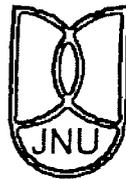


“Mughal Highways in Seventeenth Century”

*Dissertation submitted to Jawaharlal Nehru University
in partial fulfillment of the requirements
for the award for the award of the Degree of*

MASTER OF PHILOSOPHY

Yogesh Sirole.



Centre for Historical Studies
School of Social Sciences
Jawaharlal Nehru University
India
2003

To

Maa and Pa.



Dated: 21st July 2003

Certificate

The dissertation entitled "Mughal Highways in Seventeenth Century," is Submitted in partial fulfillment for the degree of MASTER OF PHILOSOPHY of this university. This dissertation has not been submitted for any degree of this university or any other university and is my original work.


Yogesh Sirole

We recommend that this dissertation be placed before the examiners for evaluation.



Prof. Majid. H. Siddiqi
(Chairperson)
Centre for Historical Studies
School of Social Sciences
Jawaharlal Nehru University
New Delhi-110067



Dr. Yogesh Sharma
(Supervisor)
Centre for Historical Studies
School of Social Sciences
Jawaharlal Nehru University
New Delhi-110067



A GENERAL MAP
of
INDOSTAN
or the
GREAT MOGOL'S EMPIRE
with the
ADJACENT COUNTRIES.

Contents

	<u>Page No.</u>
Acknowledgement	
<u>Chapters:</u>	
Introduction	i-v
I. Highways	1-45
II. Roads, Avenues and Bridges	46-80
III. Travels	81-112
Conclusion	113-117
Bibliography	118-127

Acknowledgement

I must express my gratitude to my supervisor Dr. Yogesh Sharma, Associate Professor of the Centre for Historical Studies, Jawaharlal Nehru University, New Delhi, for his help and guidance. I am grateful to receive his most zealous care at every stage of my work. I am much beholden to the Professors and the Staff of the Centre for historical Studies for their support.

I am short of words to express my heartfelt thanks to each and every friend of mine in Jawaharlal Nehru University, without them this work has not been a possibility.

I have also to acknowledge with the financial aid given me by the India Council of Historical Research. Finally I want to thank to the libraries in and around Delhi.

Yogesh Sirole

Introduction

The seventeenth century was a period of moderate, but steady, population growth and rising productivity. The Mughals imposed a new level of peace, order and stability throughout most of the Indian subcontinent. Only at the end of the century there were political crisis, warfare, and economic disruption accompanying the eroding of the steel base of the Mughal empire. In the first half of the eighteenth century Maratha advances were preceded by raids and attrition before final conquest. Shifting to regional polities in the aftermath of empire was a turbulent process for the societies of the Indian subcontinent.

During Akbar's (1556-1605) rule the central political fact in the region was the rising power and expanding territorial domain of the Mughal empire. At his death in 1605, he left to Jahangir (1605-1627) a multi-regional state controlling the northern half of the subcontinent. After the initial violence of conquest, the Mughals regime succeeds in imposing internal peace and order in each new province.

Successors of Akbar in the Seventeenth century, continued to extend and deepen imperial power throughout the century. To the northwest, they established their limitation in Balkh and Badakhshan in the 1640s. To the north in Himalayan hills, the Mughals imposed their authority over the rulers of the Rajput hill states. In the northeast Mughal armies probed as far as Brahmaputra river. In the south, recurring wars and incessant diplomatic pressure ended with the final victories over Bijapur and Golconda

in 1686-87. By the mid-seventeenth century all chiefs, rajas or other Indian rulers formally acknowledged the authority of the Mughal emperor.

The great success of the Mughal's in holding down such a vast empire was in large measure to the communication system and the care taken in the upkeep of the roads. It was kept up far more efficiently than earlier rulers. They not only promoted the control of far flung provinces but also the development of trade and commerce over the whole area of the empire.

An attempt has been made in the following pages to present a historical sketch of the routes in Hindustan during seventeenth century. Geographically, the study covers the regions of Mughal northern, eastern and western India. The administration and power of Mughals being more or less consolidated within it.

Largely the study depends on the surviving accounts of the European merchants and travellers who traversed in the seventeenth century throughout the Mughal domain. Some European visitors were both intelligent and observant. Their narratives are valuable for the study.

The Commentary of Father Monserrate is one of the earliest European accounts. He came to Akbar's court in 1580. His account of the emperor's personality, court and administration gives an excellent insight. Among other things he left a systematic

record of the emperor's progress, the measurement of land, construction of the bridges etc.

Subsequent travellers, such as Ralph Fitch, William Hawkins, Sir Thomas Roe, Pelsaert, Mundy, Manrique. Tavernier, Bernier, Manucci have left accounts full of their traveling experiences in India. Although at times they were biased in their opinions but this does not necessarily reduce the value of their contribution. Often they compare and contrast local condition with those in their own countries, or those seen elsewhere, adding insight into the problems connected with roads and communications.

However, care should be exercised in using their accounts, because some of them suffer from serious defects. Their inadequate knowledge of the local languages hampered their understanding to a greater extent. Frequently, while explaining and describing terms and events, they rely on unauthorised sources. This created the problem for subsequent historians while translation. Still their descriptions merit critical analysis and comparison with contemporary Persian sources.

The second most utilized sources for the present study are the Persian and Turkish sources translated in English. One of the earliest is *Baburnama*. This gives a valuable insight into Babur's work for the enhancement of roads and communication.

Abul Fazl's *Akbarnama* and *Ain-i-Akbari* are the most important and authentic history for Akbar's period. Especially *Akbarnama* contains the description of routes roads, the construction of bridges, the modes of travel, the distances covered and other matters

related to travel and transport. On the other hand no serious study can be undertaken without consulting *Ain-i-Akbari*. It deals with every aspect of government and administration, gives an exhaustive account of all the *subhas* under Akbar. It also provides information about imperial rules and regulations, and describes the imperial household and events, the military and civil services, and the directives governing the judicial and executive departments, all in great detail. We get a clear picture of Akbar's hunting expeditions, his preparation for travel, concern for merchants, traders and travellers.

Tuzuk-i-Jahangiri or *Jahangirnama*, of Jahangir is particularly important for its geographical details and the name of the places visited by Jahangir. He also gives the distance travelled daily when on the march, summarises those of his *farmans* directing *zamindars* and other officials to construct *sarais* and *kos minars*, and to plant trees. These memoirs were written by Jahangir until the sixteenth year of his reign, after which Saqi Mutamad Khan wrote them under the emperor's direct supervision.

Two other sources *Khulasat-ut-Tawarikh* of Sujan Rai (1695) and *Chahar Gulshan* of Chatumal Kayath (1759) are worth mentioning. The former is a general history of India, but is useful for its detailed geographical details of the country, routes, and stages of travels. *Chahar Gulshan*, though a small book, contains statistical details of the twenty two *subhas*, as well as itineraries. Sir Jadu Nath Sarkar has translated portions of them in his *India of Aurangzeb*.

Some modern historians have studied aspects of roads and communication in seventeenth century, but their accounts are incomplete. Books such as Moreland's *India at the death of Akbar* (London, 1920) and *From Akbar to Aurangzeb* (reprint N. Delhi, 1972) briefly touches the problems of travel and transport from an economic standpoint, as do Irfan Habib in *Agraian system of Mughal India*. The work is of great value in understanding certain aspects of travel and transport. H. K. Naqvi's two books, *Urban Centers and Industries in Upper India 1556-1803* (Bombay, 1968) and *Urbanisation and Urban Centres under the great Mughals* (Simla, 1972), provides very information about the movement of goods and commodities between manufacturing and producing centers and consumption centers. Passing references is made of some important routes and places, but beyond that little is said about the system in question.

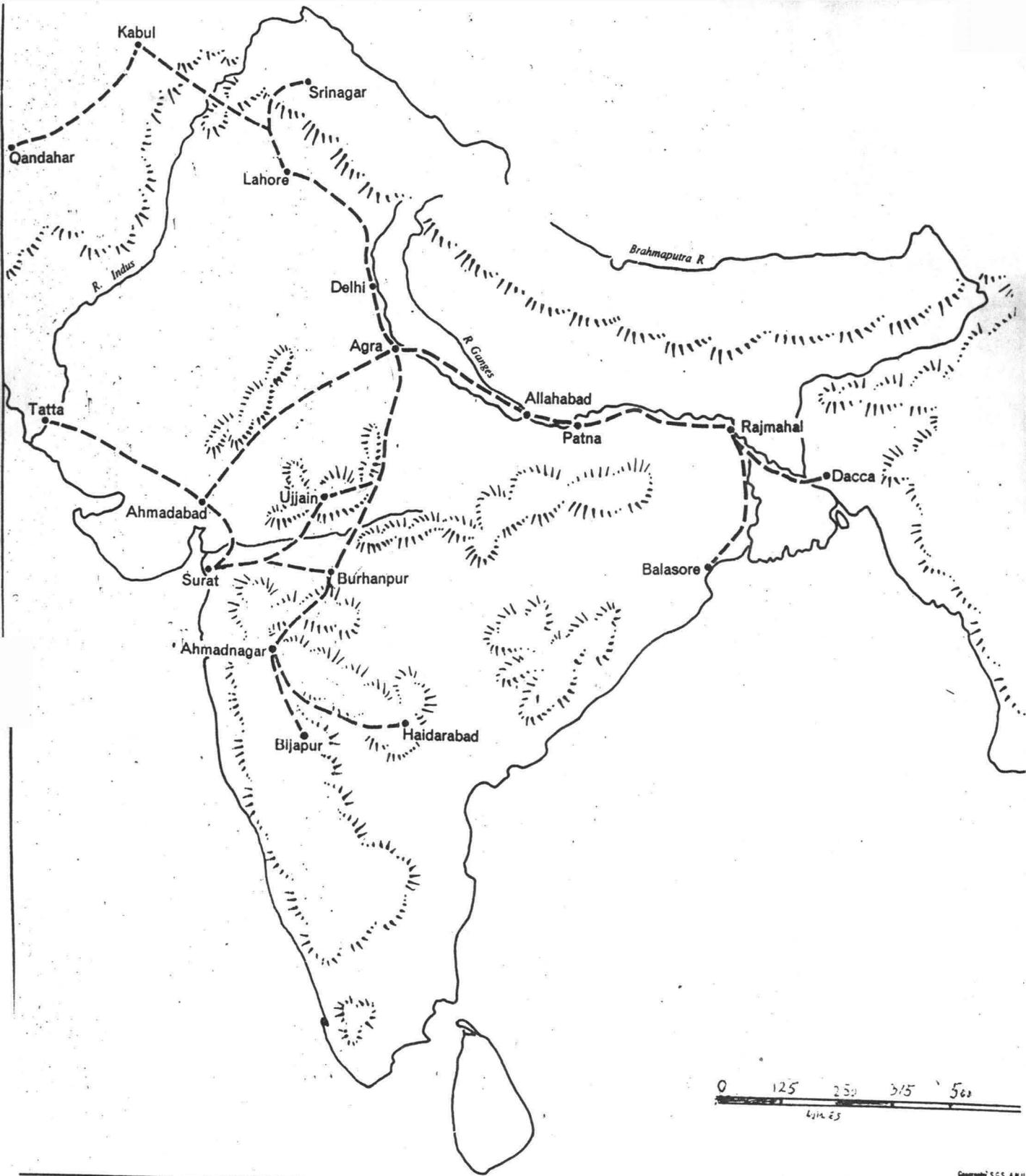
The book of H. C. Verma *Medieval routes to India* (Delhi, 1978) is a very refreshing book in this field. Although his works largely deals with the routes of north and northwestern India in Sultanate Period. But the monograph is very useful. A.K.M Farooque's Monograph *Roads and Communication in Mughal India* (New Delhi, 1977) is like an oasis in the desert. Very thorough and extensive this work almost covers every aspect related to roads and communication. However, his book failed to provide an insight about the stages on various routes. He mentioned various routes frequented during Mughal rule, but only in his appendix.

A very recent book of Jean Deloche which is being translated in English from French. *Transport and communication in India Prior to the Steam Locomotion* (OUP, 1993)

deserves mention. He has made a critical study of the historical sources dealing with the routes of Mughal India, reproducing maps showing itineraries of many foreign travelers. In this he says very little about other related aspects of the itineraries.

My study is an attempt to reconstruct from the available evidences a coherent picture of the travelling conditions in seventeenth century. It may be pointed here that no attempts has been made in this work to draw parallels between modern route system and those of Mughal period, nor is any effort made to find in the former traces of the latter. Accordingly, the route system in Mughal period is neither judged in this work by modern standards nor condemned for want of modern technology involved in the preparation of roads. The function and scope of their activities are determined, to a great extent, by the geographical characteristics and the commercial products of the areas under study.

The dissertation has three main chapters. The first one deals with the three main highways of the seventeenth century. i.e. Agra-Lahore-Kabul, Agra-Surat, and Agra-Patna. In this chapter I tried to highlight the importance of the highways along with the main stages and their importance along the route. The second chapter deals with the bridges, *kos-minars*, avenues and the maintenance of roads. The final chapter comprises of descriptions about the caravans, means of transportation, *Sarais*, *Rahadaris*, Robbery, and safety measures employed by state to safeguard against any trouble on highways.



Major routes in India during Mughal time

I. Routes

Geography and Routes:

Geographical factors played an important role in the evolution of mankind. The changing climate not only affects the life of the people but it also influences their character and thought processes. For example, in arid regions where man has been in constant tussle with the nature, he develops a rough character susceptible to raids and robbery, which again is in direct contrast to the mild character of the peoples living in tropical countries, because here nature easily satisfies their demand and therefore the inhabitants are mild in nature. Similarly, the existence of road network necessarily implies the collaboration of nature and man, and corresponds therefore to a geographic and human choice. The routes passing through the open valleys, rivers and vast plains become easier.¹ Geographical factors played vital role in determining the scope and nature of the explorations of land routes, and the line of communications any time in History.

The topography of India is very conducive to the traffic through land routes although the geographical features of India create an ideal condition for smooth traffic both in land and water. Ample evidence is available of commercial activity in this country since time immemorial.² It is difficult to ascertain the time taken in the evolution of

¹ "On the plains routes usually follow watercourses, where settlements have always been denser; thus making the plains important commercially, administratively and politically." Goblet, Y.M., "Political Geography and the World Map," London, 1955, 121.

² See, Motichandra, "Trade and Trade Routes in Ancient India," New Delhi, 1977.

routes in India, though ages must have passed in their evolution and innumerable tribes must have participated in giving them their distinctive character. The nomadic tribes in search of fodder for their herds must have got themselves gradually acquainted with the natural routes of the country, but even before them, the hunters and gatherers in search of their food must have treaded on the natural routes that later on became the main roads. This search for natural passages must have continued for ages and in course of time the whole country got covered with a network of routes.

The geography of Indian subcontinent is clearly demarcated from the rest of Asia by its high Rampart Mountains, allowing passage only at certain places. The variety and nature of India's physical features, extending over such a vast area was an obstacle for the establishment of a single government. Geographically India can be divided in three major zones, the northern plains between the Himalayas and the Vindhyas, the Deccan plateau stretching southwards from Narbada to the Krishna and Tungabhadra Rivers, and the far south, which lies beyond these rivers.

The importance of the Himalayas lies in the barrier they provide, running along its northern frontier from Afghanistan in the north-west to Assam in the northeast; they limit and channel the impact of foreign invasion and contact. However, the barrier is penetrable at its north-western end,³ where it turns southwards, through which the Kabul and Indus Rivers flow into India.

³ This northwestern gap contains several passes over, which contact was maintained with Central Asia like Hinukush, Gomal, Bolan and Khyber Passes.

The Indo-Gangetic plains, watered by three great rivers, the Indus, the Ganges and the Brahmaputra, are extremely fertile and populated. Its central position, fertility and large population, were mainly responsible for it having been the center for political activity throughout India's history. On the other hand, peninsular India, relatively isolated from the north, both physically and politically, often pursued independent policies.

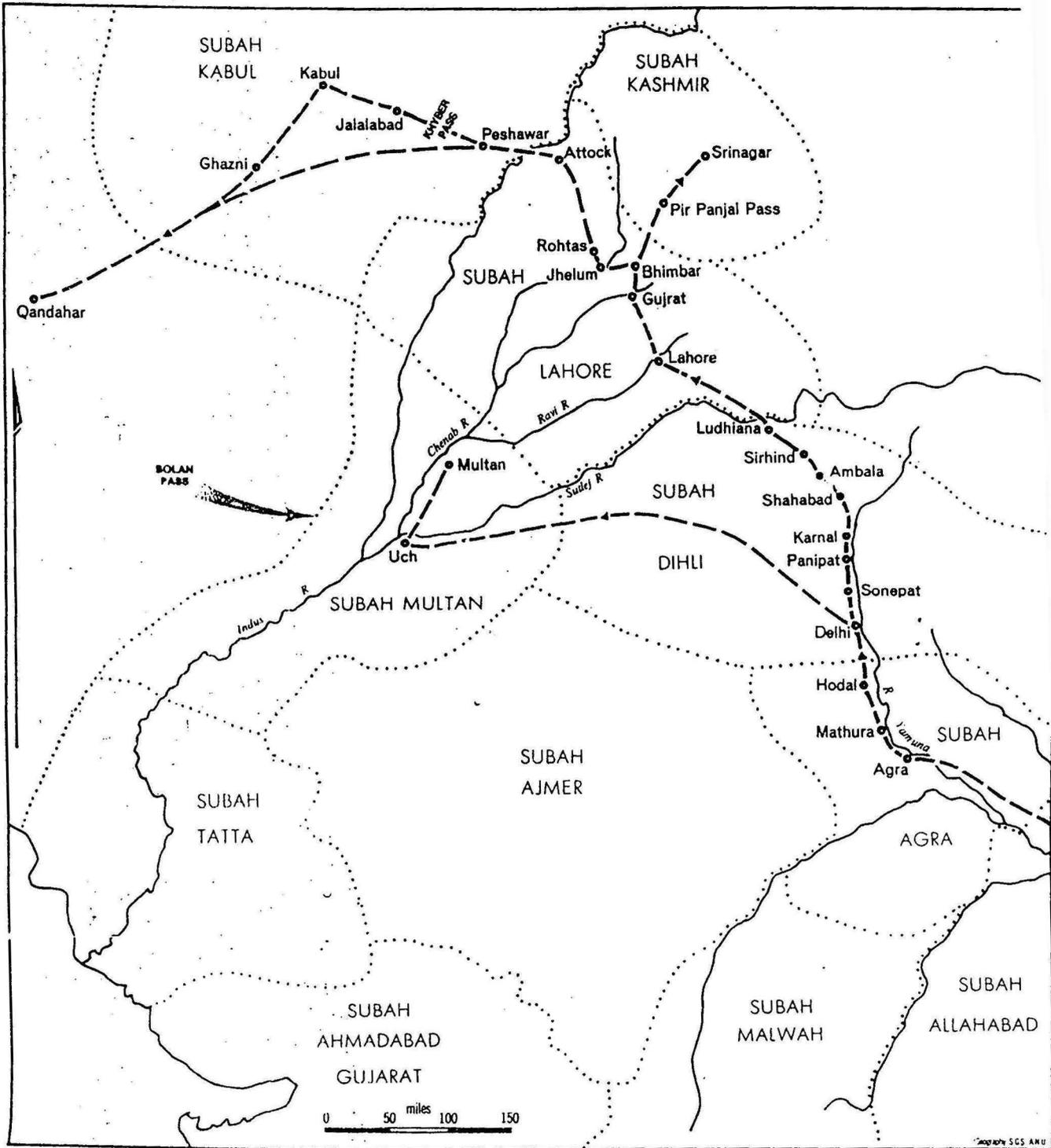
In Ain-i-Akbari, Abul Fazl wrote on the boundary of Hindustan. He said, "*Hindustan is described as enclosed on the east, west and south by the ocean...To the north is a lofty range of mountains, parts of which stretches along the uttermost limits of Hindustan, and its other extremity passes into Turkestan and Persia. An intermediate region lies between this and the vast frontiers of China. With all its magnitude of extent and the mightiness of extent and the mightiness of its empire it is unequalled in its climate, its rapid succession of harvests and the equable temperament of its people. Notwithstanding its vast size, it is cultivated throughout. You cannot accomplish a stage nor indeed travel a kos without meeting with populous towns and flourishing villages, nor without being gladdened by the sight of sweet waters, delightful verdure and enchanting downs.*"⁴

The Routes in North and Northwestern India:

The establishment of Muslim rule in India saw the shifting of political wheel to the Cis – Indus and the Ganga – Jamuna Doab region. The two cities, Agra⁵ and Delhi,

⁴ Abul Fazl, "Ain-i-Akbari," Translated by H.S. Jarret, revised and annotated by J.N. Sarkar. Calcutta, 1948, III, 7.

