

HUNTING LANDSCAPES OF THE MUGHALS: POWER, NATURE AND CONSERVATION

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The Mughal Empire, which ruled India from the sixteenth to the nineteenth century, was known for its grandeur, opulence, and love for hunting. Hunting was an essential part of Mughal royal life, serving not only as a means of entertainment but also as a way to showcase bravery, martial skills, and imperial power. The Mughal emperors, such as Akbar and Jahangir, would often organize grand hunting parties, which included nobles, courtiers, and other dignitaries. *Shikargah*, also known as *Shikar*, refers to a hunting ground or a game reserve, particularly during the medieval period in India. Hunting grounds were specially created and maintained for royal hunting parties. These areas were often fenced or enclosed to contain the game. *Shikargahs* were also used as game reserves, where animals were bred and raised for hunting purposes. *Shikargahs* were also symbols of royal power and wealth, demonstrating the emperor's control over nature and his ability to provide for his subjects. *Shikargahs* often included royal accommodations, such as pavilions, tents, or lodges, for the emperor and his entourage. *Shikargahs* were managed to ensure a steady supply of game for hunting purposes. During the Mughal Empire *Shikargahs* were an integral part of royal life. *Shikargahs* were equipped with infrastructure such as hunting towers, blinds, and traps to facilitate hunting. The emperors implemented regulations on hunting, including restrictions on the types of game that could be hunted and the methods used, practiced wildlife management techniques, such as habitat manipulation and game reintroduction, to maintain healthy game populations. The emperors and nobles employed various hunting methods, including falconry, hawking, and shooting with guns and bows. The Mughal rulers recognized the importance of sustainable hunting practices and made efforts to balance their hunting activities with conservation goals. This paper aims to explore the various hunting methods and techniques employed by the Mughals, their approaches to conservation, and the organization of their hunting grounds. By examining these aspects, this study seeks to provide a comprehensive understanding of the role of hunting in Mughal India and its significance in the broader context of imperial culture and politics. By exploring royal hunting practices, wildlife management, and imperial authority, the study contributes to discussions in social, environmental, and historical studies. The research is based on historical chronicles, memoirs, and travel accounts, providing new insights into the relationship between power and nature in early modern India.

Keywords: *Shikargah*, *qamargah*, hunting, conservation, *janwar-i-shikar*

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ОХОТНИЧЬИ ПЕЙЗАЖИ МОГОЛОВ: ВЛАСТЬ, ПРИРОДА И ЕЁ ОХРАНА

Рену Баляян

Империя Великих Моголов, владевшая Индией с XVI до XIX в., славилась величием, богатством и любовью к охоте. Охота была важной частью жизни императорских семей и служила не только развлечением, но и способом демонстрации храбрости, военных навыков и власти. Могольские падишахи, такие как Акбар и Джахангир, часто организовывали огромные охотничьи экспедиции с участием знати, придворных и прочих высокопоставленных персон. Термином *шикаргах* или *шикар* в средневековой Индии обозначались охотничьи угодья или заповедники. Их специально устраивали и оберегали для царской охоты, часто ограждая для того, чтобы дичь не разбегалась. Их также использовали как заповедники, где животных выращивали специально для охоты. *Шикаргахи* были символами имперской власти и роскоши, демонстрируя монарший контроль над природой и способность государя заботиться о подданных. Они часто включали в себя места для размещения государя и его свиты — павильоны, охотничьи домики, палаточные городки. На этой же территории устраивались башни для охоты на крупных хищников, ловушки и места засад. Могольские императоры регулировали охоту, вводили ограничения на определённые виды дичи или методы охоты, манипулировали средой обитания, осуществляли меры для сохранения поголовья животных. Правители и придворные практиковали различные виды охоты: с соколами, ястребами, ружьями и луками, понимали необходимость поддерживать баланс между охотой и сохранением фауны. Статья рассматривает различные методы и технические средства, которыми пользовались Моголы, их подход к сохранению природы и организации охотничьих угодий, анализирует роль охоты в Могольской Индии и её значение в более широком контексте имперской политики и культуры, вносит вклад в изучение истории, социальных и природных проблем. Исследование базируется на материале хроник, мемуаров, травелогов, что позволяет увидеть новые аспекты взаимоотношений между властью и природой в Индии позднего средневековья.

Ключевые слова: *шикаргах, камаргах, охота, охрана природы, джанвар-и шикар*

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Hunting, or *shikar* has been a cherished royal activity in India since ancient times, persisting as a pleasure-seeking pursuit until Independence. From the early sixteenth to the early eighteenth century, the Mughal Empire underwent a transformation, characterized by the royal insignia, kingship, power, and absoluteness. Notable nobles and elites played a crucial role in shaping the empire's trajectory. The memoirs of Mughal emperors Babur and Jahangir offer valuable insights into the geographical scenario of the time, showcasing their vast knowledge of nature. The Mughal emperors were known for their extensive travels, often with grand entourages, which made their progress a spectacular sight [Farooque, 1977, p. 8].

For the Mughal emperors, hunting was a multifaceted activity that served as a source of pleasure and a means to manage administrative tasks. Hunting expeditions provided opportunities for the emperors to inspect their territories, interact with local officials, and demonstrate their power and authority. The Mughals hunted a wide variety of animals, including tigers, leopards, lions, elephants, antelopes, rhinos, and numerous species of wild beasts and birds. They employed various hunting methods, showcasing their knowledge and skills in tracking and capturing their prey. Some animals, such as *cheetahs*, deer, buffalos, and falcons, were specifically trained for hunting purposes. This highlights the Mughals' appreciation for the skills and abilities of these animals.

The Mughal emperors frequently received gifts of exotic animals, known as '*janwar-i-shikar*' or 'animals of the chase'. These gifts were presented by vassals, defeated rebels, and foreign dignitaries as a symbol of loyalty, power, and prestige [Thapar, 2013, p. 93]. The term '*janwar-i-shikar*' appears frequently in Mughal records, yet scholars have made limited attempts to identify and document these animals. Uncovering the identities of these 'animals of the chase' can provide valuable insights into the Mughal Empire's cultural, economic, and environmental dynamics [Ansari, 1959, p. 1].

Scholars have proposed various theories and views on human-nature relations during the Mughal era. According to Jos Gommans, Mughal hunting practices served a purpose beyond mere sport. Away from the formalities of court life, hunting created a relaxed atmosphere, reminiscent of Babur's war-band days. This setting fostered new relationships built on friendship and loyalty. Notably, Islamic prescriptions and *adab* (etiquette) cautioned against unnecessary or excessive killing of game. However, hunting remained a cornerstone of Mughal rule during the sixteenth and seventeenth centuries [Gommans, 2002, pp.110–111].

