

# Hunters and protectors of Pakke tiger reserve

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Wangdu Sangchoju<sup>1</sup> was one of the best hunters from around Pakke Tiger Reserve (PTR) in Arunachal Pradesh. Married thrice with five children, one of whom has a physical disability – many people attribute the child’s condition as a consequence of his hunting too much – Wangdu has hunted tigers in the past, but he now is contingency patrolling staff in PTR, protecting tigers. Yet, it is difficult to put the ‘hunter’ tag behind one – for people, ‘was a hunter’ is often same as ‘is a hunter’. Wangdu is not given a weapon while patrolling as there is an unstated

uneasiness that he might return to hunting. Whenever hunters from the resident tribal community are apprehended, Wangdu is often cited as a justification that ‘the department staff hunt or used to hunt.’ He complains that he just can’t get over this perception whether or not he has stopped hunting in reality.

Just like 140 of his other patrolling colleagues,<sup>2</sup> he earns 10,000 INR a month as contingency staff, and lacks the benefits and perks of government employees, or the political and monetary currency he will require to get his job regularized. The last time forest guards were recruited, a majority came from the constituencies of the ex-parliamentary secretary of forests and ex-chief minister respectively. None of the daily wage forest watchers of Wangdu’s cohort who had

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1. His name has been changed.

2. Beat guards earn 7,000 INR a month.

applied, many of whom had passed the written exam and appeared for the interview, made it.

Wangdu is indicative of the complexities of how people relate to wildlife in PTR and in other parts of Arunachal Pradesh. These complexities are only being magnified in ever-evolving socio-economic contexts. An understanding of hunting in India is often reduced to a dichotomy between hunter versus protector, Forest Department versus local community or Wild Life (Protection) Act versus local governance. In this article, we use our diverse set of conversations with residents from around PTR to understand the management context that the reserve works within and situate these questions in on-ground perspectives. Specifically, we will explore the practices, perceptions, taboos and motivations for hunting by tribal communities in the forests in and around PTR.

This is an important conversation issue because hunting is widespread in Arunachal Pradesh and other hill states of North East India.<sup>3</sup> Despite urbanization and a shift toward market-based economies, people still consider hunting as a part of their customs and traditions. Even though they might not necessarily hunt themselves, they still consider wild meat purer than domestic meat and are willing to pay more for it. PTR was one of the first protected areas in Arunachal Pradesh to develop a patrolling and community involvement strategy. What remains a challenge is the balance between conservation needs and the socio-economic and cultural aspects of hunting in the region.

3. Hilaluddin, R. Kaul and D. Ghose, 'Conservation Implications of Wild Animal Biomass Extractions in Northeast India', *Animal Biodiversity and Conservation* 28, 2005, pp. 169-179.

Wangdu belongs to one of the four major tribes (Nyishis, Akas, Mijis, Puroiks) that live around PTR, along with smaller numbers of other tribes and non-tribals who have moved to the area for employment or business opportunities. PTR is bound by rivers on all sides which serve as an easy marker for residents on the east and west of the park when they make decisions about going to hunt. The Kameng river is an effective barrier during the rainy season. Within PTR, the threat of hunting is usually heightened in the winter months when water levels recede and the river is crossable. There is no discernible seasonality in hunting outside the reserve though, as we note later, specific species are hunted in different seasons.

Asuite of hunting methods have been documented in and around the area; solitary hunters using guns, group hunting using guns and dogs (*kheda*), shooting animals from platforms made on fruiting trees, and hunting using traps and snares. Some specific methods hunters shared with us were the setting of steel traps on rocks for otters, stone traps for rats, killing pangolins with dogs, using electric cables to snare wild pigs, serow and barking deer and erecting fences of banana or broom (*Thycolina maxima*) leaves around a field with a gap where a snare is set up for jungle fowl and pheasants. Most often, fish was excluded from the list of people's perception of wild meat, and often violations related to fishing may not be treated with the same seriousness as compared to bushmeat.