⁵ "*The citadels of Agra appeared in the midst of the dust like mountain, its ramparts and battlements like mountain peaks.*" Masud sad Salman wrote this qasida in praise of Mahmud Lodi. cf., Jahangir, "Jahangirnama," (trans. Ed. & annotated by) M. Thackston Wheeler, New York, 1999, 23.



Agra-Kabul route

emerged as important places from which originated movements to all directions. The rulers of Hindustan were concerned about the road axis uniting these points with other regions of their empire. Alexander Hamilton writes,

*"The Compasse of this contrey is two yeares travell with caravan, to say, from Candahar to Agra, from Soughtare (Sonargaon) in Bengala to Agra, from Kabul to Agra, from Decan to Agra, Agra is in a manner in the heart of all his kingdoms."*⁶

(i). Agra –Lahore Route:

Except for few stages, the route from Agra to Lahore and Kabul has not gone many changes since the fall of the Mughal sovereignty." *The whole country from Agra to Lahore is well cultivated and is most fertile part of India, bearing all kinds of crops abundantly.*"⁷ The journey from Agra to Lahore can be divided in two major stages, Agra to Delhi, and then Delhi to Lahore.

(a). Agra-Delhi:⁸

The main stages of this very important highway were Sikandara, where is situated the tomb of Akbar, lies 5 miles northwest in out-skirts of Agra. Followed by Farah Sarai,

⁶ Alexander Hamilton in "Purchas His Pilgrimage," by Samuel Purchas, Glasgow. III, 1905, 30; De Laet, "The Empire of Great Mogol," A translation of De Laet's "Description of India" and "Fragment of Indian History," translated by J. S. Hoyland & Annotated by S. N Banerjee, Delhi, reprint, 1975, 4

⁷ De Laet, 54-5.

⁸ Jahangirnama, 50-6; Mannucci, N., "Storio Da Mogor," or "Mughal India," edited by William Irvine, London, 1906-08, I, 69; The Chahar Gulshan fragments in J.N. Sarkar's, "The India of Aurangzeb", XC VII, XC VIII & 172; De Laet's stages on this route were almost similar. His stages were Raukata – Bad-i-Sarai – Akbarpur – Hodal – Palwal – Faridabad – Delhi. De Laet, 47-55; Tavernier gave six main stages between Agra and Delhi. They were, Agra – Good Ki Sarai – Saha ki Sarai (near Mathura) – Koti Sarai – Palwal – Badalpur – Delhi. Tavernier, J.B., "Travels in India," translation by V. Ball, London, 1889, I, 57, 79, & note.

Jhandipur, Ganu-Ghat, which was a pucca sarai on the Jamuna River. The next stage was Koila sarai, which was 5 miles north of Jhandipur on the Jamuna River. After Koila Sarai was Naurangabad, and Mathura, on the right bank of the Jamuna River, about 30 miles from Agra. It is considered by the Mughals as one of the most fertile area. For Mathura Bernier says, "*Nothing is worthy observation but Maturas, where an ancient and magnificent temple of idols is still to be seen; a few tolerably handsome caravansaraies, a day's journey from each other.*"⁹ But region around Mathura became extremely hostile in the later part of the seventeenth century, owing to the rise of Jat rebellion. Akbarpur¹⁰, which according to De Laet was once a large town, he further adds that, "... *but is now only frequented by pilgrims on account of many Mahemta (Mohammadan) saints whose tombs are here.*" Chata sarai, which was a pucca sarai 6 miles north of Akbarpur. At Hodal, there was a decent sarai, "*At the entrance of saray,*" wrote Finch, "*is a faire fontaine (i.e., well), three stories and one hundred steps.*"¹¹ Banchari, Khataila, Mitnaul, all small villages. Khera Sarai (Baminee Khera), Palwal, was the frontier town between the provinces of Agra and Delhi. The clusters of villages like Baghaula, Pirthala, Sikri, Ballabgharh, Faridabad, Khawaja Bakhtawar Khan Sarai, Badarpur (Madanpur), were the stages on the Highway. The tank of Raja Kisahn Das situated 11, miles from the Turkoman Gate of Delhi. The last three stages

⁹ Bernier, F., "Travels In the Mogul Empire," AD 1656-1668, translated and annotated by Archibald Constable, Second Revised edition by Vincent A. Smith, First Indian Edition, New Delhi, 1983, 284.

¹⁰ De Laet, 48; Finch, "Early Travels in India," (1583-1619), edited by, William Foster, New Delhi, 1985, 155.

¹¹ Finch, 155.

of the route were Mahabat Khan Sarai, Barapula, the famous eleven arches bridge of Mughal architecture and then Delhi.¹²

The distance of the highway being 81 kos according to De Laet's estimate.¹³

(b). Delhi – Lahore Route:¹⁴

From Delhi the route to Lahore goes towards the northwesterly direction. The main stages on this track were Badli, Narela, Sonipat, Ganaur, Samalkha, Panipat,¹⁵ Gharaunda, Sarai-Pul¹⁶, here was located a sarai near the western Jamuna canal. Karnal,¹⁷ according to De Laet here route was, "*exceptionally dangerous and infested with robbers*". Taraori, Azimabad, the crossing point of the Nai River. Thaneswar, the crossing point of Saraswati River is about 90 miles from Delhi, lies at 29° 59' N., 76° 50' E. It was famous as a place of great sanctity, its name being from the Sanskrit word *Sthaneshwar*, "the God abode." Finch says, "*Here is a castle, a goodly tanke, and by its pagodas, much revered by all the Gentiles (Hindus) throughout India.*" Henry Bornford in 1639 wrote, "*Thirtie course from this (Sirhind) is Thanesa or Taneceere, which affords conserves, etc. This is likewise the place of making nossadur (nausadar,*

¹² In the early eighteenth century, Hakim Maharat Khan Isfahani, a geographer wrote, "*(Shahajanabad) was always the dar al-Mulk [seat of the empire] of the great sultans and the centre of the circle of Islam (Markhaz-I-daraih Islam).*" And Muhammad Salih wrote, "*Its four walls... enclosed centre of the earth (Markhaz-I Kahk).*" Cf., Blake, S., "Shahjanabad: The sovereign city in Mughal India," 1639-1739, C.U.P, 1993, 28.

¹³ De Laet, 47.

¹⁴ Sarkar, J. N., "India of Aurangzeb," Cacutta, 1901, XCVIII; De Laet, 50-4; Finch, 155-60.

¹⁵ "*At the entry whereof was placed a manora (Minar) with the heads of some hundred theeves newly taken, their bodies set on stakes a mile in length.*" Finch, 158.

¹⁶ India of Aurangzeb, XCVIII.

¹⁷ De Laet, 49; Finch, 158.

or *Sal ammoniac*).¹⁸ After Thanesar is Shahbad, 13 miles in north, then Ambala, where the route crossed the Ghaggar River. Followed by Sarai Nun, Sarai Hajjam, Aluwa, Sirhind, situated at 30° 38' N., 76° 27' E., according to Khafi Khan it was called *sar-i-Hind* originally, as being the frontier of the old Ghazni dynasty, and adds that Shahjahan changed it to *Shahrind*. Father Monserrate says, "*Cengandum (Sirhind) is two days' journey from Ambala. It is recounted that in this place a certain king fought with and vanquished a lion (Sinh). The town is also called Sarindum, because it is situated on the frontier of the province of Indin and Lahorum (Lahore).*" Bornford wrote, "*The third munzell (manzil, or stage) from hence (i.e., Thanesar) is Seroun or Senound (Sirhind), greatly frequented by the... merchants for chinta, redd sealoes, commodities of that place.*"¹⁹ "*This city has a beautiful tank, in the middle of which is a temple approached by a stone bridge of 15 arches: a cos distance from this tank is royal park approached by a canal and a paved road 50 feet broad, between a fine avenue of trees.*"²⁰

Sarai Lashkar Khan, 20 miles from Sirhind was the next stage. Then Doraha, which signifies two routes, one through Rupa and other through Rahon. Caravans generally prefer the route from Rupa, Bajwara, Haryana, Dasuya, Pathankot, Sialkot, and Gujrat and further. Ludhiana, 14 miles northwest of Sirhind was the next stage of the trunk road. Phlor, river Sutluj has to be crossed before it. Nurmahal, was next followed by

¹⁸ Finch, 158; Foster. W., (ed.), "The English Factorise in India," 13 Vols, (1637-41), Oxford, 1906-27, 134; Rennell, "Memoir of a Map of Hindustan: The Mughal Empire," London, 1788, 1797, 67.

¹⁹ Babur, "Baburnama," translated by A. S. Beveridge, reprint, New Delhi, 1970, I, note 1 on 383; Monserrate, 101; E.F.I, 1637-41, 134.

²⁰ De Laet, 49-50; Finch, 158

Nakodar, Dakhini, also known as Jahangirpur, and at Sultanpur,²¹ the route crossed the Kalna River on the right west of the Town and the Bias River, further 6 miles at the ferry of Baupur in the northwest. In 1606, while on his way to Lahore Jahangir from Sultanpur turns to Gorbindwal, Jaipal, Bhairawal, Kamran Garden, and Sarai Amanat Khan, Knchani ka Pul, Hochiarnagar, Shahganj, and Lahore. The next manzil was Fathiabad, or Fatehpur, according to De Laet, "*The place was called Bhironwal. It was bestowed on Shaikh Farid who was henceforth to be style Murtaza Khan, Farid named it Faridabad.*" Bhaironwal is on the right bank of the Beas on the road from Jalandhar to Amritsar. The name Fatehabad came in existence after the victory over Khusrau by the Royal forces in 1606. According to Finch, Jahangir built a Saray in the memory of this triumph.²² Naurangabad, Nuruddin Sarai, Sarai Amanat Khan, Darkah Pul, (Kunchee ka Pul)²³ this bridge was 8 ½ miles from Hosheer Nagar, on the main road from Amritsar to Lahore road. Hosheer Nagar and Shah Ganj were the last stages on the route before Lahore.²⁴

Until Jahangir's period, there was another popular route, Qanungo named it as "*the old Turkish route,*" which from Sirhind, led through Machiwara, Rupar, Rahan, Sarai Nuruddin, here it converges into the main route. Then went on to Sarai Nun, Adinanagar, Patial, Kalanaur, Sarai Amanat Khan, and finally to Lahore. In 1540, Humayun took this route while on his way to Lahore. This route ran via Samana that is

²¹ Jahangirnama, 55-8.

²² De Laet, 50, 176 & note. Finch, 158-9.

²³ India of Aurangzeb, XCVIII.

²⁴ The summer Capital of the Mughals, Lahore stands in 30° 35' N., 74° 20' E., on the east bank of the Ravi River. According to Finch, "*Lahor is one of the greatest cities of the East. The castle or town is inclosed with a strong bricke wall, having therto twelve fairs gates, nine by land and three openings to the river; the streets faire and well paved; ... The buildings are faire and high, with bricke and much curiositie of carved windowes and doores.*" Finch, 161; Pelsart, F., "Jahangir's India," translated by W. H. Moreland and Geyl, Cambridge, 1925, 130; Rennell, 79.

through modern Jhind and Patiala. Samana was the meeting point of two roads coming from Sirhind and Firuzpur across the ferries on the Sutluj River. In order to check the Mongol incursions Alauddin Khalji built a strong fort here.²⁵

A different route is also suggested by De Laet;²⁶ Delhi – Bunyra – Karnal – Thaneswar – Shahbad – Gangur (Mughal Sarai) – Sina – Duratia – Pullower – Nicoudar – Saltanpore – Churinal – Khan-i-Khana sarai –Lahore.

According to Bernier it was a fifteen days' journey, the distance being about 120 leagues. Rennell puts it at 386 English miles. Tavernier gives the distance as 18 stages.²⁷

(ii). Lahore – Attock – Kabul Route:

“The road from Lahor to Kabul is infested by Pathan brigands; and although the king has established 23 guard stations of troops at regular intervals, none the less travellers are frequently robbed by these brigands, who in the year 1611 actually attacked and looted the city of Kabul itself,” noted De Laet.²⁸

(a). Lahore – Attock Route:

The Attock route going by Rohtas made a deep bend to the north. The main stages of the route are mentioned by Chahar Gulshan: Shahdar situated 3 miles north of the

²⁵ Qanungo. K. R., “Shersha and his times,” Longman ltd, 1965, 255.

²⁶ De Laet, 54.

²⁷ Bernier, 358; Rennell, 243; Tavernier, I, 73.

²⁸ De Laet, 55.

Lahore Fort, Fazilabad, Pool Shah Dowla, on the River Degh. The next stage Aminbad, according to De Laet a "fine town,"²⁹ is situated 10 ½ miles north northwest of Pool Shah Dowla and 9 miles south of Gujranwala. Hakimabadpur, Gakhar Cheemah, Wazirabad, after the town the Chenab River was crossed by caravans to reach Gujrat, "a notable trading center," says De Laet. It is 60 miles from Lahore and situated in 32° 32' N., 73° 55' E.³⁰ Khawaspur, crossing point of the Bhimber River, Kinari or Khairan a mountain pass, Khariala, Sarai Alamgir, 1 ½ miles from Jhelum River, Said Khan, Naurangabad, Chokuha (Chakao), Khurd Jalal (Sera-i- Jalal Khan), Mahsa, Pakka, Rowat, Lashkari, Rawalpindi. There is a mountain pass called the 'Margalla' that ends near Taxila through which the road led towards Attock. This ancient Pass is situated between Rawalpindi and Attock a few miles east of Hasan Abdal. Jahangir writes, "*In Hindi 'Mar' means to waylay, and 'Gala' is what they call a string of animals, i.e., it is the place where caravans are plundered.*"³¹

At Margalla, there is an old cutting through the hill crossing of the Lahore and Peshawar road. The roadway was covered with flags of stone, while a stone slab inserted on the wall on the side contains the work was completed in 1672, or shows or sometimes when Aurangzeb marched to Hasan Abdal and sent his son prince Sultan with an arm against the Khattaks and other trans-Indus tribes.³² The road then went to Hasan Abdal; one kos east of this place was an extremely fast-flowing waterfall.

²⁹ Ibid.

³⁰ Hamilton, W., "A Geographical, Statistical and Historical Description of Hindoostan and the Adjacent Countries", Reprint, Delhi, 1971, I, 49; De Laet, 55.

³¹ Jahangirnama, 78-9.

³² "Gazetteer of the Rawalpindi district," revised edition, 1893-94, 223.

Jahangir writes, "*Along the entire road to Kabul there is not another waterfall this one ...the water is so pure and limpid that this line of Amir Khusraw's could be applied to it. 'So pure it is that fine sand at the bottom of the water could be counted by a blind man in the heart of night'.*"³³ According to De Laet, it was "*a fine town on the bank of a small River, near which lie some beautiful tanks containing countless fish, upon whose snouts, Achabar (Akbar) is said to have fixed gold rings; the water is so clear, and pure that one can everywhere see the bottom,*"³⁴ After Hasan Abdal, the next stage was Burhan from here two roads diverged, the left hand road was the 'Shah Rah' or king's highway. The right hand³⁵ branch went through Khogiani, Nitopa, Hazrao, Pirdad, Bhati, Kalu villages, reached the ford of Bazar, the Attock fort, the old fort was built in 1581 and lies in 33° 56' N., 71° 57' E., and then it extended to Madrota and finally to the town of Attock, also known as Attock-Benaras, situated on the eastern bank of Sindh River.³⁶

From Shahdheri (Taxila), the ruined city of Taxila is situated at a distance of 26 miles to the northwest of Rawalpindi; the lower road went towards Jangi via the Margalla pass, whence it ran through Chaontra to Dhudhid. From here the road divided into two tracks one to south proceeding by Chakowal, situated on 33° 4' N., and 72° 34' E. It is 68 miles east from the River Sindh, the salt mines to Pind Dadan, which lies in 32° 39' N., and 72° 47' E., and it is situated on the northern bank of River Jhelum,³⁷ and to

³³ Jahangirnama, 79.

³⁴ De Laet, 55. Although the work of putting gold rings was done by Jahangir, Jahangirnama, 79.

³⁵ Raverty, H.G., "Notes on Afghanistan," London, 1880, 31-2.

³⁶ Hamilton, W., I, 488

³⁷ Hamilton. W., I, 490.

Ahmadabad. The other road to the east proceeding via Asanot and the Bunhar River to Dilawar, opposite Rasul (vang) to Jalapur. From Shahdheri to Dhdhial the distance is 55 miles, then to Asanot 33 miles, then to Dilawar and Jalapur each 21 miles. The whole distance by this route is 110 miles. But this distance would be the foot of the salt range to Jalapur. There was also a third road to the south of the Mankiala,³⁸ a village in the Gakhar district, situated about 72 miles east of the River Sindh. It lies in 33° 28' N., 73° 25'E., and proceeded via Chakowal and Pind Dadan to Jalapur.

According to Babur's memoirs,³⁹ it seems that two different roads from the River Sindh reached the Jhelum River. Babur distinguished them as the upper and the lower roads. From the River Sindh to Hasan Abdal both routes were same. After Hasan Abdal, the upper route proceeded by the Margalla pass through Rawalpindi and Mankiala to Dhamak and Bakrala. From Bakrala one can follow a footpath to Jhelum River, which crossed the Tila, range pass about 6 miles towards the northeast of Rohtas. Then it descend by the Riverbed of Kahan River through a gap in the pass of Tila range to Rohtas and then to over an open plain to Jhelum.

According to De Laet the distance was 145 Kos. In Tavernier's record it was 119 Kos. Rennell gave the distance of 138 Kos, one Kos being equal to 4,995 yards.⁴⁰

³⁸ Ibid.

³⁹ Baburnama, 390-33.

⁴⁰ De Laet, 55; Tavernier, I, 76-7; Rennell, 85.

(b). Attock – Kabul Route:

The route from the Attock fort generally run's westward. On the opposite bank of the River Sindh and facing the Attock fort was Khairabad in the Pakli region. The Pakli plain lies east of the Sindh River, through which ran the main road to Kashmir. The Pakli town was situated on the left-hand side of the King's highway.⁴¹ While approaching towards the north, after a short distance, the route crossed a small stream, also known as the Landai River. The River, after one Kos or half farther to the east, falls into the Sindh River reached Narai, a large village on the banks of Kabul River. In 1667, Aurangzeb's army under Amin Khan was sent to suppress the Yusufzai's rebellion. The army crossed the Kabul River at Nari (Narai) and marched on towards the Yusufzai's territory.⁴²

The route from Narai took the northwestern direction, inclining north to Shaidu, a large village the banks of Kabul River. Akorah, where the two roads diverged, was the next stage of the route. The road on right crossed the Kabul River at this point and ran towards Doaba, Hashtnagar, Shahkadr, Buner and Swat. The left branch that was known as the 'Shah Rah' went to Peshawar via Naushera, Pabbian (Pabbi), Shahbad and Chamkani. Robert Bryan writes, "*A road already old when the Mongol emperors came down from Kabul, a road that had been both bloody and peacefull.*"⁴³ The road

⁴¹ Raverty, 33.

⁴² Sarkar. J. N., "History of Aurangzeb." Calcutta, 1928, III, 227.