According to Lisa Balabanlilar, hunting was widely justified at the Timurid-Mughal court as a royal duty, an act of mediation between the ruler and the forces of nature [Balabanlilar, 2013, p. 84]. This notion reinforced the idea that only the King was competent to control and regulate the natural world. The Mughal nobility's passion for hunting was deeply intertwined with their loyalty to their Timurid legacy. The royal court's frequent movements provided ample opportunities for the nobility to indulge in hunting, which became a near-daily activity.

In Mughal India the hunt remained, just as for earlier Central Asian Turks and Mongols, a vehicle for display of imperial dominance over nature, proof of the King's ability to tame the wild, to identify and successfully mobilize resources, to publicize his superior administrative skills, and an open-air theatre in which bravery could be publicly tested and appreciated [Balabanlilar, 2013, p. 85]. Thomson observes, 'Akbar hunted the lion, the elephant, and the *yuz*, or hunting leopard, but more to show his imperial courage, and his skill in shooting with the fusil or bow, than from any pleasure he had in the discipline of the pack' [Thomson, 1798, p.75]. Thapar notes that in the Mughal era, demonstrating bravery by fighting a lion or a tiger — even in a controlled setting — was a surefire way to establish one's courage. No one would dare question the valour of such an individual [Thapar, 2013, p. 126]. A notable example of this is Akbar, who, as a young man, reportedly killed a tiger on foot. This feat would have undoubtedly cemented his reputation as a fearless and skilled hunter.

As Abu-l Fazl tried to justify the hunting of Akbar that it was basically a part of Akbar's administrative policies, he comments, 'He lifts up such as are oppressed and punishes the oppressors. On account of these higher reasons His Majesty indulges in the chase, and shows himself quite enamoured of it. Short-sighted and shallow observers think that His Majesty has no other object in view but hunting; but the wise and experienced now that he pursues higher aims' [Abu-l Fazl, III, 1989, p. 293]. Sometimes Abu-l Fazl used to say the hunting march of Akbar, 'spread the shadow of his justice over city' [Abu-l Fazl, III, 1989, p. 328].

He writes about hunting that 'Superficial worldly observers see in killing an animal a sort of pleasure, and in their ignorance stride about, as if senseless, on the field of their passions. But deep inquires see in hunting a means of acquisition of knowledge, and the temple of their worship derives from it a peculiar lustre. This is the case with His Majesty. He always makes hunting a means of increasing his knowledge, and besides, uses hunting parties as occasions to inquire, without having first given notice of his coming, into the condition of the people and the army' [Abu-l Fazl, I, 1978, p. 292].

IMPERIAL HUNTING GROUNDS

In the northern and central part of India there were many imperial hunting grounds, which were preserved by the state for their own pleasure. The Mughal Emperors were very much interested in

a special kind of large-scale enclosed hunting known as *qamargah* (Hunting ground) and such pleasant hunts were frequently arranged for them, in which the important nobles of the state and, sometimes, even the commoners (male and female both) also participated [Ojha, 1975, p. 57].

During the reign of Mughals, we find so many *qamargahs* (hunting grounds) that were situated at Bari, Hisar, Sunnam, Bhatindah, Bhatnir, Nagaur, Narwar near Gwalior, Palam near Delhi, Sheikhpura/Jahangirpur near Lahore, Girjik and Nandina, Jalalabad and Sahara. Jahangir built several country houses and hunting lodges. The most outstanding hunting ground was Shaikhupura near Lahore [Ansari, 1959, pp. 13–14; Habib, 1982²].

Akbar institutionalized hunting by establishing a separate staff for the hunting department. Their primary responsibility was to organize imperial hunts, which involved: Gathering intelligence on animal movements and habitats, coordinating logistics for the hunt and collaborating with local tribal communities for guidance and support. Ultimately, the objective of the hunt depended on the emperor's whim; whether he desired to capture or kill the animal. This level of organization and planning underscores the significance of hunting in Akbar's court. Abu-l Fazl informs that when Akbar starts hunting, 'active *Qarawals* men employed by the Mir Shikar³, ... surrounded the hunting ground, the *Qur*, remaining at a distance of about five *kos* from it. Near the *Qur* the grandees and other people await the arrival of His Majesty. Several near servants off His Majesty have admission to this place; but generally, only such are allowed to come as are required to render services at chase' [Abu-l Fazl, 1978, p. 293].

Jahangir loved hunting and cared little whether there were 'many or few' attendants or whether it was 'rainy or windy' [Jahangir, I, 2006, p. 312]. Basically, the flesh of hunted animals was distributed among the members of royal family or nobles for their consumption and sometimes it was distributed among the poor like charity. Jahangir, after the killings for his own curiosity, measured every rare beast and recorded as rarity in his Memoirs. There are many references of this kind in his account [Jahangir, I, 2006, p. 307]. Manucci observed that the Mughal hunting involved a meticulous and stealthy approach. The hunter would cautiously approach the prey, navigating through vigilant sentinels. At the slightest suspicion, a sentinel would softly cry out, prompting the other sentinels to respond in kind. As the hunter drew closer, the sentinels' cries would grow louder, signalling increased alarm. Upon detecting danger, the sentinels would sound a loud alarm, rousing the entire flock and prompting a swift retreat accompanied by frantic cries [Manucci, I, 2010, p. 184]. Manucci's account highlights the complexity and strategy involved in Mughal hunting practices.

TIGER/ LION HUNTING & METHODS

The Indian wild life has different types of beasts, but the role of big cats as tiger/lion; leopard/'*cheetah*/panther have special value and concentration because of their existence nowadays. As they all belong to the *Panthera genus* — 'the name given to the big cats that have a special roar, made possible by the vibration of the thickened vocal folds just below the vocal cords in the larynx' [Thapar, 2013, p. 3]. The tigers were very well known to the Mughals, as Babur commented when he hunted it and mentions that his predators also involved in the hunting of tiger. All the Mughal emperors used to hunt of tigers and the royal hunt organized specially for the amusement. The travellers and the Mughal chronicles have given detailed accounts of various hunts and the existence of tigers in different regions

² See sheets, 4B, 6 B, 8 B.