Unlike hunting which is mostly done by men, women enjoyed fishing as a pastime and as a means to bond with family and friends. One interesting method we noted was the 'open *thali* method' where a dollop of wheat dough is placed on a steel plate and

covered with cotton cloth leaving a tiny hole for fish to enter and eat the bait. The fish that are in the plate are directly emptied into a bucket or a locally woven basket. Other, more traditional fishing methods involve using baskets and, more recently, the deploying gill and cast nets.

Many species are hunted. Goral, gaur, barking deer, serow, and wild pigs are commonly targeted. Wild pigs are hunted in a variety of circumstances, but especially when they raid tapioca fields. Similarly, Asiatic black bears are hunted when they visit maize field. Large Indian civets, sambar and barking deer are hunted from platforms set over trees, especially from November to January when trees are fruiting and attract these species. Snakes are also killed but usually not eaten. Residents shared that otter and pangolin skins were sold to outside markets. Pangolin skins are sold at about INR 4000-6000, while otter skins are known to fetch INR 8000. There was awareness that these species – including the Asiatic black bear, for its gall bladder – were especially lucrative for middlemen, who would greatly increase the final selling price.<sup>4</sup>

So what motivates hunters, and what are the species used for? Both men and women living around Pakke talked highly of hunters bringing rare bushmeat home. Many old hunters recalled their hunting days, and associated hunting ability with youthful vigour. From an economic point of view, wild meat fetches a higher price as it is rare and generally considered tastier than domestic meat that is available in the market. It is difficult to attribute a single use for a species that is hunted. For example, Asiatic black bears have multiple purposes. Skins are used as covers to decorate machetes. Bear fat

4. N. Velho, 'Arunachal Keeps Hunting', *Daily Pioneer*, 10 March 2013.

can be stored for three to four years and is used as antiseptic and to treat bone fractures. A part of the gall bladder is kept at many homes as it is believed to cure malaria and for other medicinal purposes. It is also used for shaman rituals. But more recently, traders from the plains have established linkages with hunters on the ground, and come and buy gall bladders.

There is much heterogeneity both across and within tribes with respect to hunting practices. Bushmeat as a livelihood or nutrition source is more important for the Puroiks compared with the Nyishis, Akas and Mijis. The Puroiks are a marginalized community with settlements on the western fringes outside Pakke. We observed that they had skilled hunters in the community and hunt wild animals for consumption or, in many cases, as gifts to the Nyishi families that they are attached to and/or for political patronage.<sup>5</sup> In the recent past, they have tried to be part of an economy that is mostly cash based and have begun selling meat in the local markets, which they say is a good income source to support their children's education and for buying additional home supplies such as mustard oil, dal, sugar, salt, biscuits and instant noodles. Many Puroik women also collect and sell wild vegetables which are in great demand. The Puroiks have been evicted from forest land in the past and face restrictions on obtaining land rights and continue to face challenges related to education and health.

Within tribes as well, there is geographical variation in hunting practices – a small pocket of villages is known as elephant eaters while the majority of the tribe did not hunt or eat

5. The Nyishi and Sulung share a feudal relationship. For more details refer to S. Dutta and S. Tana, 'A Case Study of the Sulungs (Puroiks)', in S.K. Das (ed.), *Blisters on their Feet: Tales of Internally Displaced Persons in India's North East*. Sage, Delhi, 2008.

elephants. The primary purpose of the hunt was to obtain meat and not tusks. However, a few admit that nowadays, people hunt elephants for both meat and to sell tusks. Where the Forest Department (FD) has an active presence on the ground, and where members of the resident community are part of their protection force, resident communities seem to hunt less; in the Seijosa and Tippi-Bhalukpong area, hunting is much lower both inside and outside the reserve compared with other areas.

The FD's role is woven from the societal fabric around PTR. A majority of the FD personnel – from the Divisional Forest Officer (DFO) to daily wage forest watchers – hail from the same tribal community that lives around the PTR. In 2004, PTR had just two anti-poaching camps, 13 km of patrolling roads, and 20 patrolling staff.<sup>6</sup> From 2006 onwards, there has been a concerted effort to get more people on the ground which has been achieved through working and creating linkages both with the communities residing around PTR, governmental and non-governmental agencies, researchers and other individuals who supported conservation.