⁴³ Bryans, J., "Gateway to the Khyber," London, 1959, 88-9.

from Peshawar to Attock was straight and in 1505, Babur marched to Hindustan by the same road. Although instead of crossing the River Sindh, he moved to Kohat.⁴⁴

It appears that there was another route from Nilab⁴⁵ to Peshawar by the pass of Sandh – Basta that Aurangzeb followed. It was an extremely rugged and difficult track, and without entering the city, he marched by the regular stages to Kabul.⁴⁶ According to Rennell, *“The heights of Sindia Busteh are steep, craggy and tremendous, and are to be crossed between Deenkote by those who go from the former to Cabul.”*⁴⁷

From Peshawar that has been the portal to Khaibar pass. According to Ernest fox, *“The great caravan ser-i at the end of the trail that comes down from the Khyber... the end of all the trails into the northwest from the plains of India – therefore the trading centre. From Peshawar to Kabul the road runs west across the plain that bounds, the Kabul River,”*⁴⁸ to Kabul there were three distinct routes, all of them leading the vast chain of mountains to the west. They are the Khyber, Abul Fazl mentioned the Khyber route as one of the five routes led to the province of Kabul. It was so difficult to travel before

⁴⁴ Baburnama, I, 230-1.

⁴⁵ The Nilab (Blue water) is the upper Indus and not the Behat or the Kabul River as De Laet and Other European writers wrongly suppose. Even in then sixteenth century a city named Nilab stood on the east bank of the Indus River at a small distance below its conflux with the Kabul River. Perhaps it was even older than that. Ptolemy writes of a city of nearly the same name ‘*Nilaub*,’ on the opposite bank of the Indus. Rennell writes, *“The city of Attock in a manner succeeded Nilab, their situations differing but little. It may be conceived from the apparent etymology that the city originally took its name from the river which was more generally known by the name of Nilab came to be applied also to an adjunct river, that is, to a part at least (between Attock and Peashawar) of the river Cabul.”* Rennell 95-6; Monserrate. *“The Commentary on his Journey to the Court of Akbar,”* translated by Hoyland, annotated by S. N. Bannerji, Oxford, 1922, 121-22.

⁴⁶ Elliot & Dowson, *“The History of India as told by its own Historians,”* 8 Vols. London, 1867-68. VII, 95.

⁴⁷ Rennell, J., *Memoirs*, 114.

Akbar that even horses and camels found it difficult to negotiate. Akbar with the aid of his superintendent Qasim got it improved to the extent that, "*now wheeled carriages could pass over with ease.*"⁴⁹ The Abkunar or Kuner River, and the Krapper route. According to Charles Masson, "*There were numerous ascents and descents and lofty mountains on the route.*"⁵⁰ These are the Spinghar range and the Tirah range. They show themselves both to the right and to the left on the right-hand. Nearby is the mountain of Tahtara, and the Kahibar pass lies further to the left-hand.

Jamrud the next stage on this road was sandy and stony.⁵¹ Jamrud 11 miles from Peshawar. The Sikhs, who called it 'Fatehpur', built the present fort at Jamrud.⁵² In the nineteenth century, the fort guarded the then Indian entrance to the Khyber route. Three routes diverged from Jamrud.⁵³ The first was the left – hand route known as the Khyber route.⁵⁴ The second was the right – hand route known as the Tahtarah or Tartara route. Tartara is one of the passes of the Khyber range, to the north and near to the Kabul River.⁵⁵ It was more difficult and longer than the Khyber route. The route again meets the '*Shah Rah*' at Bulak or Bulagh.

The Tartara route writes Masson, "*leaves the Jalalabad plains at Daka, and proceeds over very difficult and rugged mountains to Peshawar, a distance of some 32 miles.*

⁴⁸ Fox, Ernest. F., "Travels in Afghanistan," (1937-38), New York, 1943, 2, 4; For the ancient route see "Trade and Trade Routes in Ancient India," 8-12.

⁴⁹ Ain, I, 590.

⁵⁰ Masson. Charles in Forrest, G.W., "Selections from the Travels and Journeys," Bombay, 1906, 160.

⁵¹ Skyes, P., "Afghanistan", London, 1956, II, 25.

⁵² Fattehgur, according to Burnes. Burnes, A., "Cabool being a Personal Narrative of a Journey to & Residence in that City," London, 1842, 126.

⁵³ Raverty gave only two routes. Raverty, 37.

⁵⁴ For this route see Masson, C., "Narratives of Various Journeys," London, 1842, 166-89.

⁵⁵ Raverty, 37.

emerging into that valley 9 miles north of Jamrud. Following the course of the Kabul fort after 4 miles, the road then ascends the mountains to a plain, 6 miles wide, from here the Abkhana route branches off. Further 4 miles, at Luadagi, a path leads off into the Khyber, while the Tartara road passes over a succession of steep hills to the Peshawar valley, winding round the Tartara peak. The Abkhana route leads to ferry over the Kabul River, 12 miles above the point where the River enters the Peshawar valley. The passage over the River is made on rafts of inflated bullock's hides, where it is 120 yards wide, and very rapid. The precipices rises from the River banks to a height of 2,000 feet, and the road goes up the Haider Khan Mountain, whence the distance is 10 miles to the Michni fort near Peshawar, over spurs of the Mohammad mountains, ... north of the Abkhana is the Karapa pass, which leads from the Michni fort to a district on the Kabul River called Gushtia, about 25 miles below Jalalabad."⁵⁶ The third route started from Jamrud and ran south to Kohat. From Kohat onwards the road runs in the northward direction to reach Peshawar.

Babur on the other hand took a rather circuitous route towards the southern direction. He did not cross the Sindh River; in fact he marched from Jamrud, forded the Bara River and reached near the pass in Muhammad Mountain. After crossing them he reached Kohat.⁵⁷

Jamrud fort, which is only three and a half miles east of the mouth of the Khyber Pass two routes,⁵⁸ diverged through the Khyber Mountains, about one Kos apart, which met again near Ali Masjid, which is only 8 miles from the entrance of the Khyber Pass. De Laet described this part of the way as dangerous for travel.⁵⁹

The right-hand route was called the '*Kotah of Shadibeg*'. The left-hand route ran by the Jam's Riverbed near the Kadam village.⁶⁰ The Ghari or tower of Lal Beg was the next stage on this route. Running westward, the route reached the Landi Khana pass and then extended to Daka,⁶¹ on the southern bank of Kabul River, and on the western mouth of the Khyber Pass. Both sides of Daka are surrounded by bare rocky hills. From

⁵⁶ Masson, 222.

⁵⁷ Baburnama, I, 230-1.

⁵⁸ The India of Aurangzeb, CII.

⁵⁹ De Laet, 170.

⁶⁰ Raverty, 39-40.

⁶¹ Wood, James., "Journey to the Sources of the River Oxus," London, 1872, 103; Fox, 8.

Daka one can also go along the fertile lands of the Kabul River to Ambarkhana (Abkhana) where a branch road leads to take this route as being the safest. Leaving the Jalalabad road to the right, one can carry on nearly due west over the rough broken ground that borders the range of safid koh (Spengher). From Daka two other routes emerged to Peshawar. The first lies to the north of Khyber, and the other extremely difficult and a mere footpath follows the Abkhana route to the Shalman valley, on the left hand and the Khyber Darrah on the right.⁶²

After Daka the Khyber route leads to Baswal.⁶³ The road from Baswal entered the wide valley⁶⁴ and then it descends to Barikab,⁶⁵ thence to Aliboghan from here the road went through jungles. It was a stony road that became sandy near the Bhatikot Pass. Because of the red-rock mountain the red pass or defile is called Ilahbaghi and also Surkh-Diwar (Diwal), and Koh-i-sang-i-surkh.⁶⁶ The Jalalabad town was reached after this Pass. Jalalabad is 7-½ miles northwest on the southern bank of the Kabul River. It is a large district in Afghanistan; Badakhsa, bound it on the east by Chitral, on the south by Afridi Tirah and on the west by the Kabul province. The Kabul basin drains the district. Emperor Akbar founded Jalalabad town. *“Strategically Jalalabad controls the Kabul-*

⁶² Raverty, 43-4.

⁶³ Skyes, II, 25note.

⁶⁴ In hot season the valley was full of 'Simoom' (or Samum, small, and extremely hot and dry local wind in Arabia and the Sahara regions, its temperature often reaches 55°C/ 130°F, and its humidity sometimes fall under 10 percent. Intensive ground heating under a cloudless sky causes causes the Samum, the Arabic word means "poison wind" and refers to the wind's tendency to cause heat stroke.). "The New Encyclopedia Britannica," Chicago, 1987, vol. 10, 383.

⁶⁵ Skyes, II, 24-5.

⁶⁶ Raverty, 47-8.

*Peshawar highway but it also dominates the entrance to Lamghan- the Gateway to Kafiristan (Nuristan).*⁶⁷

Several routes diverged from Jalalabad. One of them went to Lamghan, a gateway to Nuristan and the Kunar valley. From here the first one led from where the road goes to Nuristan, and the other went to Bajaur, the ancient highway from Central Asia to India. From Torkham to Jalalabad the road runs through a broad corridor between two Parallel snow covered ranges, the Hindukush on the north and the Safed-koh on the south. This corridor, beyond Jalalabad, splits into the two valleys of the Kabul River and Surkhab River.⁶⁸

The road from Daka to Jalalabad runs nearly parallel to the Kabul River through a tract of hilly country between two ranges of mountains, stretching from west to east. From Jalalabad to Nangrahar the road was very bad and tiresome. The Adinapur road according to Babur is the Juishahi or Adinapur. It was "*the middle point of Upper and lower country of Kabul.*"⁶⁹

Nangrahar onwards this road went over the stony desert and a low flat plain to Sultanpur, Charbagh, and then to Fatheabad.⁷⁰ Further the road lays Nimla and Safed

⁶⁷ India of Aurangzeb, CIII; "Imperial Gazetteer of India," XIV, Oxford, 1908, 11, 13; Fox, 8.

⁶⁸ Toynbee, A. J., "Between Oxus And Jumna," London, 1961, 48; The right bank tributary of Kabul river Surkhab falls in to the Kabul, few miles west of Jalalabad. The stream here is of considerable volume and about half a mile broad. The river flows to about three-fourth of a mile south of the Jalalabad town. India of Aurangzeb, CIII.

⁶⁹ Baburnama, I, 207, 229; Raverty, 48-53.

⁷⁰ Two routes emerged from this place. Raverty, 50, 55.

Sang, where the road entered the Gandmak valley.⁷¹ From Nimla, the road “*enters a minor pass, a thousand feet higher at Surkh Pul and climbs another higher one near Jagdalak, then again, after a slight descent, it reaches a third pass before one reach the Canyon of the Khurd Kabul, and turns north down the Narrow defile,*” Noted Fox.⁷² It then proceeded to Surkhab River, which joined the Kabul River at Darunta in southwest, and the ancient route from Jalalabad to Kabul ran up that way.⁷³

From Safed Sang to Surkhab River at Darunta, the track was very uneven and very difficult. John wood describes this route as, “*The road continued full of ascents and descents over large tracts of barren surface, interspersed with small fertile valleys, till we reached the Surkh Rud or red river. The bed of this stream is here narrowed by two ridges of blue slate that rise like walls on each side of its deep-cut channel. In 1606, a fine arch was thrown across by ‘Ali Mardan khan, it still remains, after a lapse of two centuries, in good preservation, a monument of his public spirit.*”⁷⁴ Thence the route went to Jagdalak had to cross the stream often

“*From Surkh Pul to Kotali, the road lies through a barren and inhospitable country. It is a wide waste of bare and naked low sandy hills, encompassed by high mountains, especially on the south. The road scrambles up and down steep activities and through narrow defiles, bounded on each side by steep rocks.*”⁷⁵ Then the road that is full of ups

⁷¹ From Fathhabad to Gandmak it was a very bad road. Skyes, II, 50.

⁷² Fox, 8.

⁷³ Toynbee, 130

⁷⁴ Wood, 106-7.

⁷⁵ Raverty, 59.

and downis went towards Barikab via Farmanbeg and Rud-i-katasang, entering the Tizin valley and crossed the Tizin. It then passes through the six miles long pass to Khurd Kabul and reached Kuhrd Kabul. Babur followed the route in 1507.⁷⁶

Jalalabad-Kabul road is known as Khurd Kabul caravan track. This route via Khurd Kabul pass is longer and more torturous. After crossing Khurd Kabul and the Logar River, the road proceeded towards Butkhak and then to Bala Hisar. Vigne, a traveler of nineteenth century, mentions three routes from Butkhak to Peshawar, Khurd Kabul, Sokta Chinar, and Lataband, which met at Sei Baba. In them the one from Khurd Kabul was the longest.⁷⁷ The nearly 3-mile road from Butkhak to Kabul is fine and straight one. It led over cultivated fields to the base of the lower ridge that separates Kabul from Koh-i-Daman.

Babur gave a good description of this road. In 1525, Babur marched towards Hindustan, his main stages were Yak-langa – Dih-yaqub (a stream of Kabul River) – Butkhak – Badam Chashma – Barikab – Gandamak – Bag-i-Wafa – Qushgumbaz (bird's dome) – Garm Chashma – Yadabir – Alimasjid – Begram (modern Peshawar) – Siyah-ab River – Kabul river – Sindh River – Haru River. It appears that Babur had taken the road by Parhala to Lahore. He writes the following reason for following this route. "The Rainfall had been somewhat scant in the plains, but seemed to have been

⁷⁶ Babur Nama, I, 341.

⁷⁷ Vigne. G.T., "A Personal Narrative of a visit to Ghuzni, Kabul and Afghanistan," 2nd edition, London, 1843, 174; Burnes., "Cabool", 79-80.

good in the cultivated lands along the hills skirts; for these reason we took the road for Sialkot along the Skirt-hills opposite Hatikakar country (Parhala).”⁷⁸

Babur gave three routes from Lamghan (Lamghanat) to Kabul:

- (a) From Quruq-sai one went through the Dir Pass, crossed the Baran River at Bulan ferry station, and ran into the Lamghanat. In 1508, Babur followed the road for the second march to India;
- (b) The second route went through Qara-tu, below Quruq-sai crossed the Baran River at Aulughnur and reached Lamghan by the Bad-i-Pich pass. And;
- (c) The final from Nijr-au north of Kabul in Kohistan, traversing Badr-au (Tag-au) and Qara-Nakariq and running through the Bad-i-pich pass.

In the note Beveridge describe these routes more explicitly. He writes that of the three roads, one crossed Mandarwar, the second, Alishang, a little below the outfall of Tizin River, and the third starts from the route between Kabul and Taq-au.⁷⁹

Jahangir's itineraries:⁸⁰

Lahore, Dilamiz garden, Harhar, Jahngirpur, Chandala (Jandiala), Hafizabad, Gujarat (the Chenab River has to be crossed here.) Then Khawaspur, Rohtas Fort The fort is situated in 33° N., 73° 20' E., and is 107 miles north, northwest of Lahore. Following stage were Pila and Bhakar (situated in the middle of the Riverbed of Kahan). Now the place is known as Bakrala. According to Jahangir, “*The entire way from Pila to Bhakra*

⁷⁸ Baburnama, I, 230, note2, 445, note2, 452 & note2.

⁷⁹ Ibid, 209-341, 343, 421, & 425

⁸⁰ Jahangirnama, 68-86;



TH-11289.

Dis
954.0258
S179
MU

*I came down a river bed that had some running water and Oleander flowers like peach blossoms, very colourful and in full bloom.*⁸¹ After Bakrala were, Hatya, Pakka, Khor (means a gully or a break in the landscape.)⁸² Rawalpindi, Kharbuza where according to Jahangir, the Gakhars at some earlier time had constructed a dome there and took a toll from passers-by. Since the shape of the dome bore a resemblance to a Melon (Kharbuza), it became known by that name.⁸³ Kalapani, Baba Hasan Abdal,⁸⁴ Amrohi,⁸⁵ and Attock Fort, stand on the bank of Nilab River.

During Jahangir's time the place was known as Attock Banaras. Still the name prevails in the neighbourhood. Banaras is a small ruinous town, about a mile to the east of the fort where the tomb and the garden of Bairam Khan (Bairam Beg, the guardian of minor Akbar), are still very much visible.⁸⁶ After crossing the Nilab River, Jahangir reached the bank of the River Kama,⁸⁷ and then proceeded to Bara sarai, Naushera,⁸⁸ opposite it, on the other side of the Kama River, is a fortress Zayn Khan Koka Built when he was assigned to subdue the rebellion of Yusufzai. He named it Nawshahr.

The next stage along the route was Daulatabad, Sardar Kahn garden, in Peshawar, Jamrud, Khyber Pass, Alimasjid, De Laet mentions that, *"This part of the way is*

⁸¹ E & D., IV, 308; Jahangirnama. 72.

⁸² Ibid, 72; Khor of Elliot and Dowson, lies near the Manikala tope. E & D, IV, 309 & note3.

⁸³ Jahangirnama, 78.

⁸⁴ Ibid, 79; Finch, 168.

⁸⁵ Amardi according to Elliot and Dowson, E & D, IV, 311.

⁸⁶ E & D, IV, 312, & note2; Raverty, Notes, 32.

⁸⁷ Kama also Known as Kuner. The name Kuner is derived from a fort nearly opposite to Jalalabad, at the Junction of the Kuner and Kabul River. But the lower part of Kabul River, which Jahangir called the Kama, is known as the Landi or Landai. E & D, VI, 313 & note2.

⁸⁸ Jahangirnama, 84.

rendered dangerous by enemies of the King, who can bring together ten to twelve thousand horsemen."⁸⁹ Gharibkhana, Batsawal, Surkhab, "Here is small river is crossed whose water is reddish and is said to be beneficial to stomach complaints." says De Laet.⁹⁰ At Jagdalak, Jahangir complained about the rockiness of the track. From here he proceeded to Barikao and Yurt-i-Padisha, and finally Shahraha garden in Kabul.

Stages of De Laet:⁹¹

Lahore – Kacha Sarai – Aminabad (The River Ravi had to be crossed to reach the town.) – Chaim Gakhar – Gujarat – Khawaspur – Rohtas – Khurd – Hatiya – Pakka – Rawalpindi – Kalapani – Hasan Abdal – Attock.⁹² – Peshawar – Ali Masjid – Basawal – Bariku – Ali Boghan (on the Kabul River) – Jalalabad – Charbagh Khurd – Charbagh Kalan – Nimla Bag – Gandamak – Surkhab Sarai – Jagdalak – Ab-i-Barik – Doaba (lies across a mountain region to Butkakh)⁹³ – Butkakh – Bikrami – Kabul.

Tiffenthaler's Stages:⁹⁴

Tiffenthaler gave three routes from Lahore to reach Kabul;

- (i) Lahor – Shahdara – Shah Daulatpur (Shah Daulapur) – Eminabad – Wazirabad;

⁸⁹ Ibid, 56

⁹⁰ Ibid, 56. Finch, 168

⁹¹ De Laet, 55-7

⁹² The Journey from Lahore to Attock covered the distance of 145 cos. De Laet, 55-6.

⁹³ Finch, 168.

⁹⁴ Tiffenthaler, CF., "India of Aurangzeb," CII, CIII.

(ii) Lahor – Firuzabad – Pool-i-Shah Daula – Eminabad – Cutcha Sarai – Ghakkar Chima – Wazirabad;

(iii) Lahor – Fazilabad – Pool-i-Shah Daula – Eminabad – Ghakkar Chima – Wazirabad;

After Wazirabad – Gujarat – Khawaspur – Jhelum River – Kohtas – Ckokuha – Serai-i-Jalal Khan – Puka – Rawat – Rawalpindi – Kurja – Kalapani – Hassan. Abdal – Dingaram Serai – Mandrota – Atak – Khairabad – Neri – Akora – Gidrab – Naushara – Shahbad – Juisnagar – Peshawar – Jamrud – Ali Masjid – Landikhana – Haftchah – Gandamak – Surkhab River – Jagdalak – Sher-Dahan – Tazi – Khurd Kabul – Budakak – Kotalieklang – Kabul.⁹⁵

According to Tavernier the distance from Attock to Kabul was 125 kos. De Laet puts it at 151 Kos.⁹⁶

(iii). Lahore – Multan Route:⁹⁷

The road from Lahore to Multan runs in southwesterly direction. Abul Hasan, was the first stage, followed by Aurangabad, Katpur, Guzar Sarai, Chak Sunder, A small town Nowsahra, that is situated at 42 miles southwest of Lahore. Further on the road lies

⁹⁵ Finch Says, "*It is a great and faire citie... with two Castles and many sarrayes.*" Finch, 168; "*As a city, Cabool owes its importance more to its position, which is central for commerce, than to its being the seat of a government; ...Invigorated as it is by this advantage of position, there are few places in the East better adapted for a metropolis.*" Burnes. A., 369; Roe, "The Embassy of T. Roe to the Court of Great Mogul, 1615-19, as narrated in his Journal and Correspondence," edited by w. Foster, two volumes, Haklyut Society, London, 1899, 491.