³ Ansari comments mostly a nobleman was appointed to the post of *Qarawals Baigi* (chief huntsman) [Ansari, 1959, pp. 13–14]. During the time of Akbar, *Mir Shikar* is mentioned by Abul Fazl but from later accounts it is gathered that *Qarawal Baigi* was a higher post than the *Mir Shikar*. Usually, a prominent nobleman was made *Qarawal Baigi*. Men like Allahwardi Khan were appointed *Qarawal Baigi* in the reign of Shahjahan.

of India particularly in Northern and Central India. Many British accounts refer to presence of lions and tigers till the late nineteenth centuries and about their hunts. Mughals employed different methods to catch various prey. As it was royal privilege to hunt lion and tiger. No one killed them unless permission was granted by the King before [Pelsaert, 2011, p. 52; Bernier, 1990, pp. 378–379]. Basically, we do not find so much about tiger and lion hunt in the chronicles of Babur and Humayun. Babur describes that he hunted tiger in 1519, near Bhira, on March, 25, and ‘ordered to be skinned’ [Babur, 2010, p. 393]. Akbar and his successors were involved in this sport very enthusiastically; even Jahangir recorded every detail of the sport. Aurangzeb in the starting phase, there are some incidents could be noted but largely, hunting was not at all a favourite past time of Aurangzeb instead his hunting marches were largely motivated to keep watch on recalcitrant.

There were many methods of tiger hunting. At times for tiger iron cages with open door were prepared and they put goat in, poisoned arrow and bow, tied a sheep to a place in a road frequented by tigers putting round the sheep on the ground small blades of grass covered with glue, and an intrepid experienced hunter gets on the back of a male buffalo and makes it attack the tiger. The buffalo will quickly catch the tiger on its horns, and toss it violently upwards, so that it dies. It is impossible to describe the excitement of this manner of hunting the tiger. One does not know what to admire more, the courage of the rider, or his skill in standing firm on the slippery back of the buffalo’ [Abu-l Fazl, I, 1978, p. 294]. They were especially killed with bows and arrows or matchlocks. Abu-l Fazl comments, ‘His Majesty, from his straight forwardness, dislikes having recourse to such tricks, and prefers with bows or matchlocks openly to attack this brute, which destroys so many lives [Abu-l Fazl, I, 1978, p. 294]. The Mughals also kept tamed and trained elephants for the hunts and taught not to be scared of lions and tigers. ‘To teach them, they take a tiger-skin or lion-skin, and stuff it with straw. Then, just as if it were alive, they move it here and there by a rope. The driver encourages the elephant, and urges him towards the dummy, which with feet and trunk he tears to pieces’ [Berinstain, 1998, p. 46]. Manucci gives references about the hunting of tiger especially with buffalos and other methods in the period of Shah Jahan, but riding on elephants, this way of hunting had much more risk for the hunters. Once it happened to King Shahjahan that a badly wounded tiger bounded up and hung on with its claws fixed in the elephant’s head [Manucci, I, 2010, pp. 184–85]. Accordingly, Shahjahan gave orders for the head of the elephants to be protected in future down to the end of the trunk with a covering of thick leather, studded with sharp nails [Manucci, I, 2010, p. 185].

The Mughals typically hunted tigers while mounted on elephant back, providing a safe vantage point for the encounter. These hunts were meticulously documented by court chroniclers. Akbar, in particular, was known for his bravery in hunting tigers, often venturing out to protect his people from the menace. One notable instance occurred in May 1561, near Narwar, where Akbar personally attacked a tiger: ‘This was the first beast of prey which His Majesty personally attacked. Its cubs were killed by the swords and arrows of a number of brave men who were in attendance on the sublime stirrup.’ This account highlights Akbar’s courage and skill as a hunter, as well as the significance of these events in Mughal court life [Abu-l Fazl, 1989, II, pp. 222–223, 294; Nizamuddin, II, 1913–36, pp. 255, 278, 525].

During the returned journey to Agra, Akbar traversed through the jungles of Mewat, which was a habitat of lions. A hunting excursion ensued, resulting in the unfortunate death of Adil Muhammad, who succumbed to injuries inflicted by a lion. On another occasion, in the district of Basi, Akbar received reports of a man-eater tiger. Mounting his trusty elephant, Nahir Khan, he successfully hunted and killed the tiger. A similar feat was accomplished in the district of Bari, where Akbar killed a tiger that had attacked his elephant. Near Toda, Akbar employed the *qamargah* hunting technique to kill a tiger, thereby saving a man’s life. Furthermore, while traveling between Ranthambhor and Ajmer, Akbar encountered multiple

tigers. Responding to a plea for help from a local man, Akbar bravely killed a tiger, showcasing his valour and commitment to protecting his subjects [Abu-l Fazl, III, 1989, pp. 482–483].

Jahangir demonstrated his marksmanship by killing two tigers near Panipat and Karnal, using the *qamargah* method with a gun [Jahangir, I, 2006, p. 136]. These tigers had been terrorizing travellers, and Jahangir's swift action brought relief to the region. On Jahangir's orders, Shah Jahan successfully hunted a notorious man-eating tiger near Ahmadabad [Jahangir, II, 2006, p. 39]. This tiger had been wreaking havoc on the local population, and Shah Jahan's bravery brought an end to the terror, providing relief to the people.

Emperor Jahangir's hunting exploits were motivated by a desire for pleasure and to demonstrate his superiority over both the beasts and his peers. In his memoirs, Jahangir recounts a particular hunting incident: 'Although I refrain from hunting on Sundays and Thursdays, I made an exception for a noxious animal that needed to be eliminated. I approached the beast, which was resting under a tree, and from the back of my elephant, I fired my gun. The animal was killed instantly' [Jahangir, II, 2006, p. 363]. This account showcases Jahangir's skill as a hunter and his willingness to adapt his rules when necessary.

Although male tigers were typically the target of hunts, there were instances where tigresses were also hunted. Jahangir recounted one such occasion in his memoirs, dating back to 1615: 'Despite my customary preference for hunting male tigers, I made an exception in consideration of Prince Karan's presence. My aim was to shoot the tigress in the eye, and I prayed to God for success. Fortunately, my shot was true, and I was able to fulfil my commitment, avoiding any embarrassment before the prince' [Jahangir, II, 2006, p. 105]. This account highlights Jahangir's hunting prowess and his desire to impress his noble guests.

Royal Mughal women, like their male counterparts, actively participated in hunting, showcasing their bravery and skill. A notable example is Nur Jahan, who shot a tiger in 1619, demonstrating her marksmanship and contributing to public safety. Hunting served multiple purposes, including amusement and protecting people from menacing animals. Nobles also took part in hunting games, sometimes suffering injuries. The attendants and *Ahdīs*, who assisted in these hunts, were rewarded for their services, with some even receiving increased monthly pay after demonstrating bravery, like Jahangir's successful tiger hunt [Jahangir, I, 2006, p. 166].