A multi-pronged strategy was employed. Given the low budgets, various grants were applied for, and the money used to build anti-poaching camps. Exceptional staff members were identified and motivated to start patrolling on the ground. Senior administrative officials of PTR, including the DFO and Range Forest Officers (RFOs), spent days camping in the forest along with patrolling staff to survey patrolling paths and locations for anti-poaching camps. Village heads came together following facilitation

6. R. Alluri and N. Velho, 'Pakke: From Darkness into Light', *The Arunachal Times*, 25 November 2016.

by the FD, and formed a society to implement their customary laws.

With such measures in place, the head of the National Tiger Conservation Authority (NTCA) was invited to the PTR. When he was finally able to visit Pakke, he was impressed with the ongoing conservation action – despite challenges related to staff strength, poor budgets and socio-political uncertainty stemming from an active militant organization which was operating then. This slowly led to an increase in funding and support for PTR.

The past is worth elaborating upon because it also presents a chicken and egg perspective; in other protected areas, there is often an emphasis towards increasing budgets first as a proxy for conservation action and not vice versa. To quote some of our interviewees: 'DFO *jaane se sanctuary khatham*' and '*aur koi bahar se aaye toh nahi sakega*' (if this DFO leaves, there is a risk to the sanctuary; an officer from outside will not be able to manage Pakke). Speaking the same language, sharing the same culture, understanding social bonds and economic issues makes it easier to gain goodwill and trust, and to understand the importance of taking small, actionable and locally relevant steps.

For instance, gifting wild meat is often considered a way of showing respect, or as a means of cementing bonds. Sometimes, the choicest cuts are gifted to government officials, priests and important relatives. There are several Arunachali administrative officers working around Pakke such as the Circle Officer, DFO and RFO who have made it well known to residents that they do not accept the hunting of wildlife, or the consumption and gifting of wild meat. These small but important steps along with on ground patrolling are emblematic of the change that has happened in recent

times and been responsible for reducing hunting.

**B**ut the course of action is often delicate and needs to be nuanced, with grounding in local sensibilities. All communities living around PTR share strong societal bonds, while at the same time varying degrees of identity as ingroups versus outgroups. The unit of kinship starts from the family, extends to the clan, and then to the tribe, with non-tribal settlers viewed as outgroups. Given that Pakke shares a border with Assam, it is often easier to take action against poachers from 'outside'. However, intra- and inter-clan or inter-tribe action cannot be considered in administrative isolation without the involvement of the larger community. Fines and penalties are common in certain cases, while the idea of retribution pervades several aspects of socio-cultural interaction. For example, one respondent narrated that a mithun (*Bos frontalis*) that raided his field was tied up and the animal died. His clan members helped him pay the hefty fine of INR 60,000.

This strong sense of kinship has some downside when it comes to wildlife conservation, especially in times of discord or when matters cannot be solved at the field level. FD representatives from the resident communities who do their job well are held to high standards and expectations. Resident communities often view the officer as one who should be able to provide regularized government jobs and rural development for everyone. Because such measures do not add up to the mandate or operational scope of a single officer or department, expectations often cannot be met.

When it comes to more direct wildlife matters such as human-wildlife conflict, this plays out in different forms. In the eastern part of PTR, crop damage is caused by elephants, and

carnivore depredation of mithuns is a problem in the northern areas. Crop depredation by macaques also occurs in fringe villages in the north-western areas. There are no studies from around Pakke that have examined the actual versus perceived losses from human-wildlife conflict.<sup>7</sup>

**S**imilar to villages bordering other tiger reserves across the country,<sup>8</sup> a common perception is that villagers are not compensated adequately for their losses. Many feel that the lives of wild animals are valued over theirs, especially when they have to be put through the tedium of filing for compensation, a process based on the set state policy. An offshoot of this process is that most often, remuneration to villages is lower than the actual loss. Now with the representation of village heads and officers from the field in the State Wildlife Advisory Board the state has been taking positive incremental steps in increasing the compensation amount, but this is still not reflective of the actual costs. As with other parts of India, the filing for compensation claims remains a multi-layered and complex process. However, field officers bear the brunt of these policies that are often decided at the national and state level.