⁹⁶ Tavernier, I, 76; De Laet, 56.

⁹⁷ India of Aurangzeb, CVI, CVII, CVIII & 170; De Laet, 69-70.

Mopalkee, Satghara, Kamal Khan Kumalwala, Chauki Fatu (Jhook), Harappa (lies 30° 38' N., 72° 56' E.), Chich Watni, Ali Shawa (Sahwa Gureeb or Chak Ali Shah), Talumba, Sard, Khalid (Kulalpur or kanpur, according to De Laet), Mandanpur – Multan.⁹⁸

The total distance between the two places is estimated at 120 or 160 miles.⁹⁹

(iv). Lahore – Kashmir Route:¹⁰⁰

From Lahore to Gujrat the road is same as in the Lahore – Attock route. From Gujrat, the first stage was Daulatnagar 12 miles north of Gujrat, then fort of Kathra, which was built by Isstiar khan. Preceded by Bhimbar, on the western bank of Bhimbar River, Sahatabad and Chauki Hati, where according to Tiffenthaler was a cave with two elephants carved on the rock.¹⁰¹ Ahead on the road were Nowshera, 16 miles north of Bhimbar, on the western bank of the Tawi River, Changiz Hati (Chingas Serai), Moradpur, Rajaor, Thana (Thana Bazar). From Thana the route turns to north-northeast to Baramgul, author of Chahar Gulshan writes of a Waterfall here.¹⁰² The remaining

⁹⁸ The town of Multan is situated in 30° 12' N., 71° 31' E., four miles from the Chenab River. Its position on the frontier has made it a place of importance from earliest days, but also exposed it to continual devastation by various passing hordes. It was similarly a caravan centre. Pelsart, 31; Writing in 1636 the Surat factors say, "*the accustomed manner of conveyance of goods bought in Agra by Synda (sind) marchants being first transported to Lahore or Multan in carts and thence by river.*" E.F.I (1634-36), 192; Henry Bornford wrote in 1639, "*In Multan are made chints, course (coarse) and white cloth, the former in same quality and latter not much. Hither is likewise brought course sugar and other commodities sold to the Tuttah (Tatta) merchants.*" Ibid (1637-41), 136.

⁹⁹ De Laet, 70; India of Aurangzeb, CVIII & 170;

¹⁰⁰ India of Aurangzeb, CI, CV & CVI; De Laet, 57.

¹⁰¹ India of Aurangzeb, CV.

¹⁰² Ibid.

stages were Poshana, Serai Ali Mardan Khan (Serai Muhammad Kuli), Serai Sokhta, Hirpur, Shadimarg (Shajamarg), Khanpur, Srinagar.¹⁰³

From Rajour there was another route to Kashmir, which run as, Rajor – Saifabad – Poonch – Aliabad – Oori Darah – Bhamiar – Baramula – Srinagar

Tiffenthaler also mentioned about a route that was generally followed by merchants; From Nazibgarh (a fort built by Afghan Nazib), Tajpur, Gualr, Nahn, Bilaspur, from here the road enters into Hilly region, Jala, Zoali, Haripur, Markota, Bissuli, Badroa, Kishtawar, Srinagar. He quotes one more route from “Shahjahanama” which runs as, Bhimbar – Chuki Hati – Nowshera – Changiz Hati – Rajawar – Thana Baramgulla – Poshana – Serai-i-Muhammad Kuli – Serai Sokhta – Hirapur – Shajamarg – Khanpur – Srinagar.¹⁰⁴

(v). (A). Lahore-Qandahar Route (via Multan):¹⁰⁵

Till Multan, the road ran in the same direction. Then onwards Petto-Aie. This village is found on the routes of other early travellers, and is shown on early maps just across the Chenab River opposite to Multan, about where Dera Ghazi Khan stands. It appears to have been a regular halting-place for travellers crossing the Chenab.¹⁰⁶ Alam Khan,

¹⁰³ “The city is strong, seated on the rive Bahat (Bihat or Jhelum); the countrie is a goodly plaine, lying on the mountains, some 150 cos in length and 50 cos in breadth, abounding with fruit, graine, saffron, faire and white women. Here are made the rich pomberies (Shawls, pamri), which serve all the Indians” Finch, 169; Roe, 491.

¹⁰⁴ India of Aurangzeb, CVI.

¹⁰⁵ Total distance from Multan was 181 cos. DeLaet, 69-70; Marique, S.F., “Travels of Fray Sebastien Manrique” (1629-1643), Hakluyt Society, 1927, II, 251-58; Purchas, I, 521.

¹⁰⁶ Manrique, II, 254note.

Sangar Pass, Sang-i-Nuskan Pass, Chotiali, Katzai (Chatza), is located just across the Indus beyond its right bank. It lies a little northwest of Multan, between the Indus River and Dukkeen (Duki), and according to Steel, across the "Lacca" River.¹⁰⁷

Ducki or Duki, south of Loralai. It stands about 4,000 feet above sea level. *Duki* or *Dugi* means a desert and stands for bare tracts. Babur writes for the Afghanistan hills, "*They all alike, all low, scant of vegetation, short of water. tressless, ugly, good for nothing. Their people take after them, just as had been said, 'a narrow place is large to the narrow-minded'.*" According to Thomas Best (1614), "*Duckee, small square fort of mud; Durues or 'gates of the mountains', being narrow streets with steep rocky sides,*"¹⁰⁸ Secot (Sih Gotah) or Sih-kot would mean three "fortified or walled villages." Steels calls it, "*Secota or three castles, because of three villages triangle wise,*"¹⁰⁹ then through Khoja Amran Mountains to Pesinga (Peshingaon). Thomas best writes of this place as, "*The Agwans (Afghans) insolent; Pesinga, a small village and mud fort, near Duckee, Candaher.*"¹¹⁰

The Khojak Pass lies just beyond it. The Mandarra Pass was more to the north, above the Khojak Pass. There were three passes (Kotal) lying en-route Pesinga to Kabul. They are the Kotal-i-Zakir, Kotal-i-Gwajar and the Kotal-i-Khojak or Khojak Pass. Beyond the Khojak lies Mard-Kalah, and Qandahar. In De Laet's opinion, "*The mountainous parts of this kingdom of Kandahar are inhabited by fierce tribes called Agwanes (Afghans) and Petanes (Pathans), notorious for brigandage and atrocities; and though,*

¹⁰⁷ Ibid, 256note.

¹⁰⁸ Ibid, 257note; Purchas, IV, 124.

¹⁰⁹ Manrique, II, 257note.

¹¹⁰ Purchas, IV, 124.

*through their fear of the Mongols and their zest for trading (for they are well off for cattle and agricultural produce), they are said to have begun to treat travellers a little better during bodies of strangers, drag them away into the recesses of the mountains, and enslave them: they even mutilate their captives to prevent their escaping.”*¹¹¹

(B). Lahore-Qandahar Route (Via Kabul):¹¹²

The stages from Lahore to Attock and then to Kabul are same as in (ii). From Kabul onwards the routes bend in the southward direction. The first stage was Sufed-Sang, Char-Asia, Laghman, Deh-Nau, Danbara, Haft-Asia, Shash-Gaon, Sher-i-dana (a mountain pass), Dera Nani, Karabagh, Mausoleum of Sultan Mahmud, Ghazni Fort, Dera Nani, Karabagh (Farabagh), Barik-Diwar, here lies the frontier of Qandahar. Shastal, Ab-i-Tazi, Sar-i-Asp, Kalat Ghilazi, and Qandahar.¹¹³ _____

Route according to Tavernier: Kabul – Shignau (Shashgaon) – Karabagh – Mansur – Ab-i-tazi – Kalat-i-Ghilazi – Shahar-i-Safa (city of purity) – Qandahar.¹¹⁴

¹¹¹ De Laet, 70.

¹¹² India of Aurangzeb, CIV, CV.

¹¹³ Qandahar is comparatively a level country, of which the heart is formed by the Helmand River and its tributaries. A few forts have been built on the river, mainly for military purposes, to guard the fords, to protect caravans, and to afford resting places to troops on the march. Patches of cultivation and walled hamlets dot the riverbanks in an otherwise desolate wilderness. Purchas, I, 519-28; In an age when Kabul was a part of the Delhi empire, Qandahar was India's indispensable first line of defence. During seventeenth century, Qandahar was even more important as a gateway of commerce than as an outpost of the empire. In 1615, Steel noted that fourteen thousand camels annually passed into Persia by this route. Ibid; Tavernier, I, 74. Manrique, II, 261 & note.

¹¹⁴ Tavernier, I, 74.

The Routes of Western India:

During the Mughal rule the region of Gulf of Khamabat became an important and indispensable part of the empire. There were two major routes from Surat to Agra: one was through Ahmadabad and Ajmer, and the other via Burhanpur.

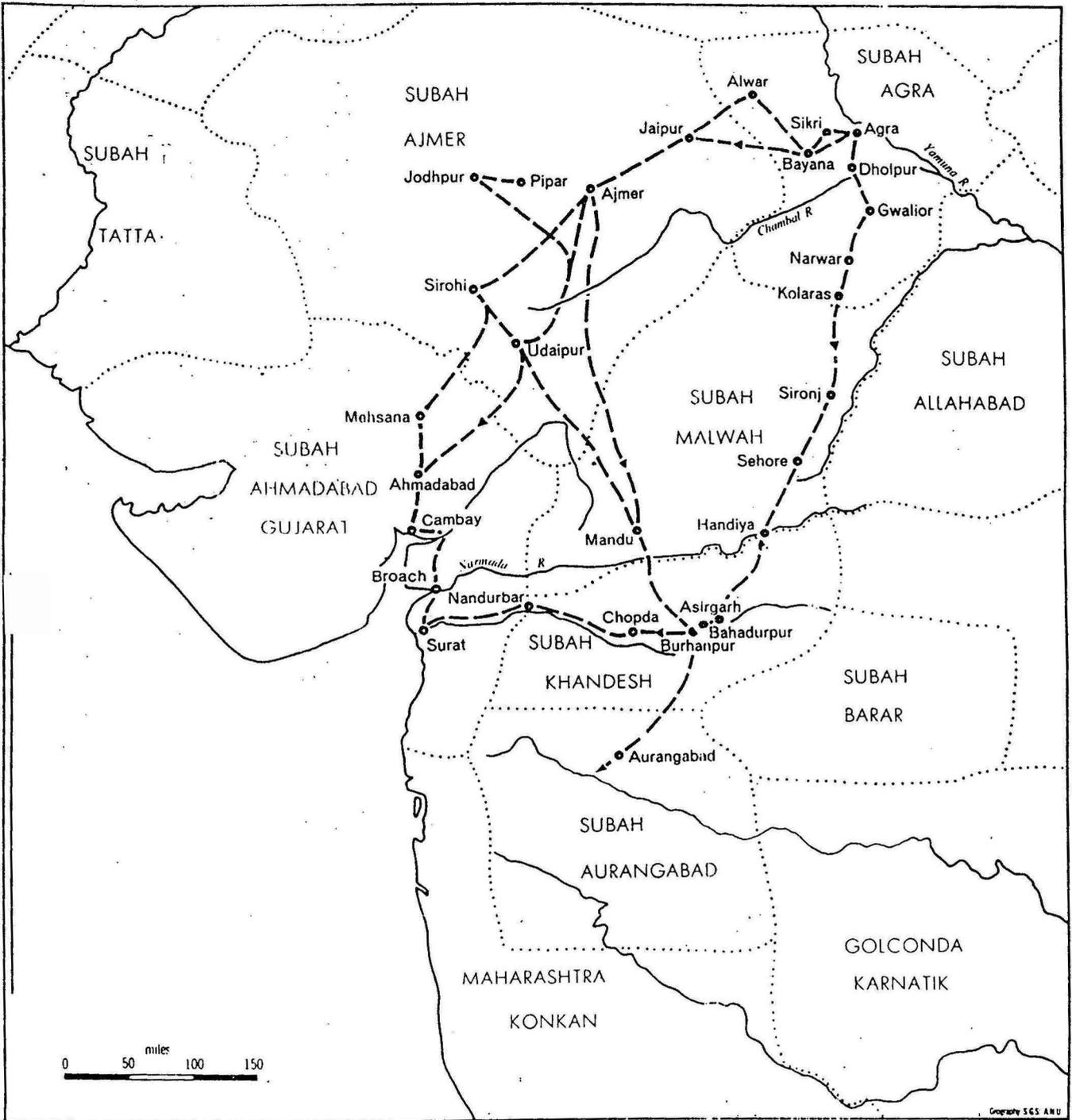
(i). Surat to Agra (via Burhanpur):¹¹⁵

The alluvial depression of the Tapti River offered an easy and natural passage from Surat to Burhanpur. The route of this first section has, no doubt varied but very little during the Mughal Period. The stages of the route were, Khumbaria, Bardoli or Barnoly, a large town situated 19 miles from Surat. Here Purna River has to be crossed. Tavernier describes Balor, a large village situated close to a tank and further states, "... is about a league in-circuit, and upon the margin of it there is a good fort, however, is not kept in repair." He further tells about a stream near by. He wrote, "Three-quarter of a league on the near side of the village you pass a rivulet by a ford, but with so much difficulty, because there are many rocks and stones under the water which may overturn a carriage."¹¹⁶ Kerkoa or Begam ki Sarai, a sarai built by the order of Begam Sahib, the daughter of Shahjahan, as a work of charity.¹¹⁷ De Laet wrote, "The large village of Curca (Kirka) lies on the north side of the river."

¹¹⁵ Tavernier, I, 40-53; Mundy, II, 39-65; Monserrate, 5-27; Finch, 135-46; India of Aurangzeb. CXVI-CXVII; Jourdain, 141-53; Salbancke, Early Travels, 82-4; De Laet, 28-35.

¹¹⁶ Tavernier, I, 40; Mundy, "The Travels of Peter Mundy in Europe and Asia 1608-67," edited by R. Temple, TRAVELS IN ASIA 1628-34, Haklyut Society, Series II, London 1914. II, 40; Roe, 87.

¹¹⁷ Tavernier, I, 41; Finch, 136.



Agra-Surat route via Burhanpur and Ahmadabad

Narayanpur or Navapoura, situated 42 miles from Bardoli. Tavernier says that, "a well known place for Basmati rice, when you wish to make an acceptable present to any one in Persia, you take him a sack of this rice."¹¹⁸ Between Kerkoa and Narayanpur Tapti River has to be passed. Then was Dhaita, where there was a custom-house by the river (Sarpini). Finch said it was, "A great towne; in the mid-way you passé a stony troublesome river. This towne hath a castle, and is almost encompassed with a river, seated in a fertile soyle."¹¹⁹ Baadoore, according to De Laet says, "*Badur a foul city and a nest of thieves.*"¹²⁰

Nandurbar or Nasarbar, is one of the oldest town in Khandesh region. Jourdain says, "*A great city of the Banians (Banias) called Netherberry, where is a great basar or market, and all manner of baser wares to be sold, as pots, kettles, candel sticks, and caldrons of four foot long, shirts of male, swords and buckles, lances, horses in armour of arrow proof, camels, and all manner of beasts. There is also great store of cotton wools, cotton yarn, pentathoes, calico lawnes, shashes for turbans for their heads, limmons, potatoes (sweet potatoes, or possibly yams), three pound for a penny, and all manner of drugs. And surely cloth would be a very vendible commodity there, for course felt is there extreame deare. Also gold and silver is there very plentifull, and there are very good people to deal with all.*"¹²¹ Nimgul, "A beastly towne;" wrote Finch, "*with thievish inhabitants and a dirtie castle; a deep sandie way neare the*

¹¹⁸ Ibid.

¹¹⁹ Mundy, II, 41; Finch, 136.

¹²⁰ De Laet, 33.

¹²¹ Jourdain, "The Journal of John Jourdain," 1608-1617, edited by W. Foster, Haklyut Society, Series II, Vol. XVI., Cambridge, 1905, 143; Finch, 137.

towne.”¹²² Sinkheda or Senquera or Tekwara, Thalner, where again the Tapti River has to be crossed. Finch complained about the “*thevish way*.” The Chopra or Chopda, was the famous mart in seventeenth century.¹²³ Sankil, Aravad, Raver, Bhadurpur, which was a large town, was situated a mile from Burhanpur. This was also a customhouse where the Burhanpur customs had to be paid.¹²⁴

After the conquest of Faruki Kingdom by Akbar in 1599, Burhanpur became the chief town of the Mughal province of Khandesh. Mundy says, “*A fine castle, Lal Qila, standinge on a hill towards the river side. The Bazare or market place which joynes to the castle is very faire and spacious, plentifully stored with all provisions, beinge supplied with all thinges from all parts, farr and neere.*”¹²⁵ Tavernier on the other hand gives a very long description of the commercial importance of the place. He writes, “*There is a considerable trade in this town ...and in all the province an enormous quantity of very transparent muslin are made, which are exported to Persia, Turkey, Muscovie, Poland, Arabia, grand Cairo, and other places.*”¹²⁶

The distance between Surat to Burhanpur, according to Mundy was 170 Kos, and he took 17 days to accomplish the journey and had three halts of a day each. Finch did the journey in 16 days with two halts of two days each, and he makes the distance 152 Kos.

¹²² Jourdain, 143note; Finch, 137.

¹²³ Mundy, II, 46note; Finch, 137.

¹²⁴ Jourdain, 144; Tavernier, I, 42.

¹²⁵ Jourdain, 145; Mundy, II, 50; Pelsart, 37.

¹²⁶ Tavernier, I, 42; Terry, Early Travels, 293.

Jourdain took 19 days to reach Burhanpur with one halt of four days, and his estimate is 166 Kos. Whereas Tiffenthaler suggested that it was a 15 days journey or 150 Kos.¹²⁷

After Burhanpur Borgaon, the crossing point of Tapti River, then Pander, Balki (Barh-ki) Sarai, Nau Sarai, Sehora, Chainpur, Charwa, Bich-ola, Handia, situated on the River Narbada was an old town. Mannucci said, "*We came in six days (from Burhanpur) to a river called the Narbada, where there was a town called Andia; there was also on the bank of the above-named river a little fort situated at the crossing place.*"¹²⁸ It fell in when the Mughal officials left the place about 1700, and a better road was made over the Vindhyan range, via Indore.¹²⁹

The old Mughal road ran from Tumri, Toolmedan, Nau Sarai, Iccahwar, Sihor, where Mundy saw a great tank with abundance of fowl, about 3 miles from the town.¹³⁰ Shaikhpura, Duraha, was a good country and a great tank according to Mundy.¹³¹ Hatyakhera, Dilod, San Kaira, Sironj; which was a large town, formerly known for its muslins and chintzes. Mundy wrote, "*The citie is encompassed with many faire villages and much fruitfull ground.*"¹³² According to Tavernier, "*There is made a muslin which is so fine that when it is on the person you see all the skin as though it were*

¹²⁷ Mundy, II, 50 & note; Finch, 138; Jourdain, 145.

¹²⁸ Mannucci, N., "Storia Do Mogor" or "Mughal India," translated by W. Irvine, London, 1907-8. I, 67.

¹²⁹ Tavernier, I, 45 & note.

¹³⁰ Mundy, II, 55.

¹³¹ Ibid.

¹³² Ibid, II, 56; Jourdain, 151.

uncovered.”¹³³ This is the fabric, a semi-transparent muslin, Known as *Ab-i-ravan*, the ‘flowing water’.