François Bernier, a French traveller and physician, provides a vivid description of lion hunting in seventeenth-century India, highlighting its exclusivity, danger, and ceremonial nature. Lion hunting was a royal prerogative, reserved for the King and Princes, which required special permission to engage in this perilous sport. After a successful hunt, the King would hold a grand assembly, where the dead lion would be presented, measured, and examined in minute detail. The hunt's details, including the lion's size, skin, teeth, and claws, would be meticulously recorded in the royal archives. Bernier dismisses the popular notion that opium was given to lions to sedate them before hunting. According to the principal huntsman, lions were already lethargic after eating to satiety, making opium unnecessary [Bernier, 1990, pp. 377–379].

Jean-Baptiste Tavernier, a French traveller, provides a detailed account of lion taming near Sidhpur, India: 'four or five lions appeared which they brought to train, and they told me it generally took five or six months, and they do it in this way... A number of people come to this spectacle, and when the provoked lion jumps towards the cord, he has another round his neck which the master holds in his hand, and with which he pulls him back' [Tavernier, I, 2007, pp. 64–66]. Although this tradition has largely disappeared, the state of Gujarat is still home to the Asiatic lions that roam freely in the forest reservoirs of Gir, a testament to the region's enduring connection with these magnificent creatures.

‘CHEETAH CATCHING AND HUNTING

There can be no doubt, that the *‘cheetah* (*yuz*) [Akhtar, 1996, pp. 381–386; Akhtar, 2008, pp. 158–159, Enayatullah, 2012, pp. 461–469] is the swiftest mammal on earth. They can run up to 70 miles (113 km) per hour. The *‘cheetah* was declared extinct in India in 1952, but under the project *‘cheetah* (2022) which is an effort of the Indian government to bring *‘cheetahs* back and 20 *‘cheetahs* imported from Namibia, South Africa. Presently, in India there are around 30 *‘cheetahs* in Kuno National Park (Madhya Pradesh) around 30 by December, 2025. *‘cheetahs* are not yet fully established in the wild in India, but the reintroduction is ongoing. It is an important conservation effort to restore a lost species.

Akbar was very much fond of *‘cheetahs* as he had many tamed *‘cheetah* in his captivity. There were many methods used to catch *‘cheetah*. Abu-l Fazl informs that “hunters used to make deep holes and cover them with grass. These pits were called *odi*. The leopard on coming near them, fell down to the bottom; but they often broke their feet or legs, or managed by jumping to get out again. Nor could you catch more than one in each pit,” but Akbar invented a new method, which was a good effort ‘a pit only two or three *gaz* deep, and constructed a peculiar trapdoor, which closes when the *‘cheetah* falls into the hole. The animal is thus never hurt. Sometimes more than one goes into the trap’ [Abu-l Fazl, I, 1978, p. 296].

Another method was elaborated, by tiring the animal. It is interesting that *‘cheetah* was hunted after making it tire [forced to run, which tired it]. Other was ‘to fasten nooses to the foot of the tree, when it comes to scratch itself, it gets entangles’ [Abu-l Fazl, I, 1978, p. 296]. Abu-l Fazl shares a fascinating anecdote about the capture of seven *‘cheetahs*: During their mating season in winter, a female leopard was roaming the fields, pursued by six male leopards. She accidentally fell into a pit, and her persistent suitors, reluctant to abandon her, followed one by one into the pit. This unexpected turn of events led to the capture of all seven *‘cheetahs*, creating a rather remarkable scene [Abu-l Fazl, I, 1978, p. 296].

Thevenot, a French traveller, provides insight into the use of *‘cheetahs* for hunting in Ahmadabad: ‘In the heavily forested areas around Ahmadabad, panthers (likely referring to leopards or *‘cheetahs*) were employed for hunting purposes. The governor of the town would oversee the training of these big cats. The ultimate goal was to present these trained panthers to the King, highlighting the governor’s loyalty and the region’s expertise in hunting and animal training’ [Thevenot & Careri, 1949, p. 16]. Thevenot further describes the use of tame leopards for hunting antelopes. These trained leopards were utilized for their speed, agility, and hunting prowess, making them effective tools for hunting antelopes.

Hunting antelopes with tame *‘cheetahs* was a popular game among the Mughals. Skilled huntsmen employed various methods to make the sport more exciting. There were many methods of hunting Antelopes such as *Uparghati* method in which hunters released a leopard to the right of the deer’s location and the leopard swiftly seized the deer with its claws. Another *Righni* method in which a *‘cheetah* spotted the deer from a distance and the collar was removed, and the *‘cheetah* dashed off, jumping from ambush, with perfect skill, the *‘cheetah* caught the deer. The third one was *Muhari* method in which a leopard was placed in ambush, with the wind blowing towards it. A cart was taken away in the opposite direction, perplexing the deer. The leopard suddenly emerged from ambush and caught the deer’ [Abu-l Fazl, I, 1978, p. 299].

Akbar invented a new method called *chatrmandal* for hunting deer with *‘cheetah*, ‘the hunters lie in ambush near a place frequented by deer, and commence the chase from this place as if it was a *qamargah* hunt (in which drivers are used). The *‘cheetahs* are then let off in all directions, and many deer are thus caught’ [Abu-l Fazl, I, 1978, p. 299]. Abu-l Fazl also informs that these efforts of Akbar bore fruits and now *‘cheetah* could hunt twelve deer while the earlier catch were only three. It was a method of amusement, that to apply bet on *‘cheetah* to bring more and more deer. ‘If a *‘cheetah* brought twenty deer, his *doriya* (the man who holds the chain to which the *‘cheetah* was fastened) got five rupees from

his equals. The grandee in charge of *khasa 'cheetahs* got one *muhar* from each bet, by which he made a good deal of money. 'As often the grandee laid before emperor twenty pair of deer horns, (as the deer horns were used to build several minarets between Ajmer to Agra) he takes an *ashrafi* from each of his equals...every one shown his zeal in trying to get as many deer as possible. The skin of the deer was often given to poor people as part of money presents' [Abu-l Fazl, I, 1978, p. 300].

III

DEER HUNTING AND CATCHING

Deer is most common animal of Indian subcontinent. There are many types of deer/antelopes in India, as *Sambhar*, *Barasingha*, *Chausingha*, Leaf deer, *Sangai*, *Chital*, Serow, Goral, Hog deer, Musk deer, Barking deer, Black Buck, *Chinkara*, *Nilgai*, Himalayan Tahr, Kashmiri Stag, *Nilgiri* Stag, *Markhor*, Ibex and Tibetan antelope etc. Indian Subcontinent is the last remaining habitats in Asia for different types of deer, but many of them are in danger nowadays can be seen in zoo or reserves only due to large amount of hunting and catching. Deer was commonly seen in the Mughal painting as landscapes and hunting scenes. Even then it was a pleasure to catch or hunt deer with the trained animals. Common people also very well knew with different species of Indian deer. Deer hunting was also favourite game, sometimes deer were caught for taming and sometimes killed by the other animals who trained for catching deer. Instead, there were also some other methods to catch deer. Deer commonly hunted from the early period in India. Deer was tamed and trained in the Mughal period [Abu-l Fazl, I, 1978, p. 302; Jahangir, I & II, 2006; Thevenot & Careri, 1949, pp. 54–55, Manucci, III, 2010, p. 82], hog deer [Babur, 2010, p. 491], *gini-cow* (ram), *Sambhar*, *nila-gau* (blue-bull) this is most common and largest Indian antelope, and can be seen throughout India. Mughal chronicles and European travelogues describe about various instances related to deer, as Black deer is one of the beautiful antelope of India, which is threatened nowadays.