Today the opposition towards the FD flows from certain aspects of the regulation of the forest and its resources, and not necessarily for cultural and traditional reasons. In recent times, large-scale and commercial extraction of resources such as bam-

7. M. Linkie, Y. Dinata, A. Nofrianto and N. Leader-Williams, 'Patterns and Perceptions of Wildlife Crop Raiding in and Around Kerinci Seblat National Park Sumatra', *Animal Conservation* 10, 2007, pp. 127-135.

8. K. Karanth, A. Gopalaswamy, P. Prasad and S. Dasgupta, 'Patterns of Human-Wildlife Conflicts and Compensation: Insights from Western Ghats Protected Areas', *Biological Conservation* 166, 2013, pp. 175-185.

boo, timber, boulders and sand has been on the rise in the forests adjacent to Pakke.<sup>9</sup> The more politically connected and influential individuals from the community have been planning to lease land to set up a medicinal garden for Patanjali.<sup>10</sup> This has been actively contested and land rights have not been settled for the general populace in the forests adjacent to PTR. The absence of a land-use mapping exercise and plan to rationalize land for bonafide livelihoods and for biodiversity in the forested lands around PTR makes any gain piecemeal.

**T**he role of the village councils is very important in bridging the gap between the forest department and residents. Village councils already exercise important administrative and legal powers in the form of settling boundary disputes among tribes, regulating rules and laws of marriage and separation in respective tribes. Often, residents (especially the older generation) do not see a need for the FD to regulate a resource which has traditionally always belonged to them. Further, keeping these trade-offs in mind, legal action cannot be taken against offenders on all matters, given prevailing sensibilities. A mix of action mediated through village councils for smaller cases is used along with departmental action.

The Pakke Tiger Reserve FD is presently fighting seven legal cases related to hunting. Most of these deal with repeat offenders or well known people in the community and despite the challenges – among others, travel time for every court hearing is 8-12 hours and requires an overnight halt –

9. T. Rina, 'Large Scale Timber Logging in Papum Reserve Forest', *The Arunachal Times*, 20 April 2017.

10. 'APPDSSU Objects to Leasing Out Land to Patanjali', *The Arunachal Times*, 28 December 2017.

this often serves as an effective deterrent. However, this also requires officers to stand up against extreme political pressures that operate within such tightly knit communities and for him/her to choose battles wisely.

The role of village chiefs and councils also face many challenges. With the institution of Panchayati Raj,<sup>11</sup> while members of the village panchayat have gained higher political reach, many find wildlife conservation to be a marginal issue. Many *gaon burrahs* (village chiefs) feel that the lack of education limits their role and participation to mainstream wildlife and livelihood needs of the area. Further, their honorariums are very small and irregular and given only once a year (between 2000-3000 INR). The respect they command now is mostly attributed to being elders and this is perceived as a connecting link to diminishing traditional knowledge and tribal ways of life.

The Ghora Aabhe Society (a group of village heads) in the eastern side of Pakke (Seijosa) was formed in 2006. They have tried to reinvent the role of the *gaon burrahs* by registering themselves as a society and their work is widely recognized. They work with the Pakke Tiger Reserve FD and many non-governmental agencies and individuals to enforce customary laws and work towards finding locally relevant solutions to natural resource management. Funding is not easy to come by from donors as they do not have the capacity (compared to other non-governmental agencies working in and around Pakke) to apply for grants and/or have a web presence to make their work known. They face manage-

ment problems given livelihood uncertainty and face an existential problem of sorts to make conservation a priority, both personally and professionally.

The communities around PTR also have various taboos and bans related to wildlife, which are overseen by the village councils. In some cases, these taboos arise from the functional value they provide in protecting human lives. Bears are not hunted by bachelors because there is a high risk of getting injured. In another instance, many people died and some were grievously injured, when they went to collect *Gandhi puk* (*Aspongopus nepalensis*) after a suspension bridge collapsed.<sup>12</sup> This led to a ban on Gandhi puk collection for the season. Use of electrocution, poisoning and dynamiting had become so rampant in the Bana area that residents imposed a ban on these fishing methods.