The Mughal sarai, Palki sarai, Kachnor ki Sarai, Shahdaura were the continuing stages. Mundy remarked about the countryside, “*the countrye contineinge fritefull and pleasant with many faire great trees of Mangoes (mangoes) and tamarinde.*”¹³⁴ Kalabagh, was a large town. The Kulharas or Kolaras, De Laet wrote, “*a pleasant town surrounded by tamrind and mango trees.*”¹³⁵ Then were Sipri, Dongri, Dongri Ghat, and Narwar that lay on the right bank of Sind River, a tributary of Jamuna River. It was an ancient Hindu town, surrendered to Nasir-ud-din in 1251. “*The town seated by a river side in a valley among many hills (the Vindhya), upon one of which adjoyninge to the town, stands a castle, or rather a citie for its greatness,*” said Mundy.¹³⁶ According to Tavernier, here was made a quality of quilted coverlets, some white and others embroidered with flowers in gold, silver and silk.¹³⁷ But De Laet says, “*This stage is lonely and infested with robbers.*”¹³⁸ The Nun Sarai, stands on the northern bank of Nun River, followed by three sarais, Barki Sarai or Sarai Sardar Khan, Cutcha Sarai, and Antri, a small town situated at 12 miles south of Gwalior.

Gwalior; in a straight line from Narwar is situated near the Vaisali river at 26° 13’ N., 78° 12’ E., 65 miles from Agra. It also served as the state prison for the Mughals. This place is nominated to yield the Best Chambeli (Jasmine) oil. Terry writes, “*For their*

¹³³ Ibid; Tavernier, I, 46 & note; Jourdain, 151; Finch, 143.

¹³⁴ Mundy, II, 56.

¹³⁵ De Laet, 34.

¹³⁶ Jourdain, 152 & note; Mundy, II, 58; Imperial Gazetteer, XVII, 396ff; Terry, Early Travels, 293.

¹³⁷ Tavernier, I, 50.

¹³⁸ De Laet, 34.

flowers... not many of them...are any way fragrant. Amongst them that are, there is one white flower, like to Spanish jessamin (if it not be the same), which is exceedingly well scented, of which they make a most excellent pure sweet oil, with which they anoint their heads and other parts of their bodies; which makes the company of those that do so very savoury and sweet..."¹³⁹ After the town at about 5 kos Sank River has to be crossed, reaching Patkeri Sarai and Kunwari-ki-Sarai, near Kunwari River.

Dholpur, the town was built by Raja Dholan Deo in the eleventh century, is situated 40 miles in north-northwest from Gwalior and 34 miles south from Agra. Three miles south of the town lay the Chambal River. The old fort of Dholpur is situated close to the ferry on the Chambal, which was formerly guarded as an approach to Agra. Dholpur was surrendered to Babur in 1526.¹⁴⁰ The last two important stages were Mania and Jajau that is on the Utangana River, a tributary of Jamuna River. Here on June 10, 1707, Muazzam defeated his brother Azam. Finally the caravans reached the town of Agra.

There was another route from Burhanpur to Agra. This route ran via Mandu and Ujjain again meeting the highway at Sironj. According to De Laet, "*The road is at first steep and rough, leading through lofty mountains ranges.*"¹⁴¹ The first on the route was Borgaon, in the northwest of Burhanpur. Finch wrote, "*A great village, stonie and steepe way, beinge the passage over the great ridge of Mountaines (the Vindhyan*

¹³⁹ Terry, *Early Travels*, 293; Finch, 144-5; Monserrate, 23.

¹⁴⁰ *Imperial Gazetteer*. XI, 33if. Mundy, II, 63; Finch, 145; Monserrate, 26; De Laet, 35.

¹⁴¹ De Laet, 30.

range).¹⁴² Next was Asir or Asirgarh that is 12 miles northeast of Burhanpur. Akbar took the famous fortress of Asirgarh in 1600 from Bhadur Khan, the last of the Faruki kings of Khandesh. Mogargaon, about 33 miles northwest of Asir. Khargaon, situated on the Kundi River 16 miles of Mogargaon.

Akbarpur coming after Balkhar was near the Narmada River. There was a fortress and a ferry place. The city of Mandu is situated about 30 miles southwest of Mhow. The old capital of Malwa was Ujjain, but the seat was transferred to Mandu by Hushang (1406-34). Nearly all-European travellers have been struck by the architectural relics of Mandu and have given a glowing description of them. After Mandu there was Lunera that had a small Sarai. According to Finch, at some half a Kos from Lunera there were four or five tanks with a great pagoda, "*a very pleasant place.*"¹⁴³ Dipalpur is 27 miles southwest of Ujjain.

Ujjain, the principal city of Malwa is situated on the river Sipra. It was one of the most ancient cities of India, the principal depot for the commerce between the ports of west and the interior of northern India. Also known as the Greenwich of the Indian geographers, as their first meridian passed through it.¹⁴⁴ Kanasia is about 24 miles of Ujjain, and 3 miles from Maksi. According to Jourdain, "*Here is made much opium and the best in the Indies, and is worth 3 mahmudis per ser, which is 24 ounce.*"¹⁴⁵ Following it were Sunera, Pipliagaon and Sarangpur on the right bank of Kali Sind in

¹⁴² Finch, 139-40.

¹⁴³ Ibid, 142.

¹⁴⁴ Bernier, 36 note3; Monserrate, 18 note.

¹⁴⁵ Jourdain, 149; Finch, 142.

23° 34' N., and 76° 30' E. Finch mentioned it as, "a great towne with a castle on the southwest side, with a faire towne-house. Here are made faire turbans and good linen."¹⁴⁶ After two small villages Bora and Barra is Sironj.

Mundy's estimate of the distance between Agra and Surat.¹⁴⁷

From Surat to Burhanpur is accompted small courses	170
From Burhanpur to Agra is accompted great courses	226
170 courses at 1 ¼ mile per course is miles	212 ½
226 great courses at 1 ½ miles per courses is miles	389
Total miles	551 ½
396 courses of India make English miles	551 ½

(ii). Surat-Agra (via Ahmadabad):¹⁴⁸

Mainly two big urban settlements contributed to the establishment for this route. Ahmadabad, the most flourishing metropolis of the empire in the seventeenth century, and Ajmer, a very old fortified city important for Mughals to keep their stronghold in the Rajputana. The itineraries were, Kathodra, a small place about 9 miles southwest of Ankelswar. Broach, situated on the right bank of the Narmada River, 30 miles from its mouth. Tavernier tells us, "*In this place Baftas (one of the varieties of fine calico), are made in quantity; they are very beautiful and closely woven cloths, the price of them*

¹⁴⁶ Finch, 143; Monserrate, 19 note.

¹⁴⁷ Mundy, II, 66.

¹⁴⁸ Mandelslo, "Mandelslo's Travels into Western India," (A.D. 1638-39), edited by Commissariat, London, 1931, 13-26; Tavernier, I, 54-72; Mundy, II, 231-72; Finch, 170-75; De Laet 65-6.

ranging from 4 to 100 rupees.”¹⁴⁹ Jambusar, famous for its great production of indigo, lies 5 miles north of Dhadhar River. The next leg of the journey was Baroda, Vasad, which was the fording place of the Mahi River, 12 miles north of Baroda. After that arrived Sojitra and Nadiad that was a center for the production of both cottons and indigo.¹⁵⁰

Mahmudabad is on the Vatrak River. According to Mundy was a, “*a handsome bigg town.*”¹⁵¹ Jahangir gave a very interesting story about the founding of city. He writes, “*Since the climate of Ahamadabad is so very foul, on his physicians’ advice Mahumad Begra built a city on the Mahi River bank and moved here.*”¹⁵² After Mahmudabad came Kanji, Vatra and Isanpur, where there was a very fine Caravanserai.¹⁵³ These were the stages before Ahmadabad, which is on the Sabarmati River. “*There is not,*” say Mandelslo, “*in a manner any nation, nor any merchandise in all Asia, which may not be had at Ahmadabad, particularly there are made abundance of silks and cottons stuffs.*”¹⁵⁴

Adalaj, Pansar were the next stages followed by Mehsana, Chitpur, “*A fairly good town, so named on account of the great trade which it does in those coloured cottons which are called Chites (chintz),*” writes Tavernier.¹⁵⁵ Then Palnpur, Dantawara,

¹⁴⁹ Tavernier, I, 54; Imperial Gazetteer, IX, 28ff.

¹⁵⁰ Mandelslo, 19.

¹⁵¹ Mundy, II, 268.

¹⁵² Jahangirnama, 274.

¹⁵³ Ibid, 24.

¹⁵⁴ Mandelslo, , 26; Tavernier, I, 58; Nicholas Ufflet in Early Travels, 173; Imperial Gazetteer, XIX, 58.

¹⁵⁵ Tavernier, I, 65.

situated 136 miles from Baroda.¹⁵⁶ The next place was a custom station of Bargam, Bhinmal, "*the foundations of whose ancient wall are yet scene (they have been 24 cos in circuit); many goodky tanke also going to ruine.*"¹⁵⁷ Further was Modra and then Jalor, which according to Tavernier is, "*An ancient town, with the fort, 800 yards long by 400 yards wide, is on an eminence, 2000 feet high and commands the town.*"¹⁵⁸ Before Merta were Khandap, Sitalwana and Palasni.

Emperor Akbar took Merta in 1562 from the Rathor rajas. Nicholas Ufflet Wrote in 1610, "*Meartha which hath a stone castle with many faire turrets, a faire tanke, and three faire pagodas richly wrought with inlayd workes, adorned richly wrought with jewels, and maintained with rich offerings.*"¹⁵⁹ But Mundy who travelled through the same place recorded, "*the way plaine, little wood and water.*"¹⁶⁰ Finally via Bharunda, Khuchel, Bandar, Sindri, Ludana (on the Bandi River) and Fatehpur Sikri, Agra was reached.

From the travellers' accounts of seventeenth century it appears that there was another route to Agra that diverged from Pansar. From Pansar, the road went towards Jormang, and Bhandu, "*A towne of rebels,*" in Mundy's opinion.¹⁶¹ From there Unawa and Magawad about which Mundy says, "*The countrie pleasant to see to, in round riseings, verie daungerous for theeves.*"¹⁶² After Magawad, Gola, Ghod, Sarota and Roha, which according to Mundy was a very great town, with a great channel of a river (The

¹⁵⁶ Imperial Gazetteer, XIX, 58.

¹⁵⁷ Nicholas Ufflet, op. cit., 173.

¹⁵⁸ Tavernier, I, 71; Nicholas Ufflet, op. cit., 171-2.

¹⁵⁹ Nicholas Ufflet, 171.

¹⁶⁰ Mundy, II, 245 & note.

¹⁶¹ Mundy, II, 262.

¹⁶² Ibid, 260.

Banas).¹⁶³ Then came Mungthala, Amtharo and Nitara that lies near the hills of Mt. Abu. After traversing the Mt. Abu came Makrora and Sirohi (lies on the slope of the Saranwa hill, 28 miles from Abu). It has long been noted for the making of and tempering of the sword blades, manufactured there.¹⁶⁴ About Ud, Mundy complained of the scarcity of water.¹⁶⁵ Siwana, Bagra, Modra, Jalor were next. About Jalor, Mundy says, "*stands under a verie high hill, whereon stands a faire castle.*"¹⁶⁶

From Jalor the route went through Khandap, Jogi Ka Talao, Pipar, Bitan, Merta, Rea, Badhwara to Ajmer, "*The cittie,*" writes Mundy, "*it selfe stands under a high mountaine, whereon is a castle, with many others (hills) on everyside, high steepy and ragged.*"¹⁶⁷ Narwar next to Ajmer was a place for quarries of pink marble. Lying adjacent were Satpura, Bandar Sindri and Sambhar, situated on the borders of Jaipur and Jodhpur, was the most important of the lake sources of salt in Rajputana. At Muzabad, Mundy points, "*The way from Lalsot plaine with some little hills here and there, which appeared in the plaine like islanda in the sea; many theeves, water scarce and wood.*"¹⁶⁸ Then came Piplo and Chaksu, which is a very ancient town, stands 25 miles from Jaipur, situated on rising ground in the midst of a plain.

From here the road moved to Jampda, Lalsot and Bamanwas that according to Mundy there was a little castle near the town.¹⁶⁹ Hindaun, Surot, "*Within ¾ course of towne is*

¹⁶³ Ibid, 259.

¹⁶⁴ Tod, "Travels in Western India," London, 1839, 71.

¹⁶⁵ Mundy, II, 254.

¹⁶⁶ Ibid, 249.

¹⁶⁷ Ibid, 242. Nicholas Ufflet, 171.

¹⁶⁸ Ibid, 239.

¹⁶⁹ Ibid, 235.

*a trench or channel made by raine water, called Gadda Kahl, (ravine), well knowne heeraboute for robberies continuallie committed here," recorded Mundy.*¹⁷⁰ Bayana that lies at 26°55' N., 77°18' E was the next halt. It has always been favoured for its indigo. According to Jahngirnama, there was a fort here under the charge of Muhammad, Humayun's Bakhshi.¹⁷¹ Nibhera, Fatehpur Sikri, Agra.

According to English Factories, the route from Agra to Surat via Burhanpur is safer compared to the route from Ahamdabad.¹⁷²

Jahangir's Route:

Ahamdabad – Kankariya Tank, the tank was made by Qutub ud din Muhammad, the grandson of the sultan Ahmad Shah. It was in ruin while Jahangir saw it.¹⁷³ – Mahumadabad – Mahuda – Alina – Panam (on the Manab River) – Dohad – Samarna – Ramgadh – Semalkfera – Badnawar – Nolai – Cahmbal River – Gambhir River – Ujjain – Kalideh – Qasim Khera – Sandhara – Gahti Chanda – Kali Sind River – Ranthambhor – Hindaun – Bayana – Barmadhmata – Chapramau – Fathprur Sikri – Nurmanzil Garden – Agra.¹⁷⁴

¹⁷⁰ Ibid.

¹⁷¹ Ain, II, 181; Jahangirnama, 290; De Laet, 45.

¹⁷² E.F.I., 1625, 90.

¹⁷³ Jahangirnama, 242note.

¹⁷⁴ Jahangirnama, 273-300; De Laet, 67.

Secondary Routes:

According to Elliot during Akbar's period there were three routes from Ahmadabad to Ajmer. They were as follows:

- (a). Ahmadabad – Disa fort – Pattan Nahrwala – Sirohi – Mirath – Nagor – Ajmer.
- (b). Ahmadabad – Haibatpur – Jhalor – Ajmer.
- (c). Ahmadabad – Pattanwal – Jhalor – Bhawanpur – Pali – Sojhat – Jitaram – Mirtha – Ajmer.

In the above three routes the one from Bhagwanpur and the road by Sirohi was shorter than the road by Jhalor.¹⁷⁵

According to Jahangir's memoir there was a route from Ahmadabad to Mandu. The total distance was 145 kos.¹⁷⁶ The Stages were, Kankariya Tank – Bareja – Pipria – Kosala – Petlad- Nadiad – Chetar Sumba – Wardala – Mahi River – sahra – Miran – Nimdah – Jalot – Rinao – Dohad – Samriya – Bhagor – Edhawala – Ramgadh (near Mahi River) – Semalkhera – Badnawar – Jalodia – Sadalpur (at this site is a stream over which Nasiruddin Khalji built a barrage and constructed sitting places, recorded Jahangir.)¹⁷⁷ – Dhar (here according to Jahangir Sultan Mahmud Khalji built a fortress of hewn stone on a hill.)¹⁷⁸ – Digthan – Haselprur – Kayd Hasan – Nalcha Tank – Mandu.

¹⁷⁵ E & D, V, 362.

¹⁷⁶ Ibid, 232-244 & 245.

¹⁷⁷ Ibid, 236.

¹⁷⁸ Ibid, 235.

Jahngir also gave one route from Ajmer to Mandu.¹⁷⁹ According to him it as was a distance of 159 kos. One very interesting remark he made after completing his journey. He said, "*The arduousness of the journey was never felt. It was as if we were progressing from garden to garden.*"¹⁸⁰ The main stations were, Ajmer – Deorani – Dasawali – Ramsagar, here was a large tank – Baloda – Nahan – Chaunsa – Deogam – Bhasu – Kakal – Lasa – kanra – Surath – Barora – Khos Tal – Koyala – Ektora – Saya – Gulana – Sultanpur (Sujanpur) – Manpura – Charduha (Chanduia) – Rupaheli – Kawalhas – Amjar (through the valley of Gahti Chanda. Jahangir wrote, "*The valley is extremely green, lush and filled with trees.*")¹⁸¹ – Khairabad – Arrah – Bachhayari – Bil – Ghiri – Amriya – Borkheri – Kishangarh – Dih-i-Qazian (in the vicinity of Ujjain.) – Hindwal – Kaliadeh (this according to Jahangir was a building constructed by Nasiruddin Khalji, the ruler of Malwa. He built it during his reign in the vicinity of Ujjain.)¹⁸² – Ujjain – Daud Kheri – Jarao Paraiya – Lake dipalpur – Banera – Daulatabad – sarangpur – Haselpur – Nalchha – Mandu.

The Routes in Eastern Region:

*Agra-Patna Route:*¹⁸³

After the Indo-Gangetic region, the Mughal highway bends in the southward direction to follow the courses of the Jamuna and the Ganga as far as the Bay of Bengal. During seventeenth century the Grand trunk road, leaving Agra, traversed the Jamuna and followed the left bank of the river. According to Mundy, "*As much land as wee passed*

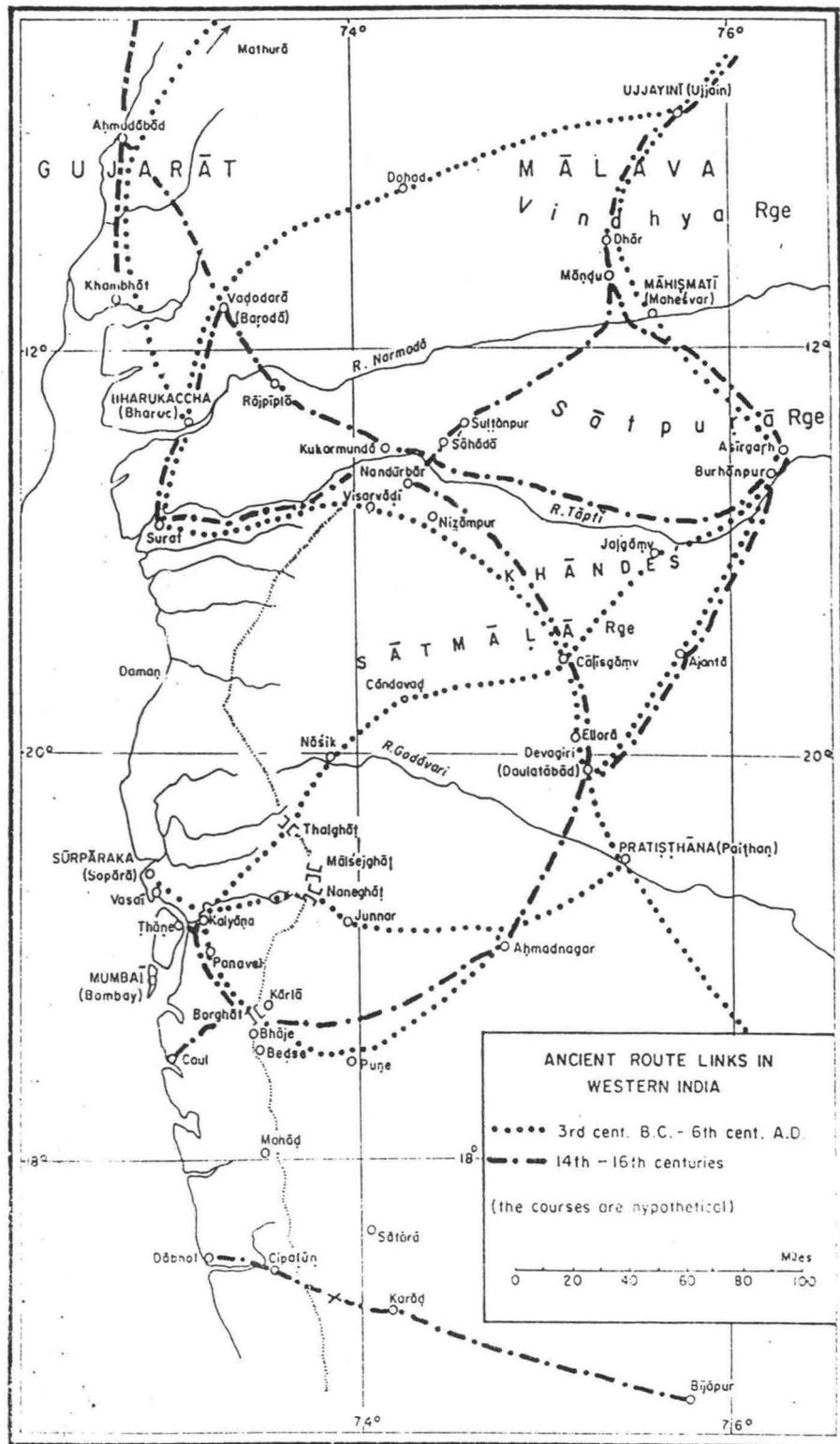
¹⁷⁹ Ibid, 202-16.