Babur, describes a unique method of hunting deer: 'A tame deer is prepared by hanging a large stone on one of its feet, preventing it from running far. The tame deer is set opposite a wild deer, and the two engage in a fight, striking and pushing each other. During the fight, the wild deer's horns become entangled in a net attached to the tame deer. If the wild deer tries to run, the tame deer is unable to follow due to the stone on its foot, allowing hunters to capture the wild deer. Captured deer are tamed and used for further hunting. Tamed deer are also used for organized fights' [Babur, 2010, p. 134]. Babur's method showcases the ingenuity and resourcefulness of Mughal hunters in capturing and utilizing deer for various purposes.

Akbar introduced new method for deer hunting, 'more than two hundred may at the same time go deer hunting. They drive slowly about forty cattle towards a place where deer are; the hunters are thus conceded and when arrived enjoy the chase' [Abu-l Fazl, I, 1978, p. 302]. By put tiny net over deer's horns, it was off let against wild deer, so out of fear deer will fight with them. During the struggle, the horn, or the foot, or the ear of the wild deer will get entangled in the net; the deer thus caught passes through a course of instruction, and gets tame. If the net should break, or the deer get tired during the struggle, it will return to the keeper, who either puts a new net on it, or sends out a fresh deer. Sometimes it happens that a wild deer will carry on the struggle from morning till evening, defeating as many as four tamed deer; but at last, it will succumb to the fifth [Abu-l Fazl, I, 1978, p. 302]. These carried nets on their horns 'in which the wild deer that came to attack them became entangled, upon which they were seized' [Pierre Du Jarrić, 1976, pp. 10–11]. The keepers will also bend forward and allow the trained deer to jump on them from behind. Wild deer, on seeing this, will think that they are in the act of copulation, and come near to fight. This way of hunting is disapproved of by Akbar, who uses female deer as a means of making wild

deer fight' [Abu-l Fazl, I, 1978, p. 302]. The methods were popular for hunting deer in that time, were *thangi*, *baukara*, *dadawan*, *ajara* etc. By the different techniques the deer hunting was in the process, after deer killing they used his skin, horns and flesh for their own purposes.

It is interesting that after the victory of Bengal when Akbar proceeded towards the capital Agra he ordered 'that for the comfort of the travellers he issued an order that every *kos* of the way from Agra to Ajmer a pillar (*minar*) should be set up, and be adorned with deer horns so that those who had lost their way might have a mark, and that strength might to be fatigued' [Abu-l Fazl, III, 1989, p. 156, Arif Qandhari, 1993, p. 226]. Badaoni informs that, 'even so many hundreds of thousands of stage's horns which the emperor had killed during the course of his life were placed on these pillars as a memorial to the world. And Mil-shakh 981/1573–74, "Mile-horn" gives the date' [Badaoni, II, 1990, p. 176]. However, significance of putting horns of deer as each *kosminar* is difficult to explain, unless we accept Abu-l Fazl's explanation, that it was done for beautification only, but Badaoni observation shows that hunting of deer was such an extensive level, as very common for amusement. Jahangir also got erected a *minar* at Jahagirpura, which was his hunting place, in Lahore, in the *Dil-Amiz* garden he ordered to erect a *minar* at the head of the grave of an antelope called *Mansaraj*, (gravestone in the shape of an antelope) 'which was without equal in fights with tame antelopes and in hunting wild ones. On a stone of that *minar* was carved this prose composition, written by Mulla Muhammad Husain of Kashmir, who was the chief elegant writers of the day: "In this enchanting place an antelope came into the world-holding (*jahan-giri*) net of the God-knowing ruler Nuru-d-din Jahangir Padshah. In the space of one month, having overcome his desert fierceness, he became the head of the special antelopes'" [Jahangir, I, 2006, pp. 90–91, Elliot & Dowson, VI, p. 309]. Jahangir had shown his sensitivity about that particular antelope, and later he banned further killing of it, 'no person should hunt the deer of this plain and that their flesh should be to Hindus and Muhammadans as is the flesh of cows and pigs' [Jahangir, I, 2006, p. 90].

Bernier comments, 'large numbers of antelopes, very much resembling our fawns in shape; that they move generally in herds; and that every herd, which is never composed of more than five or six' [Bernier, 1990, p. 377]. Manucci describes the use of domesticated deer by Mughal lords for fighting and hunting. Skilled hunters would use these methods to bring deer close to the king's matchlock and a shelter with green branches and small holes was used to conceal the king and hunters. Manucci personally witnessed and experienced these hunting methods multiple times [Manucci, I–II, 2010, p. 81].

ELEPHANT CATCHING

Elephants held a significant place in India, particularly in the eastern and southern regions, where they thrived in the lush, moist jungles. Their importance extended beyond their natural habitat, playing a vital role in various aspects of Indian society. There are two main species: African (genus *Loxodonta*) and Asian (*Elephas maximus*). Unfortunately, the Asian elephant is facing a rapid decline, with only around 50,000 individuals remaining in the wild. India is home to the largest population of Asian elephants, with around 28,000 in the wild and 3,500 in captivity [Trautmann, 2015, p. 12]. The chronicles and memoirs provide rich data pertaining to elephants. Ancient Indian texts like the Vedas, Puranas, Brahmanas, and epics contain a wealth of information on animal care, health management, and disease cure. Palakapya Muni, a legendary sage and elephant expert in ancient Indian tradition wrote *Hastya Ayurveda* [Palakapya, 1894], an ancient Indian text, is estimated to have been written between 500 BCE to 1000 CE. This text is a comprehensive guide to elephant care, covering anatomy, disease treatment, training, and classification, showcasing the advanced knowledge of ancient Indians regarding elephant biology and behavior. The *Arthaśāstra* [Kauṭilya 1915, pp. 195–199] of Kauṭilya mentions the eight elephant forests, grading their

