sacks or by drying their fat. Apart from the survey and interaction with the villagers, the investigation done by the forest department showed methods and technique of the process. Every family member is involved in the operation. Maximum number of cases related to turtle trade during the last four years (2017-2020) were reported from Amethi district, amounting to 70% of the total.

### Recommendations

On the basis of survey and investigations, steps can be taken to connect the *Kanjar* community with the main society. Basic facilities such as roads, water, lights and toilet facilities can be made available. Medical camps should be organized from time to time for them. Under the skill development scheme of the central and state governments, employment can be provided to the village women, men and youth. Various training such as making bags, sewing clothes, making candles, mobile repairing, etc. can be provided. In both villages, the people of *Kanjar* community are the majority, whose main ability is to cut stones, so they can also be trained to make stone sculptures under this scheme. According to the rules of Uttar Pradesh Biodiversity Board, an attempt can be made to link people with biodiversity conservation programmes by forming a biodiversity management committee in both villages. In order to provide alternative means of livelihood to the people of both villages, as well as to provide alternative means of livelihood, forest department itself or by making a micro plan with the help of a qualified organization which can prepare micro-development projects for the villages for employment and development.

### Acknowledgement

We would like to acknowledge Dr. Janmejy Sethy, Assistant Professor and Dr. Randeep Singh, Assistant Professor, Amity University for continuous guidance and technical support. We are thankful to Shri Amitabh Yash, IPS, ADG, STF, U.P and Pratyaksha Singh for continuously adding insightful thoughts and knowledge. We are also thankful to Forest Department, U.P. for providing technical support and also villagers, communities who were very co-operative while providing data for the study.

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