¹⁸⁰ Ibid, 214.

¹⁸¹ Ibid, 206.

¹⁸² Ibid, 208.

¹⁸³ Mundy, II, 78-187; Tavernier, I, 92-6; Finch, 178-9; India of Aurangzeb, CX, CXI; Manrique, 98-149; De Laet, 62-3



VII. The roads in Western India prior to the Mughals.

from Agra hitherto is verie fruitfull, well manured, and inhabited, with good accommodation for travellers, as many faire sarai and Tancks all the way."¹⁸⁴

Manrique holds the same opinion when he says, "*We found this route studded with Habitations, large towns and small villages, which stood in sight of the next, and much frequented bytravellers. On this account it was well supplied with caramossaras.*"¹⁸⁵

The main places on the road were, Nur Mahal ki Sarai, which was situated according to Mundy's diary at 1 Kos from Agra. Jahangir built the sarai in the memory of Nurmahal. The gateway of the existing portion of the building was restored and repaired in 1882.¹⁸⁶ Followed by Mahmudabad, Firozabad, Shikhabad, Ahirbans Ki sarai and Etawa, on the Jamuna River, which De Laet mentions, had a fort on the top a hill, "*Precipitous from all sides.*"¹⁸⁷ Lying ahead were Bakewar, Kahnpur and Janaki Sarai, where in 1649 Ajit Mal constructed a Sarai in his own name at the same location.¹⁸⁸ Siakndara, Bhognipur, Sahnkar ki Sarai followed. About the last one Mundy complained, "*our Plaine ground turned into crags.*"¹⁸⁹ Then were Ghatampur and Kora Khas (lies in 26° 7'N., and 80° 22'E). Mundy wrote, "*Kora Khas is the biggest and best furnished of any wee sawe since our comeinge of Agra.*" He further adds, "*From this place Ganges is six course off and Jamuna Seven.*"¹⁹⁰

¹⁸⁴ Mundy, op. cit., 99.

¹⁸⁵ Manrique, II, 146, 149.

¹⁸⁶ Mundy, op. cit., 78 & note.

¹⁸⁷ De Laet, 62.

¹⁸⁸ Ibid, 88note.

¹⁸⁹ Ibid, 89.

¹⁹⁰ Hamilton, I, 302; Mundy, 91-2.

From here the route moved towards Bindi khas, Fatehpur, Lodhi Ka Nagar, Rampur Apohi and Kara, situated on Ganges, which was a populous place with a castle.¹⁹¹ About Shahzadpur, Mundy wrote very high praises when he said, "*Here at Shawzadpur is a great store of best paper made and from thence sent to other parts... it is finely seated on eh river Ganges, a great place and populous. In some kinde it may bee compared to Constantinople, standinge on maine little hills, which lye alongst the river side; there is one streete in i. above the rest that deserve notice and commendations; for besides that it is very longe and straight, it hath a rowe of trees on each side before the doores, whose topps meete alofte, soe that you seeme to bee in a faire laonge arbour walke.*"¹⁹²

After the town of Shahzadpur there was a series of Sarais, Alam Chand, Kuldabad Sarai, (this sarai that is about 500 sq. feet was used as a fish and vegetable market in 1882)¹⁹³ and the ancient city of Allahabad, on the confluence of the Ganga and the Jamuna Rivers. Akbar constructed a fort here in 1580. Following in the same line were Saad ullah Ki Sarai, Roharbuns Ki Sarai, Aooinal Sarai (Amkakantha), Sarai Babu, Mohan Sarai, and finally to the holy city of Banaras or Varanasi or Kasi the 'shining city'. Bernier writes, "*It is the Athens of India.*"¹⁹⁴ Mundy says, "*Of all the cities and towns that I have seen in India, none resembles so much those of Europe as this Banaroz...*"¹⁹⁵

¹⁹¹ Ibid, 97.

¹⁹² Ibid, 98; Tavernier, I, 94.

¹⁹³ Ibid, 100.

¹⁹⁴ Manrique, 146 & note; Bernier, 334; Hodges, 59-60; Hamilton, I, 307.

¹⁹⁵ Mundy, II, 124; Finch, 177, Tavernier, I, 118 & 142.

After Banaras were situated Bahdurpur, Sarai Sirsi and Khajuha, where the Karmansa River has to be crossed. Then Sawant before which a small River Saunt was crossed. Khwaja ka Sarai and Khurramabad were next and the latter according to Mundy was well supplied with all necessaries.¹⁹⁶ Sasaram, the tomb of Sher Shah Sur is here and it received the special attention of almost all the travellers. Between Sherpur and Aganur the Son River has to be forded. Before Patna city there was Naubatpur. Patna, situated at 25 37' N., and 85 10' E., on the right bank of Ganges. The name means 'a Town'. It was at this time a large trade center for goods, which passed up the river Ganges.¹⁹⁷

Distances between Agra to Patna, according to Renell were 544 miles. Manrique puts it at 21 days journey or 21 $\frac{3}{4}$ miles a day. Mundy gave the distance as 400 $\frac{1}{2}$ miles and took 35 days to complete the journey.¹⁹⁸

The three main highways served the Mughal realm as the arteries. They provided the much needed connectivity for the vast Empire with the different parts. The highways not only served the administrative purpose, they also provided enhanced mobility to the commercial traffic so necessary for the economic well being of any Empire.

¹⁹⁶ Mundy, 129.

¹⁹⁷ Manrique, II, 139-44; Mundy, II, 134; Tavernier, II, 100.

¹⁹⁸ Manrique, 145; Mundy, 135.

II. Roads, Avenues and Bridges

Roads connecting one place to another make little sense to mankind unless they are fully exploited in building up contacts between different societies, politically and economically. Thus roads perform the basic function in a body of a nation as lack of communication can lead to the social, political and economic isolation of a country. It offers an opportunity for men to discover, penetrate, organize and develop the regions hitherto unexplored.

In Mughal period, a wide network of roads intersected all the territories of the vast empire. And they were not mere footpaths for sure. Some of them can even bear the heavy traffic of army moving from one place to another. Even the caravans consisting of hundreds of travellers, needed space to travel. Though the roads of that time were not metalled, but it was one of the major concerns with the emperors to construct and maintain, in order to provide comfortable and safe passage to the travellers.

The Mughals were great builders apart from the famous palaces, mosques, forts and gardens. They built or repaired a number of bridges, canals, inns and roads. The Mughals had a department of construction, which was under the supervision of the *Mir saman*, because administratively it was one of the *buyutat*. The *Diwan-i-Buyutat* was directly responsible towards *Mir saman*, and he reports to the King.¹ Whenever there is a call for royal tour, either for hunting or a call of campaign, hundreds of sappers and

¹ Qureshi, I. H.. "Administration of the Mughal Empire," Patna., 1977, 86.

labourers were sent in advance to repair, improve and sometimes even to build a new road.² Monserrate, in particular, was impressed by Akbar's organization. He noted, that "*He (Akbar) overcome the difficulty of the roughness of the roads, which is due to the rocks and crags and deep torrent-beds, by sending sappers and labourers to level the way as far as possible.*"³ Muhammad Qasim Khan, the *Mir Bahr*⁴, efficiently removed any obstructions on the roads, leveling as far as possible to facilitate movement. *Mir Bahr*, means the '*lord of the sea*'. Under Akbar, Mir Qasim was the commander of 3,000, and was in-charge of roads and bridges. He was the best engineer of Akbar.⁵

On longer journeys or campaigns, the army was always accompanied by thousands of stone and wood cutters. According to Abul Fazl, the pioneers and other workers always accompanied the party.⁶ In 1613, while on the Kangra campaign Murtaza Khan the governor of Punjab took thousands of pioneers with him.⁷ These men belonged to the army and were skilled workers.⁸ However, if more labourers required they were easily raised from *Dakhili* (extra or additional) troops. This class known as half-troopers comprises of matchlock bearers, carpenters, water-carriers and others.⁹ Irvine suggested that the system no longer existed in Aurangzeb's reign, at least the name has dropped out of the official manuals.¹⁰

² Ain, I, 47-50.

³ Monserrate, 80.

⁴ Ain, I, 412; E & D, II, 551-2.

⁵ Monserrate, 80-1 & 126note; De Laet, 144n.

⁶ Ain, I, 49.

⁷ Brij Narain and Sri Ram Sharma, "A contemporary Dutch Chronicle of Mughal India." Calcutta, 1957, 51-52.

⁸ Ibid.

⁹ Ain, I, 264.

¹⁰ Irvine, w., "The Army of the Indian Mughals," N. Delhi, 1962, 160.

From some contemporary sources, it appears that there was no scarcity of labourers.¹¹ *Zamindars* were responsible to recruit a number of labourers and other workers to maintain the roads and to cope with any emergency. Pelsaret wrote, “*If a zamindar or any other powerful officer wanted a workman, the man was not asked if he was willing to come. But was seized in the house or in streets, well beaten if he would dare to raise any objection and in the evening paid half his wages or nothing at all.*”¹²

The contemporary chronicles and travellers’ accounts did not give any attention to the technology involved in road construction. This makes difficult to say anything about the technology involved. Babur is said to have appointed active overseers and a mass of spades men to level the road and cut down jungle, so that, carts and mortars might pass along it with ease.¹³ Jahangir while on tour in Kashmir valley wishes to use the Poonch road. He sent Nuruddin Quli, a prominent *mansabdar*,¹⁴ in order to level the hilly track, so that the passage of laden beasts and that the men should not undergo labour and hardship. A large number of artificers, such as stone-cutters, carpenters, spades men etc., along with an elephant were provided to him.¹⁵

Road conditions:

The summer resort of the Mughals, Kashmir had many roads, but they were all difficult to traverse. The easiest was from Pir Panjal. Akbar travelled to Kashmir thrice through

¹¹ Pelsaret, 61; Ovington, 184 & 228.

¹² Pelsaert, 60.

¹³ Baburnama, II, 592.

¹⁴ Jahangirnama, 268.

¹⁵ Tuzuk, II, 98.

this route.¹⁶ Similarly Jahangir usually used the same route.¹⁷ Shah Jahan, who travelled to Kashmir by the Pir Panjal route in the seventh year of his reign, found the route very difficult.¹⁸

Other region poses different hurdles, like the areas of Malwa and Gujarat were uncultivated and hilly. In 1564, While Akbar's expedition in Malwa, Abul Fazl wrote, *"On account of the lightning, the rain and floods, and the viscous mud, and the numerous holes and ditches which characterize the province of Malwa, the march was difficult. The horses had to swim like hippopotami, and the camels to traverse floods like ships of ocean. On account of the quantity of mud on this march the horses sank up to their chests and the very hair of the camels became a burden to them."*¹⁹

In December 1615, Thomas Roe while travelling in the Malwa region with Jahangir, wrote, *"About three cosses short of a city call'd Rantepuoor where it was supposed the king would rest, and consult what way to take, he on a sudden turn'd towards Mandoa (Mandu), but without declaring his resolution... We march'd every other day about 4 cosses, only with such a train of baggage as was almost impossible to be kept in order. The 26th of Dec we pass'd through woods and over montains thick of bushes. where*

¹⁶ Ain, II, 169.

¹⁷ Jahangirnama, 266.

¹⁸ Amal-i-Salih, cf., Farooque, A.K.M., "Roads and communications in Mughal India." N. Delhi. 1977, 26.

¹⁹ Abul Fazl, "Akbarnama," translated by Beveridge, H., Calcutta, 1912, II, 344.

many camels perish'd, many people tir'd with the difficulties of an impassable way, went away to Agra, and all complain'd."²⁰

Gujarat region from Badnor prior to Jahangir's visit in 1617 was a jungle and stony land. However, during the tour, a road was cleared through these obstacles.²¹ Towards, Ahamdabad the roads were very dusty. Jahangir even called the city of Ahamdabad as '*gard a abad*' (dustburg).²² In 1616 Thevenot, found the name *gard-a-abad* firmly established and popular in Ahamdabad. He assigned the origin of the name to Shah Jahan.²³ Dust made traveling on horse back very uncomfortable. When travellers sought shelter in closed carts, they were still so discomfited that the carts had to proceed more slowly than they would otherwise have done.²⁴

The roads of eastern India raised another set of problems. Mainly the heavy monsoon, ravines, and rivers, made the roads troublesome. Travellers had to go through many inconveniences. Manrique found his journey from Orissa in august 1660, exhausting. Due to rain he had to constantly cross and re-cross rivers and streams. He relates: "*In most cases there were no boats or bridges, and we crossed with water up to our knees, our waists, or even out breasts, and one day we crossed eleven streams at great risk, their current being swollen and rapid.*"²⁵

²⁰ Roe (1929's edition), 790.

²¹ Jahangirnama, 261.

²² Jahangirnama, 264.

²³ Sen, S.N., "Indian Travels of Thevenot and Carreri," New Delhi, 1949, 11.

²⁴ Jahangirnama, 261.

²⁵ Manrique, 98-9.

Although the Mughal engineers did their best, but it seems that the odds were heavily against them. Though in some incidences a desire for adventure stimulated for taking the difficult route which in turn resulted in hazards and, at times travellers had to pay for the lives of men and beasts. In 1663, Bernier saw a fatal accident. He writes, "*The king was ascending the Piri-Penjale Mountains, the highest of all the mountains, and from which a distant view of the kingdom of Kachmire (kashmir) is first obtained. He was followed by a long line of elephants, upon which sat the ladies in their mikdemers and embarys. The foremost appalled, as is supposed, by the great length and activity of the path before him, stepped back upon the elephant that was moving on his track, who again pushed against the third elephant, the third against the fourth and so on untill fifteen of them, incapable of turning round or extricating themselves in a road so steep and narrow, fell down the precipice. Happily for the ladies, the place where they fell was of no great height; only three or four were killed, but there were no means of saving any elephants.*"²⁶

Distance- Measurement:

Attentive observers have remarked that in the past Indians had, on a local level, a remarkable knowledge of distances. Tod says, "*Among the many points which presents themselves to the reflection of a traveler in India, one ought to strike with surprise is the general knowledge possessed by all classes of the distance of places within their neighbourhood; and however the standard may vary in different countries, yet within their own, a most singular uniformity and correctness prevail. To what can this be*

²⁶ Bernier, 407-8.

attributed? Assuredly not to accident, nor to the mere report of the public cassids, or runners. It is in-fact a remnant of that ancient civilisation which we are accustomed to hold so cheap, embracing whatever related to welfare, comfort and intelligence of the community, and which though buried under the ruins of ages of moral and political subjection, is not yet altogether obliterated, either from tradition or written record, both altogether that in remote times, there were road meters throughout India."²⁷

To obtain a clear record of distance travelled and to plan future developments of roads, the Mughals measured the land very carefully. It is significant that Babur had ordered the measurement of the northwestern route, from Agra to Kabul, immediately after conquering northwestern region of India.²⁸ Akbar followed the land surveying technique of Sher Shah, with slight modifications. Measurement by means of rope had played the role, but readings may vary, depending on whether the rope was dry or wet. In 1575, Akbar introduced measurement by bamboo joined with rings,²⁹ which became standard throughout the empire. Whenever he travelled, the distance was carefully recorded by this method. Later, the superintendents and inspectors audited the calculations.

In 1581, while accompanying Akbar on the expedition against Mirza Hakim, Monserrate noted about the method. He writes, "*The distance each day's march is measured with a ten-foot rod by special officers, who are instructed to followed the*

²⁷ Tod, 355.

²⁸ Baburnama, II, 629.

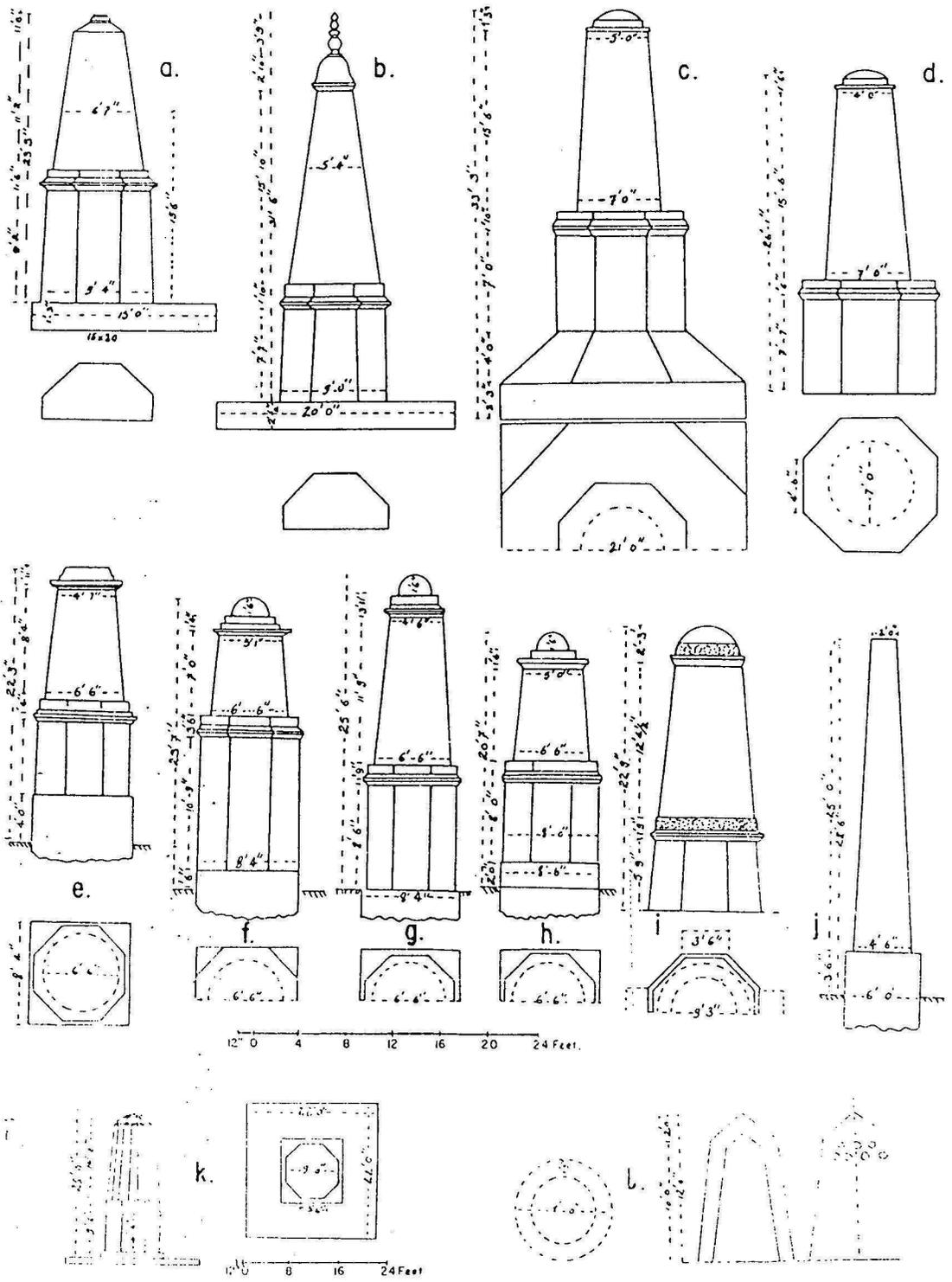
²⁹ Ain, I, 206.

emperor closely and to measure the distance from the moment he leaves his pavilion. These measurements are afterwards found very useful in computing the areas of provinces and the distance of places apart. Two hundred lengths of the ten-foot rod make what is called in Persian a 'coroo', but in the Indian tongue is called a 'kos'. This is equal to two miles, and is the usual measure of the distance."³⁰ Ain mentions, "The system of survey and measurement as promoting the interests of civilization having deeply engaged the attention of his majesty, directions were issued for the ascertainment of distances and their determination by the standard measure of the kos, the kos was fixed as 100 tanabs (rope) each consisting of 50 Ilahi gaz or 400 bans (poles) each ban of 12 ½ gaz. Both of these measurements give 5000 gaz to the kos."³¹

Mundy while travelling from Surat to Agra via Burhanpur more explicitly describes the procedure. He writes, "The courses used by the Kinge and great men are farr longer, for when they travel among other people of service (of whom are multitudes) there be two appointed to measure the way before him, which is in this manner:- there is a lyne of 25 common cords (gaz) of Agra in length, the ends thereof made fast over two mens shoulders, which they stretch att length. Then the former makes a stroke on the ground with a staffe and passeth forward, the other following him, alwaies keeping the said lyne tought (taut) and straight. And when the hindermost cometh to the stroke hee calleth out, which is for that one they have gone. Then att that instant doth the other make another marke, being then the latter cometh upp to the stroke hee cryeth againe, which is the second, and the foremost marketh againe; and soe untill they make 200 of

³⁰ Monserrate, 85.