Some taboos have existed for a longer period. Both the Nyishis and Akas have a folk tale of how humans and tigers were once brothers.<sup>13</sup> The result of this a complicated mix where people stated that they refrain from hunting certain animals like tigers, but these hunting restrictions are not impermeable to illegal wildlife trade and human-wildlife conflict scenarios. In other cases, there are elaborate rituals or heavy fines if a taboo animal is hunted or it is also considered a bad omen.

The existence of these taboos (the extent to which they are followed is in flux) provides an entry point for engagement with residents about conservation of certain species by re-imagining these species as flag-

ships. Nyishis refrain from killing hornbills during their breeding season when the female and young are sealed in a nest cavity. This cultural symbolism of hornbills has been used to advance hornbill protection with the Nyishi community of Seijosa. This has resulted in replacing casques with fibreglass replicas in their headgear, to protecting hornbills and their nests and the celebration of the Pakke-Paga festival.<sup>14</sup>

There are other important, emerging, conversations and experiences. We interacted with a local singer and songwriter who has been working to preserve the traditional folklore of his tribe by composing them into songs. He expressed his concern for the loss of local flora and fauna as a loss of traditional and cultural practices, and his themes, therefore, deal with the relationships his tribe has with nature and forests.

So where do we go from here? There are no studies which have assessed whether these management inputs have led to the desired outcome of reducing hunting. But there are multiple other outcomes and a general direction (barring a few exceptions) that has taken shape, where park management is concerned.

In Seijosa and Tippi, there is awareness that the tiger reserve starts beyond the river and while people may visit fringe areas, they are unsure about the consequences should they venture a greater distance into the core area. There is also a small flipside of this success. Some interviewees (they were a minority) shared that with tough conditions (given the chances of arrest) and also the greater distance and time required to hunt, hunters are considered patient, skilful and brave.

11. The Panchayati Raj system was introduced in Arunachal Pradesh on 2 October 1968. For more details refer to the website of The Department of Panchayati Raj, Government of Arunachal Pradesh.

12. S.G. Gupta, '50 Feared Killed as Suspension Bridge Collapses in Arunachal', *The Indian Express*, 30 October 2011.

13. In Nyishi folklore this story is that of Nima and Niya, while in Aka folklore it is of Chaura and Sagra.

14. A. Datta, A. Rane and T. Tapi, 'Shared Parenting', in *Survey of the Environment 2012*. 'The Hindu', Chennai, 2012, pp. 88-97.

However, in the lower reaches (Seijosa and Tippi-Bhalukpong area), many interviewees pointed out that conserving natural resources is a longer-term investment compared to the one-time gratification of eating meat. How that shapes their attitudes and practices is a different matter, and requires a more thorough analysis and study. As populations rebound, dispersing tigers (and other species) are also likely to be threatened by hunting in the larger area. In the northern areas, park protection is slowly expanding and a new park management range (Rilloh) has been created. There were conversations wherein interviewees admitted that despite the decline in animals and forests, they were not willing to stop hunting or logging. Why, who and what motivates them is perhaps as important as the subset that has now embraced a conservation ethos. There are economic angles that are being explored in the form of nature based tourism that residents are beginning to take up. Women are also finding small ways of supplementing their income through the setting up of food and handicraft stalls at the Pakke-Paga festival.

The road ahead is long. We sum up with a resident's observation of wildlife trends in and around his village: 'Leopards used to visit the villages before but they've become rare now. Bears are very much there. Last week we formed a group and went after a bear that was raiding our fields. We fired twelve shots but it still escaped. Tigers are not present in our village anymore and are only found across the Kameng river.' Across the Kameng river is PTR where Wangdu Sangchoju works. His future is layered with the hope of getting his job regularized and providing for his family, while challenges related to managing humans and wildlife remain in a larger context of declining wildlife and, indeed, hope for Pakke.