elephants based on quality. As key components of military forces, elephants were considered vital to a kingdom's power and defense, making their protection a top priority. Elephants have a special place in India's art, folklore, mythology, and religious traditions. Their presence in rituals and representations is linked to the continued existence of wild elephants in forests and domesticated ones in human settlements. Elephant hunting and capture were highly valued and risky pursuits during the Mughal period. Elephants held significant importance due to their military and aristocratic demands, high economic value, fetching substantial prices, utilization in warfare and ceremonial events. They used several modes of hunting. Babur provides insight into the extensive efforts dedicated to capturing and training elephants 'as many as 30–40 villages in the region Karrah and Manikpur (west Allahabad along the Ganges) were involved to capturing and training of elephants. Elephant catches had to be reported to the *Diwan*'s office, accordingly they need to pay some amount in the form of tax and 'people answerable (*jawab birurlar*) for them to the exchequer' [Babur, 2010, pp. 488–89]. Abu-l Fazl gives a full section on elephants in *Akbarnama* and *Ain-i Akbari*. During Akbar's reign elephant assumed so much importance that even minute details on their size, behaviour etc. were given by Abu-l Fazl. Connecting the relationship of Delhi Sultans and Mughal emperors vis-à-vis elephants Raman Sukumar writes, 'As with the Delhi sultans, the Mughals continued the tradition of maintaining large numbers of elephants in their armies. The engagement of Mughals with the elephant also changed qualitatively compared to earlier Muslim rulers; the Mughal learnt and used the Indian art of capturing elephants. Some of them developed personal bonds with their animals; individual animals had names and distinct characters in the Mughal accounts' [Sukumar, Raman, 2011, p. 187]. Akbar hunted elephants in Narwar, Gwalior, Garha, Chunar with the various methods. Historical records, provide valuable insights into the significance and management of elephants during the Mughal era. By the method of *kheda*, 'deep *khad* (pitt) *chor-kheda* take a tame female elephant to the grazing place of wild elephants, deep pit is constructed in a place frequented by an elephant, which is covered up with grass... They soon get tame' [Abu-l Fazl, I, 1978, pp. 295–296, Monserrate, 1922, p. 84; Thevenot & Careri, 1949, pp. 64–65; Manucci, III, 2010, p. 72].

Abu-l Fazl also describes the method which was introduced by Akbar, 'wild herd of elephants is surrounded on three sides by drivers, one side alone being left open. At its several female elephants are stationed. From all sides, male elephants will approach to cover the females. The latter then go gradually into an enclosure, whither the males follow' [Abu-l Fazl, I, 1978, pp. 295–296]. Jahangir also used this method of catching elephants. In 1618, Jahangir embarked on an elephant hunting expedition near Dohad, [Ali Muhammad 1965, pp. 102–103] Gujarat, employing the *qamargah* method. Jahangir's *qamargah* hunting method involved driving the elephants towards a designated area, where they could be captured or hunted. This method required careful planning, coordination, and execution.

Jahangir's elephant hunting expedition in Gujarat yielded a significant number of captures: 'as total elephants caught: "185 (73 males, 112 females) by imperial huntsmen and Faujdar: 122 elephants (47 males, 75 females) and Shah Jahan's huntsmen and elephant-drivers 63 elephants (26 males, 37 females). Jahangir's specific instructions to avoid capturing old or small elephants demonstrate his concern for selective hunting practices' [Jahangir, II, 2006, pp. 12, 24]. Nobles actively participated in elephant hunting, as evident from the account of Jamal Khan's hunting expedition near Sultanpur and Rajpipla, two dependencies of Gujarat, had started for court with 130 of them. As Inayat Khan recorded, 'In these days (16 December 1630), the 70 that had remained alive were presented to His Majesty, and their value amounted to one lakh and 30,000 rupees' [Inayat Khan, 1990, p. 48]. In August 1645, there came 'news from Bengal that 30 male and 26 female elephants were captured by Allah Yar Khan for the royal stud in the forests there, where they abound' [Inayat Khan, 1990, p. 327]. However, Irfan Habib comments that wild elephants previously used to be caught in Dohad and Rajpipla territories; but as 'passes were

closed to them (by human settlements) they were now no longer found there' [Habib, 1982, p. 26]. In Assam also elephants abounded in Kajliban forest and there were four and five other localities where wild elephants could be caught and says that if desired, 500 to 600 elephants could be captured annually in such localities [Habib, 1982, p. 263]. In the Deccan, *suba* Berar *sarkar* Kherla and *sarkar* Ramgir [Abu-l Fazl, II, 1978, pp. 237–238] were the areas where wild elephants could be traced. About the disappearance of elephants Raman Sukumar states, 'An important development for elephants at the height of Mughal power was that, for all practical purposes, the wild elephant populations of central India, with the exception of the region of Orissa and Bihar-Jharkhand, were wiped out. A part of this population in the present-day states of Gujarat, Maharashtra, southern Uttar Pradesh, Madhya Pradesh, and Chhattisgarh, in any case, would have been rather isolated by Mughal times, an all that the Mughal probably did was to deliver the final blow' [Sukumar, 2011, p. 209]. Though elephant are now removed from their natural habitats, in the Mughal territories elephants were found in Hardwar, Kumayun range, Gorakhpur, Agra, Allahabad, Malwa, Madhya Pradesh, Chhattisgarh, Gujarat, Bengal, Bihar, Orissa, Assam and Deccan. Outside the Mughal territories there were other areas also that were not the part of Mughal Empire, as deep South where elephants were found. This localized disappearance resulted primarily from nineteenth-century agricultural expansion and forest clearance rather than Mughal capture practices, as evidenced by Tavernier's late seventeenth-century testimony confirming continued elephant abundance in these regions.

RHINO HUNTING

The great one-horned Indian rhinoceros (*genda*) once existed across the entire northern part of the Indian subcontinent from Pakistan to the Indian-Burmese border, and including parts of Nepal and Bhutan. It may have also existed in Myanmar, southern China and Indochina. However, the species now exists in a few small population units generally situated in north-eastern India and in Nepal [Foose, 1997, p. 8]. Babur's accounts demonstrate his fascination with rhinos, which led him to attempt hunting them multiple times. His descriptions provide valuable insights into the habitats and behaviours of rhinos during the 16th century. He gives description on February 16 in 1519 near Bhira [Babur, 2010, p. 378]. In December, 1525, while passing through jungles near Bigram Babur also hunted rhino. He writes, 'the people had been stationed near-about it. We betook ourselves, loose rein, to the place, formed a ring round the jungle, made a noise, and brought the rhino out, when it took its way across the plain. Humayun and those come with him from the side (Tramontana), who had never seen one before, were much entertained. It was pursued for two miles; many arrows were shot at it; it was brought down without having made a good set at men or horse. Two others were killed. Babur amaze mentions in astonishment that he after visualized rhino-hunting fight but when, 'one came out right in front of some elephants the mahouts were bringing along; it did not face them when mahouts drove them towards it, but got off in another direction' [Babur, 2010, p. 378]. Babur's comment clearly indicates that the two did not see each other as rivals and peacefully co-existed. Except Babur's enthusiasm to hunt rhinos, we do not get any reference of rhino hunting throughout the Mughal period. Abu-l Fazl adds presence of rhino in Kumaun and Sambhal *sarkar* in *suba* Delhi [Abu-l Fazl, II, 1978, p. 285]. Tavernier informs (December, 1665) the friendliness of rhino with humans and comments that often they preferred to eat millet shrubs [Tavernier, I, 2007, pp. 93–94].