³¹ Ain, II, 417.



25. Types of *Koyunlu* (A): a., b., c., d., on the route from Agra to Mathura; e., f., g., h., on the route from Agra to Fatehpur-Sikri; i., on the route from Ajmer to Kishangarh; j. in the Bulandshahr district; k., in the Kishangarh district; l., in the Kanpur district (from *Annual Progress Report, Superintendent, Muhammadan and British Monuments, Northern Circle, 1914*, pl. 44).

the said lynes, never stoppage att all, but continually goe on a good pace, recconing on beads."³²

Mannuci describes the measurement of a route in Aurangzeb's time still with a rope. He observed, "*During his journey to Kashmir, the surveyors starting from the royal tent. The men in front made a mark on the ground with a rope, and when the man at the rear came to that point, he maae another mark and counted two. In this way, they went on continuing. One man kept a record book in his hand, writing out the score, so that if the king at any time asked the distance he had travelled, the scribe could immediately supply it.*"³³ Later Ovington saw the same technique being employed in the Gujarat region.³⁴

Distance-meters:

The *kos-minar* (distance-meters) or towers erected at every *kuroh* or *kos* are a very special feature of the Mughal empire.³⁵ Under Babur relay stations were constructed between Agra and Kabul. In his memoirs Babur writes that, after having ordered the measurement of the route form Agra to Kabul, he had towers of 12 *qari* (9 or 10 meters) erected every 9 *kuroh* (*kos*) with a *car-dara* (?) at the top.³⁶ Akbar is said to have erected a *kos-minar* at every *kos* (2 miles) between Agra and Ajmer, so that travellers might not lose their way.³⁷ There is an interesting peculiarity regarding the Agra-Ajmer

³² Mundy, II, 66-7.

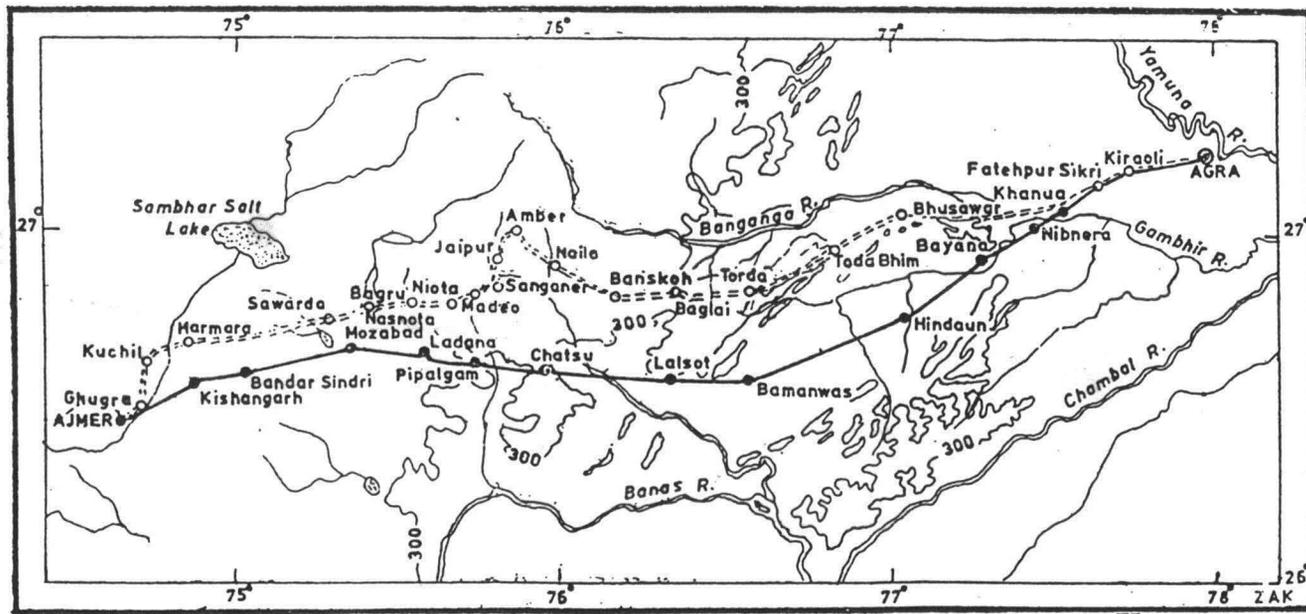
³³ Mannucci, II, 70.

³⁴ Ovington, 116-7.

³⁵ List of Muhammeden and Hindu monuments, IV, Calcutta, 1941,41-42.

³⁶ Baburnama, II, 629.

³⁷ Finch, 149; Withington, Early Travels, 225; Mundy, II, 226.



----- Mughal Highway

HEIGHTS ARE IN METRES

———— Commercial Route drawn from Irfān Habib's Atlas of the Mughal Empire.

Km. 10 0 10 20 Km.

route. The commercial route diverged from the official highway from beyond Fathepur-Sikri, via Bayana and Hindaun, and did rejoin the official highway near Ajmer. As can be seen from the map, the commercial route was much shorter than the official highway, owing to the great diversion the latter makes to pass through Amber. Clearly, there were some military or administrative considerations, which had decreed that the Mughal highway should pass through Amber; and this meant that the commercial traffic would choose the more southerly route especially, it passed through the great indigo-mart of Bayana.³⁸ The majority of the *minars* still existing today, over a distance of 368 km, 110 have been found.

Jahangir wanted to introduce the *kos-minars* throughout the length and breadth of the empire. In 1619, he ordered their erection at every two miles on the route from Agra to Bengal.³⁹ Between Agra and Delhi alone, Thevenot saw seventy-nine.⁴⁰ When Bernier travelled during the later half of the seventeenth century, he noticed small pyramids or towers.⁴¹ Mannuci give the credit to Jahangir for the markers on the road. He says that, "*Jahangir was reputed to have installed some manner of pyramids from Multan to Allahabad.*"⁴²

At the time of the decline of the Mughal Empire, the system of road markers, whose provision was linked with the vigour of the state, was not further maintained. The *kos-*

³⁸ Deloche, J, "Geographical Considerations in the Localisation of the Ancient Sea-Forts of India," in I.E.S.H.R, vol. XX, 440-8.

³⁹ Tuzuk, II, 100.

⁴⁰ Indian Travels of Thevenot and Carreri, 57.

⁴¹ Bernier, 284.

⁴² Mannucci, I, 164.

minars were no longer repaired. In the heart of the Mughal realm, the travellers no longer mentioned about the road markers.⁴³

Avenues (*Khaya-ban*):

In India, where travelling is troublesome during the intolerable heat, tree planting, for the benefit of others, was the traditional form of philanthropy. The Brahmin says, "*He who plants a tree lives long.*"⁴⁴ The avenues were comprised of different species of trees. Generally with trees having medicinal properties and which often attributed with religious significance. Mundy noted some trees on the route from Agra to Allahabad, "*The sort of trees are Neems (neem), Peeples (pipal), Dhaca (dhak) and Bhurr (bar) with broad leaves; and others, which continue all waies greene, as most of all the trees in India doe the like.*"⁴⁵ The most extensive among these trees, served as shelter to travellers during a day's halt. Some enormous Banyan trees with their multiple ramifications could shelter entire caravans. On an isle of the Narmada, approximately 20-km upstream from Broach, there was an enormous Banyan tree, known by the name of *Kabir-bar*, which had in 1780 a circumference of 3,000 feet. During the passage of an army it was said to have sheltered 7,000 men. In 1825, according to Heber, it was mutilated, the river having carried away part of it; nevertheless it was "*one of the*

⁴³ Hodges, W., "Travels in India during the Year 1780, 1781, 1782 & 1783," London, 1793, 124; Heber, R., "Narrative of a Journey Through the Upper Provinces of India from Calcutta to Bombay," 1824-1825, London, II, 316, 324.

⁴⁴ M.G, 813, cf., Deloche. J, "Transport and Communication," 144.

⁴⁵ Mundy, II, 83-4.

noblest groves in the world."⁴⁶ According to Tavernier most of the roads in India were lined with trees.⁴⁷

Sher Shah would appear to have been the initiator of this policy. Abbas Khan Sherwani wrote, *"It was Sher Shah who had trees planted along the roads, so as to provide shelter for the travellers' rest."*⁴⁸ Akbar must have continued his work, however it is Jahangir, who is generally known for the shaded avenues (*Khaya-ban*), of the Mughal highways. Jahangir clearly mentioned in his memoir, *"Previously to this according to orders, they had planted trees on both side from Agra as far as the River of Attock and had made an avenue in the same way from Agra to Bengal."*⁴⁹

Finch says that Jahangir had planted the row of trees along the route from Agra to Kabul.⁵⁰ Roe while his visit to the royal court in Agra, writes, *"His majesty ordered in 1619 obelisks to be erected at, the distance of every kos on the high road from Agra to Lahore at every third obelisks a well was sunk and each side of the road was planted with trees for the refreshment of travellers."*⁵¹ Mannucci recalling the work of Akbar's son specifies that he ordered an avenue of trees to be made between Multan and Allahabad.⁵² It is evident that Mughals had intended to make highways as comfortable as possible, offering passers-by relaxation and comfort.

⁴⁶ Heber, III, 67-8.

⁴⁷ Tavernier, I, 233.

⁴⁸ E & D, IV, 418.

⁴⁹ Tuzuk, II, 100.

⁵⁰ Finch, 60.

⁵¹ The Embassy of Sir Thomas Roe, II, 527.

⁵² Mannucci, I, 159.

The route from Agra to Lahore was the object of particular concern. Herbert while recording the distance from Agra to Lahore does not forget to mention, "*Most of the way being through a shade of trees.*"⁵³ Travellers of seventeenth century, in particular had expressed their wonder at the beautiful sight. Thomas Coryat was not a blind admirer of things Indian, and he could claim to be a competent judge of roads as he hiked through many countries of Europe and Asia. His admiration of this long avenue extending over hundreds of miles was as unbounded as genuine. He describes, "*From the famous citie of Lahore I have twentie daies journey to another goodly citie, called Agra, through such a delicate and even tract of ground as never saw before... Another thing also in this way being no lesse memorable than the plainenesse of the ground; a row of trees on each side of this way where people doe travell, extending it selfe from the townes end of lahore to the townes end of Agra. The most incomparable shew of that kinde that ever my eies survaied.*"⁵⁴

Terry is no less excited when he describes, "*The walke of four hundred miles shaded b great trees on both sides,*" and adds that, "*this is looked upon by the travelers who have found the comfort of that cool shade as one of the rarest and most beneficial works in the whole world.*" He ended up by saying that the English referred to it as "*The long walke.*"⁵⁵ Mandelslo found travelling from Agra to Lahore, "*so much the more pleasant in that our way was but one continued alley, drawn in a straight line, and planted on both sides with date trees, palm trees, cocos trees, and other kind of fruit trees which*

⁵³ Herbert, T., "Some Year's Travels into Asia and Africa," London 1677, 62.

⁵⁴ Coryat, Early Travels, 244.

⁵⁵ Terry, Early Travels, 283-4; Bernier, 284; Mundy, II, 83-4.

gave us a continued refreshing shade against the heat of the sun."⁵⁶ Tavernier very simply adds to this, "*Nearly all the way from Lahore to Delhi and from Delhi to Agra, is like a continuous avenue planted throughout with beautiful trees on both sides.*"⁵⁷

However, other roads were not overlooked. Mundy, in 1632, traveling from Agra to Patna writes, "*There is nothing remarkable about this route, save for two rows of trees on either side; the distance between each tree is from 8 to 9 paces and, and between the rows, some 40 paces.*"⁵⁸ He regularly makes note of the shaded avenue as far as Jasantnagar,⁵⁹ but after Bindi Khas, he remarks that, "*The rankes of trees I formerly speake of is much decayed hereabouts, being cutt downe and fallen downe, etts., and not order for supplie in the voyd places, although hitherto they have continued in reasonable manner; here and there some wantinge.*"⁶⁰ Before reaching Patna, he however, emphasized the reappearance at some three or four kos from the city of the rows of trees which had "*disappeared so many days previously.*"⁶¹ In 1640, while travelling in the opposite direction, Manrique noted that the majority of the villages were located in clumps of green- leafed trees, which offered pleasant shade to the wearied travellers at the entrance and exit to the village.⁶²

By the end of Shah Jahan's reign, the state seemed less bothered about providing the shades. Tavernier, while admiring the grand avenue from Agra to Lahore, noted that,

⁵⁶ Mandelslo, 45; Tavernier, I, 78.

⁵⁷ Tavernier, I, 78.

⁵⁸ Mundy, II, 83-4.

⁵⁹ Ibid, 86.

⁶⁰ Ibid, 92.

⁶¹ Ibid, 134.

⁶² Manrique, II, 149.

*"In certain places one had allowed the trees to perish, with out thinking to replace them."*⁶³ At the time of Aurangzeb, the Mughal Empire was having problems with rebellions in various regions. In the eighteenth century, during the decline of the empire, all roads of the Indo-Gangetic region were laid waste by the armies. Law de Lauriston, proceeding from Delhi to Agra in 1758, noted, *"I nowhere saw those tree-lined avenues, nor any mark that they had been."*⁶⁴ Thus, in less than a century 'the long walk' vanished completely from the roads of northern India. But the fact remains that this imperial work represents a great effort, for if the main road were to have been bordered with trees from Lahore to Kora Khas that would have represented an avenue of some 1,100 kms.⁶⁵

Bridges:

The most important engineering features of the Mughals were the bridges, essential to provide connectivity of two geographically divided lands. Almost all the early civilizations came to share the idea of conquering the distances created by the fords, streams, or rivers by the means of bridge. The crossing of rivers often represented formidable obstacles of land communications. During the high waters, most of the rivers were impassable. According to Tavernier, *"It was necessary to wait two months to traverse the Sabarmati, to the north-west of Ahamdabad."*⁶⁶ The images which should be kept in mind while considering the river's size on a map, where a simple line represents the average breadth of more than 2 kilo-meters, and from which the greater

⁶³ Tavernier, I, 78.

⁶⁴ cf., Deloche, "Transport and Communication," 149.

⁶⁵ Rennell, Memoirs, 318.

⁶⁶ Tavernier, I, 59.

number of minor tributaries have been omitted. Hamilton had recorded several figures in the East India Gazetteer, the Ganga is only fordable at some spots upriver from Allahabad, and its main bed at low-water periods varies from 400 yards to 1 ¼ mile's breadth (nearly 2 ½ km).⁶⁷ Understandably the structures and devices, which enable the travellers to overcome such natural obstacles, assumed considerable importance. The Mughals realizing the importance of bridges encouraged their construction and built many with beautifully decorated stones, while temporary bridges were made of wood, rope and, most often with boats.

Flat and simple floating structure of timber, were also employed to cross a river. In the early sixteenth century, it was noticed that grain was transported across the Indus on huge rafts. Once a raft loaded with grain got stuck in the mud and could not be extricated despite best efforts of the owners, ultimately the stock fell into the hands of Babur.⁶⁸ In the province of Multan, inflated skins appear to have been used, besides boats, for crossing the river and streams. During the course of his wanderings in the region, Humayun carried out raids in the villages located within 10 or 12 Kurohs of Bhakkar and captured cows and buffaloes, with the purpose of converting their skins into leather bags (*khiks*) that could be used for crossing watery obstacles.⁶⁹ Jahangir, while travelling between Jalalabad and Kabul, found the *Jala* safer than boats in river with rocky beds. The structure made of bamboos and grass, had inflated skins

⁶⁷ Hamilton. W., I, 557 & 583.

⁶⁸ Babur-Nama, I, 392.

⁶⁹ Aftabchi. J, "Tazkirat-ul-Waqiat," (Hindi translation), by S. A. A. Rizvi., "Mughal Kalin Bharat," I, Aligarh, 1969, 625.

underneath.⁷⁰ Inflated skins were substituted by pitchers by a group of people who crossed the Tomsa river on their way from Ayodhya to Surharpur.⁷¹

Permanent Bridges:

The construction of permanent bridges was accomplished on several streams during the Mughal period. The remains of many extant structures bear witness to the success achieved by the contemporary technical skills. Near Lahore, at Sirhind, Finch saw a beautiful stone bridge.⁷² De Laet says that, "*This bridge is made of stone and supported by fifteen arches was in the middle of the city near a tank.*"⁷³ Manrique some thirty years later came across this bridge, which according to him was the "*most beautiful, built of hewn stone, and supported upon fifteen great arches.*"⁷⁴ Its three distinct portions-having lengths of 24.8m, 27.7m, and 21.3m – possessed four, five, and three arches respectively. The prominent central portion was characterised by six octagonal towers on each side of the 12.6m wide roads. A flight of steps on both sides of this segment, led down to the water level where rounded cut - waters was found.⁷⁵

Another arch bridge had been constructed on the White Bein at Dakhni Sarai, about 10 kms west of Nakodar on the Delhi-Lahore highway. With the stream having changed its courses, five arches of the structure were lying abandoned in the fields. Each arch was

⁷⁰ Jahangirnama, 74.

⁷¹ Banarsi, Das., 'Ardh Kathanaka' translated by Mukund Lath, "Half a tale," Jaipur, 1981. 68.

⁷² Finch, 158.

⁷³ De Laet, 76.

⁷⁴ Manrique, II, 183.

⁷⁵ Cunningham. A, "Archaeology Survey Reports," 1878-79, XIV, Varanasi, 1970, 7.

4.6 m wide and the pier 5.5m broad, with triangular cut-waters. The bridge provided an 8.25m wide road, which was flanked by a 0.75m thick parapet.⁷⁶

Remains of two arch bridges exist at Sultanpur, where the Kali Bein pierced the Delhi - Lahore trunk road. At the first structure, there are only four arches on the southern bank, spreading over a length of 37.4m having survived. The breadth of each arch and pier was 3.4m and 3.1m respectively. An additional one-meter broad arch sunk into each pier, provided outlet for excess overflows of water. Steel and Crowther had seen this structure. They referred six arches to the bridge. Following the collapse of a major part of the bridge, a more ambitious structure was raised at a small distance.⁷⁷ The middle arches of this 218.5 bridge gave way, leaving an unspanned gap of 90m. At present, seven arches (spanning 85.5m) on the southern bank and three arches (40.3m) on the opposite side were extant. Each pier was reinforced by a wedge shaped buttress to provide additional strength on the northern and southern sections, indicated that one of the two was restored at a later date.⁷⁸ This long stone bridge was intact when Jahandar Shah with the Dutch embassy crossed it in 1712.⁷⁹

Shah Daula has been credited with the construction of a bridge over the Aik, near Sialkot, with seven small pointed arches and equally thick piers.⁸⁰ The remains of

⁷⁶ Ibid, 57.