Thus, it appears that rhinos during the medieval period largely abounded the north-western passes in India to eastwards along the Gangetic plain to Assam, through Bihar, Bengal and the Sunderbans. However, at present the rhinoceros is restricted to a few reserves in Assam and West Bengal [IUCN, 2008, p. 2]. Rhino skin was used to make military arms. Abu-l Fazl informs that 'from its skin shields are made, from the horn, finger-guards for bow-strings and the like' [Abu-l Fazl, II, 1978, p. 285]. Rhinoceros's

horn is used as ‘an aphrodisiac as well as for curing fever, headache, and hearts and liver troubles in India and China and far East countries [Akhtar, 2008, p. 157].

It seems to be reasonable to assume that much of the aridity of today in Sindh is due to the drastic changes in the courses of the rivers of the region. Today we do not meet those thick marshes there that had Rhino living in it as late as the sixteenth century. This may again be the reason for the disappearance of Rhino from eastern U.P. where Akbar faced it in one of his visits to the region [Ansari, II, 1989, p. xx]. Though it is difficult to conclude where rhino population did actually decline. Even in the nineteenth century, rhino was still having disappeared from much of northern India. Apart from climatic, biotic and temperature changes, mounting demographic pressure forced the animal to make way for human settlements and cultivation. However, the decline of rhino population was caused by habitat destruction and fragmentation for extension of agriculture and later, tea gardens; poaching of rhino for horns which are much in demand in the Middle East, and other parts believed to have medicinal value [Krishna, 2010, p. 204]. Habitat destruction aided hunting and sounded the death knell, pushing the animal to the verge of near extinction [Bose, 2014, p. 80].

CATCHING WILD BUFFALOES

The wild buffalo/Asian buffalo is also a common in the Indian sub-continent. Presently in India they could be exclusive traced mostly in Assam. The population of this beast is on the constantly of decline. It is larger than domestic buffalo. Babur describes about it that ‘It is much larger than the (domestic) buffalo and its horns do not turn back in the same way. It is mightily destructive and ferocious animal [Babur, 2010, p. 492]. By the way of hunting, degradation of wetlands, diseases and many more buffalo factors were behind their reduction. Wild buffaloes were also used for hunting purposes. Abu-l Fazl while narrating the animal hunting of the *subah* of Oudh mentions that here ‘wild buffaloes are numerous. When the plains are inundated, the animals take to the high ground where the people find sport in hunting them. Some of the animals remain all day in the water and only at night approach the dry ground and breathe in freedom’ [Abu-l Fazl, II, 1978, p. 182]. To catch them distinct methods were used. Abu-l Fazl records, ‘at a place where buffaloes sleep, a rope is laid in the ground; but the end forming a loop is left outside. Another long rope is attached to it. To this they tie a female buffalo that wants the male. A courageous active man lies in ambush. As soon as a wild male buffalo comes to the spot, and covers the female, the hunter makes use of the opportunity, and fastens the foot of the male; but it frequently happens that the man loses courage, and has to pay for the attempt with his life. Another mode of catching them is to go near the ponds which they frequent. They put snares the ponds; and sitting on tame buffaloes the hunters go into the water with spears in their hands. Some buffaloes are then killed with spears; others are caught in the snares. A similar method may be adopted when buffaloes are attacked in their jungle pastures’ [Abu-l Fazl, I, 1978, p. 304].

Clearly Mughal hunts and catches of animals and birds were for various purposes. Since as elephant was symbol of royalty that’s why, it was the matter of concern for the State to control the elephant extensively for royal use. Their killing was not noted in any record, but their captive, maintenance and taming the wild was the big concern for the state. Similarly, Tigers were hunted basically to display the royal power as well as it was often done for their personal interest. Many miniatures of Mughal period recorded the ‘cheetah’ hunts. But we do not find any record of killing ‘cheetah’ except once Jahangir killed ‘cheetah’ during his extensive hunting activity in Ajmer. The hunting episodes basically recorded by all Mughal chronicles, [Jahangir, I, 2006, p. 369], but especially the changing outlook of Akbar is noted by them. As from the beginning of his reign, he was continuously involved in hunting, even hunting with

'cheetah was his favourite game, after the expansionist policy particularly after 1579, we found very few episodes of Akbar's hunting [Abu-l Fazl, I, 1978, p. 294]. In 1574, Abu-l Fazl justified the hunting of Akbar, proceed towards capital and he passed from stage to stage, occupied in appearance with the service of administering justice, and the enjoyment of hunting, while in reality he was per pending the divine mysteries, and imparting to society the gifts of seclusion [Abu-l Fazl, III, 1989, p. 152].

After the spiritual inclination of Akbar during *qamargah* hunt, 1579, near Bhira and 'a high order was issued that *qamargah* hunt should be stopped; and the game that had been collected should be allowed to escape...' [Nizamuddin, 1913–1936, p. 512; Abu-l Fazl, III, 1978, p. 345; Badaoni, II, 1990, p. 261]. Observation of Akbar in some manner was too much rare, when the establishment of the empire starts, Akbar tried to extend control in such areas which had also a large number of wild beasts. In some cases, hunting was for pleasure, some for political ambitions, and some for the cause for the people.

Jahangir extolled his own role as imperial exterminator, describing explicit invitations from his subjects to have the emperor rid them of a tiger or lion which threatened their village and portrait his hunting trips as a 'disinterested service to his subjects' [Jahangir, II, 2006, p. 312]. Pelsaert refers to the pleasures of the game of hunting, refers to Jahangir's interest in lion hunting, and says that the emperor, while young preferred shooting to all other forms of sport [Pelsaert, 2011, p. 51]. Jahangir had passion for hunting. Though his account and his scientific bent of mind are the important source for natural history, but his sensitivity towards the beast we can see with the rare animal also

Apart from the justification of public service, hunting served personal and political purposes. Shah Jahan fled plague-ridden Akbarabad and spent his time waiting for the disease to leave the region while hunting across the countryside. Aurangzeb suggested to his son 'Hunting is the business of idle persons. It is very reprehensible for one to be absorbed in worldly affairs, and to disregard religious matters' [Bilimoria, 2009, p. 15]. He wrote to Mahammad Azam, 'it seems that you passed one month in shooting cranes near the river Tali, (a river in Khandesh in Berar). Though hunting is an occupation which gives pleasure and delicious food, yet it is more pleasant when indulged in after being disengaged from the execution of important affairs, to do which is your bounden duty' [Bilimoria, 2009, p. 34]. The Mughal emperors' motivations and attitudes towards hunting and killing animals were also influenced by their personal thoughts and characteristics. For instance, Akbar's personality underwent a significant transformation after 1578, leading to a change in his views on killing creatures. Similarly, Jahangir abstained from hunting between 1618 and 1622, while Aurangzeb showed limited interest in hunting, likely due to his strong religious convictions.

References

- Abu-l Fazl. *Ain-i Akbari*. 2 vols. Tr. by H. Blochmann and H. S. Jarrett. Revised by J. N. Sarkar. Delhi: Oriental Books Reprint Corporation, 1978.
- Abu-l Fazl. *Akbarnama*. 3 vols. Tr. by H. Beveridge. New Delhi: Atlantic Publishers, 1989.
- Akhtar E. 'The *'cheetah* and the Mughals.' *Proceedings of the Indian History Congress*, 57th Session. Madras, 1996.
- Akhtar E. Zoological Interest of the Mughals (with Special Reference to the *'cheetah* and the Rhinoceros). *Essays in Medieval Indian History and Culture*, ed. by Shahabuddin Iraqi. New Delhi: Manohar, 2008.
- Ali Muhammad Khan. *Mirat-i-Ahmadi*. Tr. by M. F. Lokhandwala. Baroda: Oriental Institute, 1965.
- Ansari M. A. The Hunt of the Great Mughals. *Islamic Culture* 32, no. 1 (1959).
- Ansari M. A. *Geographical Glimpses of Medieval India*. Vol. 2. Delhi: Idarah-i-Adabiyat-i-Delli, 1989.
- Badaoni, Abdul Qadir. *Muntakhab-ut-Tawarikh*. Tr. by G. S. Ranking, W. H. Lowe, and W. Haig. 3 vols. Delhi: Atlantic Publishers, 1990.

- Babur Zahiru'd Din Muhammad. *Baburnama*. Tr. by A. S. Beveridge. Delhi: Low Price Publications, 2010.
- Balabanlilar L. *Imperial Identity in the Mughal Empire*. New Delhi: Viva Books, 2013.
- Bernier F. *Travels in the Mughal Empire, 1656–1668*. Tr. by Archibald Constable. Revised by Vincent A. Smith. New Delhi: Atlantic Publishers, 1990.
- Berinstain V. *Mughal India: Splendours of the Peacock Throne*. London: Thames and Hudson, 1998.
- Bose S. From Eminence to Near Extinction: The Journey of the Greater One-Horned Rhino. *Shifting Grounds: people, animals, and mobility in India's environmental history*. Ed. by Mahesh Rangarajan and K. Sivaramakrishnan. Delhi: Oxford University Press, 2014.
- Du Jarric P. *Akbar and the Jesuits*. Tr. by C. H. Payne. New Delhi: Tulsi Publications, 1976.
- Elliot H.M. & J. Dowson, *History Of India As Told By Its Own Historians*, vol. VI, Calcutta, 1867–77, reprint, Allahabad, 1972.
- Foose Thomas J., and Nico van Strien, eds. *Asian Rhinos: Status Survey and Conservation Action Plan*. Gland and Cambridge: IUCN, 1997.
- Gommans J. *Mughal Warfare: Indian Frontiers and High Roads to Empire, 1500–1700*. London: Routledge, 2002.
- Habib, Irfan. *An Atlas of the Mughal Empire: Political and Economic Maps with Detailed Notes*. New Delhi: Oxford University Press, 1982.
- Inayat Khan. *The Shah Jahan Nama*. Ed. by W. E. Begley and Z. A. Desai. Delhi: Oxford University Press, 1990.
- Jahangir. *Tuzuk-i-Jahangiri (Memoirs of Jahangir)*. Tr. by Alexander Rogers. Ed. by Henry Beveridge. New Delhi: Low Price Publications, 2006.
- Kautilya. *Arthashastra*. Tr. by R. Shamasastri. Bangalore: Government Press, 1915.
- Khan E. Akbar and His 'cheetah'. *Proceedings of the Indian History Congress*, 73rd Session, 2012.
- Krishna N. *Sacred Animals of India*. New Delhi: Penguin, 2010.
- Manucci N. *Mogul India, 1653–1708*. Tr. by William Irvine. 3 vols. Delhi: Low Price Publications, 2010.
- Monserate A. *Commentary on His Journey to the Court of Akbar*. Tr. by J. S. Hoyland. Cuttack: Mission Press, 1922.
- Nilakantha, *Matanga-lila* Tr. in English by Edgerton, F. as the Elephant -Lore of the Hindus, Delhi: Motilal Banarsidass, 1985.
- Nizamuddin Ahmad. *Tabaqat-i-Akbari*. Tr. by B. De. Calcutta, 1913–1936.
- Ojha, P. N. *North Indian Social Life during the Mughal Period*. Delhi: Oriental Publishers and Distributors, 1975.
- Palakapya. *Hastya Ayurveda*. Ed. by Sivadatta Sarma. Pune: Anandashram Press, 1894.
- Pelsaert F. *Jahangir's India*. Tr. by W. H. Moreland and P. Geyl. Delhi: Low Price Publications, 2011.
- Ruka'at-i-Alamgiri (Letters of Aurangzeb). Tr. by Jamshid H. Bilimoria. Delhi: Idarah-i-Adabiyat-i-Delli, 2009.
- Silverman B. *Can You Tell a 'cheetah from a Leopard?* Minneapolis: Lerner Publications, 2012.
- Sukumar R. *The Story of Asia's Elephant*. Mumbai: Marg Foundation, 2011.
- Tavernier J.-B. *Travels in India*. Tr. by V. Ball. Delhi: Low Price Publications, 2007.
- Thapar V. *The Tiger in Time*. New Delhi: Aleph Book Company, 2013.
- Thevenot, J. de, and Careri G. F. G. *Indian Travels*. Ed. by Surendranath Sen. Delhi: National Archives of India, 1949.
- Thomson, Pennant. *The View of Hindoostan*. Vol. 2. London: Henry Hughes, 1798.
- Trautmann, Thomas R. *Elephants and Kings: An Environmental History*. Chicago: University of Chicago Press, 2015.