⁷⁷ Steel and Crowther, in Purchas, IV, 267-8.

⁷⁸ Parihar, S., "The Relics of Agra-Lahore Road at Sultanpur Lodi," in *Indological Jaipurensia*, II, 1988-95, 86-7.

⁷⁹ The Dutch Embassy, 37.

⁸⁰ Cunningham, A, "Archaeology Survey Report," XIV, 45; Elliot, 56; Habib, I, 'An Atlas of the Mughal Empire', Delhi, 1982, 12.

another bridges erected by him have been discovered near Parsu, a halting place between Sialkot and Kalanaur.⁸¹

Monserrate, during his journey to Kabul with Akbar, saw many permanent bridges. The first one he mentions was near Karnal in the Punjab.⁸² On the same march, Akbar ordered the construction of bridge over Indus and Kabul river.⁸³ Abul Fazl built another stone bridge during Akbar's reign at Sultanpur in the Punjab. The cost of this bridge was estimated at 20,000 rupees.⁸⁴ In the second year of his reign, Jahangir built handsome gardens and buildings near this bridge so that people can rest in peace and admire the beauty of it.⁸⁵

Jahangir constructed a bridge on Baba Hasan Abdal in the fourth year of his rule.⁸⁶ In 1618, a stone bridge 140 yards long and 4 yards wide was built for him across the River Mahi, under the supervision of Abdul Hasan, the Mir Bakhsi. To test its strength, Jahangir ordered four huge elephants across it, all at the same time. The bridge was strong enough to survive the weight of those elephants.⁸⁷ The bridge at Salimgarh, which was also constructed during his rule, is regarded as the fine piece of architecture, bold in design and with solid foundation. Cunningham has described it at length, "*The arch sheeting is formed of rubble and mortar, and springs flush from the face of the abutments. It is strengthened by a series of arched ribs springing from cables that*

⁸¹ Imperial Gazetteer of India, Provincial Series, Punjab, II, 1908, 87.

⁸² Monserrate, 98.

⁸³ Akbarnama, III, 523.

⁸⁴ Tuzuk, I, 135-6.

⁸⁵ Ibid.

⁸⁶ Ibid., 160.

⁸⁷ Tuzuk, II, 41.

project from the faces of the abutments, which give great appearance of lightness, with great strength. As it is the bridge cannot from the immense size of its piers appear light but were the piers well proportioned, the effect would be very pleasing."⁸⁸

There were many bridges in and around both Delhi and Agra. The Athpula bridge, or Khair ka pul, east of Sikander Lodhis tomb, was built by Nawab Bahadur, one of Akbar's nobles. The eight piers, 7' 44" in thickness, which support its arches have in all probability led to its being named Athpula.⁸⁹ According to De Laet, a stone bridge, over a branch of the Jamuna, gave access to the tomb of Humayun in Delhi.⁹⁰ William Finch, while travelling from Agra to Lahore, saw the famous Bara Palah near Delhi.⁹¹ It was built under the supervision of Mihrban Agha, entitled *Agha-e-Aghayan Khwaja-Serai*, was one of the famous KhawajaSarais in Akbar and Jahangir's court.⁹² The massive stone bridge of eleven arches on twelve piers in 214 yards wide⁹³ still exists.

The Barah Palah is 361 feet long, 46 feet wide and has a maximum height of 29 feet. Heavy masonry walls protect the sides of the bridge; the walls over the arches are flanked by minars, about 10 feet high, one on either side of every arch. On the second northern arch, the highest point on the bridge stands a red stone wall, about eight feet high and five feet wide, containing an inscription. The road on the middle of the bridge is covered with masonry, and on either side of it is a footpath of sand stone. From the

⁸⁸ Cunningham. A, "Archaeological Survey of India," IV, Banaras, 1966, 72; Nath, R., "Monuments of Delhi," New Delhi, 1979, 55.

⁸⁹ List of Muhammeden and Hindu Monuments, II, 38.

⁹⁰ De Laet, 75.

⁹¹ Finch, 56.

⁹² List of Muhammeden and Hindu Monuments, II, 127; Nath, op. cit., 54.

⁹³ Finch, 127.

second arch on the north, the arches decline in height till they reach the road on the opposite side.⁹⁴

In 1639 on Shahjahan's order, Ali Mardan Khan's men constructed an aqueduct of five arches of 162 feet long and 24 feet wide, to bridge the drain carrying overflowing water from Najafgarh jhill. They built it on a channel from Hansi to Hissar, which extended upto the point reached by Shihab al-Dir. Later, Bakhtawar Khan, an *amir* of Aurangzeb, built a bridge over the canal.⁹⁵

During Kashmir's tour, Jahangir found several good bridges of different styles and designs. He saw two near Nain Sukh across the Kunhar river and another old bridge which was 54 yards in length and 1 ½ in breadth, across the Kishan Ganga. Jahangir for his army ordered the construction of another bridge parallel to it, 53 yards long and 3 yards wide.⁹⁶ In Srinagar, he saw four very solid bridges built by stone and wood.⁹⁷

Finch while on the way from Agra to Kanauj, saw two bridges. one near Akbarpur,⁹⁸ and the other at Chaparghata.⁹⁹ Mundy, on his journey to Patna from Agra, saw a pretty small bridge at Khurramabad (Jahanabad).¹⁰⁰ Tavernier mentions a bridge on the River Sengar (near Musanagar). He also refers to a bridge at Shahsaram.¹⁰¹

⁹⁴ Carl, S., "Archaeology and Monumental remains of Delhi," Allahabad, 1967, 209.

⁹⁵ Hamilton, W., I, 414.

⁹⁶ Tuzuk, II, 127-8.

⁹⁷ Ibid, 142.

⁹⁸ Finch, 175.

⁹⁹ Ibid, 179.

¹⁰⁰ Mundy, II, 226.

¹⁰¹ Tavernier, I, 113 & 121.

According to Mannucci, there was a bridge of twenty four arches in Sind built by Shaista Khan, which took 25 years to complete. In 1750, Tiffenthaler saw it in good condition. He wrote, "*An elegant bridge made of ashlar on the Sindh, supported by 24 high and wide arches, 3 of which are now destroyed by the violence of the rains.*"¹⁰²

Among the more important bridges, a particular one that came to the notice of foreign travellers was in Ahamdabad. Della Valle describes a bridge at Cambey. He writes, "*Of many arches were built, upon which, I believe two Indian coaches go abreast.*"¹⁰³ Tavernier saw some good bridges between Gwalior and Agra, notably one over the Kuwanri river, with six large arches, and another near Agra called Jajou ka pul, built of cut stones.¹⁰⁴ Mundy says, "*A prettie river (Rhind) with stone bridge,*" near Kora.¹⁰⁵ Tieffenthaler mentions about a bridge near Chunar fort. He writes, "*Near Chunar fort the ravine or Jhirna Nal (Jirgo) is spanned by a bridge having three arches.*"¹⁰⁶

Perhaps the most magnificent and beautiful bridge of the Mughal era was built on the Gomti at Jaunpur by Fahim, the most trusted and faithful servant of Mirza Abdur Rahim Khan-i-Khanan during Akbar's rule.¹⁰⁷ Completed in 1567, it marvelously blends art and utility. It still stands today, in all its glory and grandeur. It is believed that the

¹⁰² Mannucci, II, 322 & note.

¹⁰³ Della Valle, P., "The Travels of Pietro Della Valle in Indies," edited by Edward Gray, Hakluyt Society, 1892, I, 96; Mundy, II, 226.

¹⁰⁴ Tavernier, I, 64-5.

¹⁰⁵ Mundy, II, 91; Tieffenthaler in S. N. Sen., "The Mid- Gangetic Region in the 18th Century," New Delhi, 1986, 47.

¹⁰⁶ Tieffenthaler, op. cit., 47.

¹⁰⁷ Ain, I, 360. De Laet, 91.

construction of the bridge had already begun in 1564 during the governorship of Ali Quli Khan-i-Zaman. It was later completed in 1567 by Munim Khan after he became the governor of Jaunpur.¹⁰⁸ Running from north to south, *"The bridge is extremely picturesque... The extreme length from bank to bank i.e., 654 feet, but this comprises not only the two bridge but also the island between them, 125 feet in length... the southern bridge is 176 feet long and consist of five pointed arches, (Tieffenthaler said six) of 18 ¼ feet span... the northern portion has ten similar arches and is 353 feet in length."*¹⁰⁹ A pair of kiosks, one on either side of the road surmount each pier, along the whole of which is a colossal stone figure of a lion standing on a platform which is surrounded by latticed stone railings.¹¹⁰ According to the inscription on the bridge, its architect was one Hazarat Ali of Kabul and the superintendent of the work was khawaja Shaikh Nizamuddin.¹¹¹

About this bridge there is an interesting story in Jaunpurnama. *"In the year 972H (1564-65) victorious king, Emperor Jaluldin Akbar arrived in the fort or Jaunpur, for the purpose of punishing Ali Quli Khan. At the close of the days he frequently used to go for pleasure and recreation on board of royal boats, with several of his companions. One day, as the boat in which Emperor was moving, passed down the river, he saw a woman weeping, whose face was covered with a cloth. His heart was touched at the voice of affliction and he asked his attendants the cause of her lamentation. On enquiry,*

¹⁰⁸ Khan, I. A., "The Political Biography of the Mughal Noble-Munim Khan -i-Khanan," 120-1.

¹⁰⁹ Tieffenthaler, op. cit., 41-2; Hodges, 149; Imperial Gazetteer, Provincial Series, U.P., XII, 385 & XV, 83.

¹¹⁰ Annual Report of Archaeological Survey of India, 1935-36, 4. De Laet, 91.

¹¹¹ Imperial Gazetteer, op. cit., 234.

they were informed that she was a widow and had left the child she was suckling in order to go over the river to sell some skeins of thread and arrived at the bank of the river, but no one paid attention to her situation, the boatmen had taken away the boat and she did not know what had become of her infant. Immediately the river of mercy became agitated he (Akbar) ordered her to be taken into his own boat, and conveyed her to the opposite shore. He also ordered Munim Khan Khan-i-Khanan, the Hakim of Jaunpur to construct a stone bridge over the bridge."¹¹²

About the construction of permanent bridges a local tradition has recorded the method and material used, besides highlighting the role of various sections of society in the task. To begin with, Shahjahan ordered the local *faujdar* to lay a masonry structure over the Degh. The officer, Mirza Badiuzzman, failed to carry out the order as he could get only unbaked bricks from the brick burners, all of whom were imprisoned. In response to the officer's request, Shah Daula arrived to break the stalemate. The saint secured the release of brick burners and started the construction. When his first attempt failed (allegedly due to mischief of a *Jin*), he dug a deep pit and filled it with lime and mortar forming a well foundation. He raised two embankments (bunds) to keep the water and, in the process, converted the opposition of the local *Zamindar* into active cooperation.¹¹³ The bridge has continued to exist in fair condition up to the modern times, including its frescoe paintings and turrets.¹¹⁴

¹¹² Fuqueer Khyrooddeen Moohummud, "History of Jaunpur," a translation of 'Jaunpurnama', by an officer of Bengal Army, Calcutta, 1814, 66-7, 106, 199note.

¹¹³ Elliot. A. C, "The Chronicles of Gujarat," Patiala, 1970, 58-9.

¹¹⁴ Rehman. A., and Wescot, L J., "Pivot of the Punjab; the Historical Geography of Medieval Gujarat." Lahore, 1993, 88.

Pontoon-Bridges:

According to Horn the practice of river crossing was exceedingly common. *"Any river, if unfordable, was crossed by a temporary bridge of boats. Elephants could cross such bridges, but this a matter of every day experience."*¹¹⁵ From the beginning, Mughals were familiar with boat-bridges. In 1528, Mir Muhammad constructed a boat-bridge on the river Ganga near Kanauj, within 12 days, for Babur's marching army.¹¹⁶ Humayun is credited with many innovations, including a movable bridge made of several boats joined together within iron nails. Akbar in 1566, while returning to Agra from Jaunpur, camped on the banks of the River Ganga at Manikpur, ordered his officers to bridge the river with boats, which was accomplished in a single day.¹¹⁷ On the Kabul campaign Akbar's army had to cross many un-bridged rivers. Many wooden and boat bridges were widely constructed and the army with all the war animals and garrison, safely crossed the river.¹¹⁸ In the year 1618, during Jahangir's Gujrat visit, Khwaja Abul Hasan, the Mir Bakhshi raised a bridge on the Mahi river. Jahangir wrote. *"Although there were no boats on the river from which to make a bridge, and the water was extremely deep and swift, thanks to the efforts of Khwaja Abdul Hasan, in three days a very strong bridge 140 cubits long had been made. To test it out, I ordered them to make my personal elephant Gun Sundar, a massive elephant, cross the bridge with three female elephants, cross the bridge with three female elephants. It was so strong*

¹¹⁵ cf., Irvine, op. cit., 211.

¹¹⁶ Babur-Nama, II, 599.

¹¹⁷ Ain, II, 399.

¹¹⁸ Monserrate, 8; E&D, II, 551-2.

that the supports did not shale even under the weight of such huge elephants."¹¹⁹ Such incidences indicate that boat-bridges did not usually take long to build, a reasonably strong bridge could be ready in one to four days.

A special officer, dignified with the name of *Mir Bahr*, was charged with the construction of these bridges and the provisions of boats.¹²⁰ According to *Jahangirnama*, while travelling on the land several boats always accompany the royal camp, and the boat men were responsible for the loading and unloading of them.¹²¹ During a campaign, or an imperial tour, the *Zamindars* sometimes other local officers supplied boats to the *Mir Bahr*. These bridges could easily be broken down into its components and then re-assembled when required. Men along with beasts were able to cross-rivers on such bridges. Despite some apparent advantages, the device failed to be dismantled on any noticeable scale. Instead it was a common practice with the Mughals to construct temporary bridges of flat-bottomed boats, "*were tied together with grass and placed side by side in such a manner,*" says Monserrate, "*that the water just had play between them.*"¹²²

Mughal engineers were skilled pontoon bridge makers. Monserrate during Akbar's campaign against Mirza Hakim watched pontoon bridges being made. He writes, "*The king overcome the difficulty and danger of constructing bridges; for if these are built*

¹¹⁹ *Jahangirnama*, 202.

¹²⁰ Irvine, op. cit., 211.

¹²¹ *Jahangirnama*, 203.

¹²² Burnes .A and others (ed.), "Political, Geographical and Commercial reports 1835-37," in "The Punjab Past and Present," XII, April 1978, 67.

over a broad river-bed they are apt to be swept away by the force of the current and hence to bring disaster upon an army crossing them. It is the custom in India to make temporary bridges of boats, which are tied together only by grass ropes. Over these boats is laid a roadway made of branches of trees, bushes and hay. The king, however, gave orders that the cavalry the infantry, the camels, the other beasts of burdens, the flocks and the herds, should pass over both separately and in single file, so that, if a bridge parted, the river should take no great toll of men or supplies. Whereof on nearing a river, a small block-house was set up and occupied by the king's men, who took care that a large number should not carelessly crowd the bridge at one and the same time, and so sink the boats. Moreover, elephants were not allowed to cross such bridges, lest they should sink them by their weight."¹²³

Bernier almost a century later saw a boat-bridge constructed in much the same way. He noted, "*so as to cross the large Rivers, which in these regions ordinarily do not have bridges, two were made of boats, separated by some two or three hundred paces from each other; they know tolerably well to link and strengthen them, and they then, cover them with a mixture of earth and straw, thus preventing that the animals easily slip.*"¹²⁴ Bernier, however, complained about the indiscipline among the troopers. He says, "*Confusion and dangers occur at the extremities; for not only does the crowd and pressure occur most there, but when the approaches to the bridges are composed of soft moving earth, they became so broken and so full of pits, that horses and laden oxen tumble upon one another into them, and the people pass over the struggling animals in*

¹²³ Monserrate, 81.

¹²⁴ Bernier, 380.

the utmost disorder, the evil would be much increased if the army were under the necessity of crossing in one day; but the king generally fixes his camp about half a league from the bank, he again delays his departure so as to allow the army three days and nights at least to effect the passage."¹²⁵

The length of a pontoon, understandably, varied in accordance with the volume of water, flowing at any given time. On 4th of May 1607, a pontoon of only 18 boats was thrown across the Indus, because "*at this time the water of Nilab was low.*"¹²⁶ However, this was in complete contrast from the situation of September 1652, when heavy rain in the entire Indus plain had flooded all the rivers and streams. A bridge of 40 boats was constructed over the Indus at Jalalabad, while 55, 56, and 50 boats were used for the same purpose at Jhelum, Chenab and Ravi respectively. In that season of prolonged monsoon, a bridge of 104 boats was erected at Buh where the combined waters of Beas and Sutluj posed a formidable barrier.¹²⁷ A better idea about the dimension of pontoons has been provided by an account of the Dutch embassy, which visited the Mughal court at Lahore. In May 1712, 38 flat-bottomed boats, each two and a half fathoms (15 feet) wide, were employed in constructing an 80 fathoms (480 feet) pontoon over the Beas. The width of its platform measured two fathoms (12 feet) so that

¹²⁵ Ibid.

¹²⁶ Tuzuk, I, 101.

¹²⁷ Badshah Nama, CF, Singh, S, "River Crossing in North Western India during Mughal Times," in IHC proceedings, 59th session, 1998, 435-443.

two carts could pass simultaneously one beside the others, without any notable difficulty.¹²⁸

Not only temporary but also permanent bridges of boats were made on important routes. The Jamuna at Agra was bridged by stout pontoons, which were so strong that they could support two huge elephants. Once Akbar mounted a huge elephant called *Hawai* for an elephant fight. *Hawai* and other elephants became wild and charged. After a while they came to the Jamuna bridge. Abul Fazl says, "*Owing to the great weight of those two mountains forms the pontoons were sometimes submerged and sometimes lifted up. The royal servants flung themselves into the water on both sides of the bridge and went on swimming untill the elephants had traversed the whole of the bridge and got to other side.*"¹²⁹ When Shahjahan moved the capital from Agra to Delhi, the new site was on the banks of the Jamuna, which were linked by a bridge of boats.¹³⁰

Wooden Bridges:

Like permanent stone bridges, many wooden bridges were scattered all over the country. Monserrate saw a wooden bridge built over the River Sultluj in Machivara-Ludhiana district,¹³¹ and noticed several others across the Beas (Dungarri), Ravi (Kalanaur) and near Sodhra.¹³² In the Kashmir valley there were many strong bridges;

¹²⁸ Kunen, D., and Vogel, J. Ph, "Embassy of Mr Johan Josua Katelaar, Ambassador of Dutch East India Company of the Great Mughals – Shah Alam Bahadur Shah and Jahandar Shah," *Journal of the Punjab Historical Society*, X, Part I, 37. (Hence forth., "The Dutch Embassy").

¹²⁹ Akbarnama, II, 233-4; Jahangirnama, 278-9

¹³⁰ Bernier, 241.

¹³¹ Monserrate, 103.

¹³² Ibid, 104, 108, 110.

Bernier saw two beautiful bridges in Srinagar.¹³³ On the construction of wooden bridges in Kashmir, Jahangir's comments are worth mentioning, "*The way in which they made bridges in this country is to throw pine trees on the surface of the water, and fasten the two ends strongly to rocks, and having thrown on to these thick planks of wood, make them firm with pegs and ropes, and these, with a little repair, last for years.*"¹³⁴ But this Method was used to bridge fairly narrow rivers. Unlike the stone bridges, rope bridges were susceptible to damage and destruction by fire and flood. They required precaution to ensure their safety.

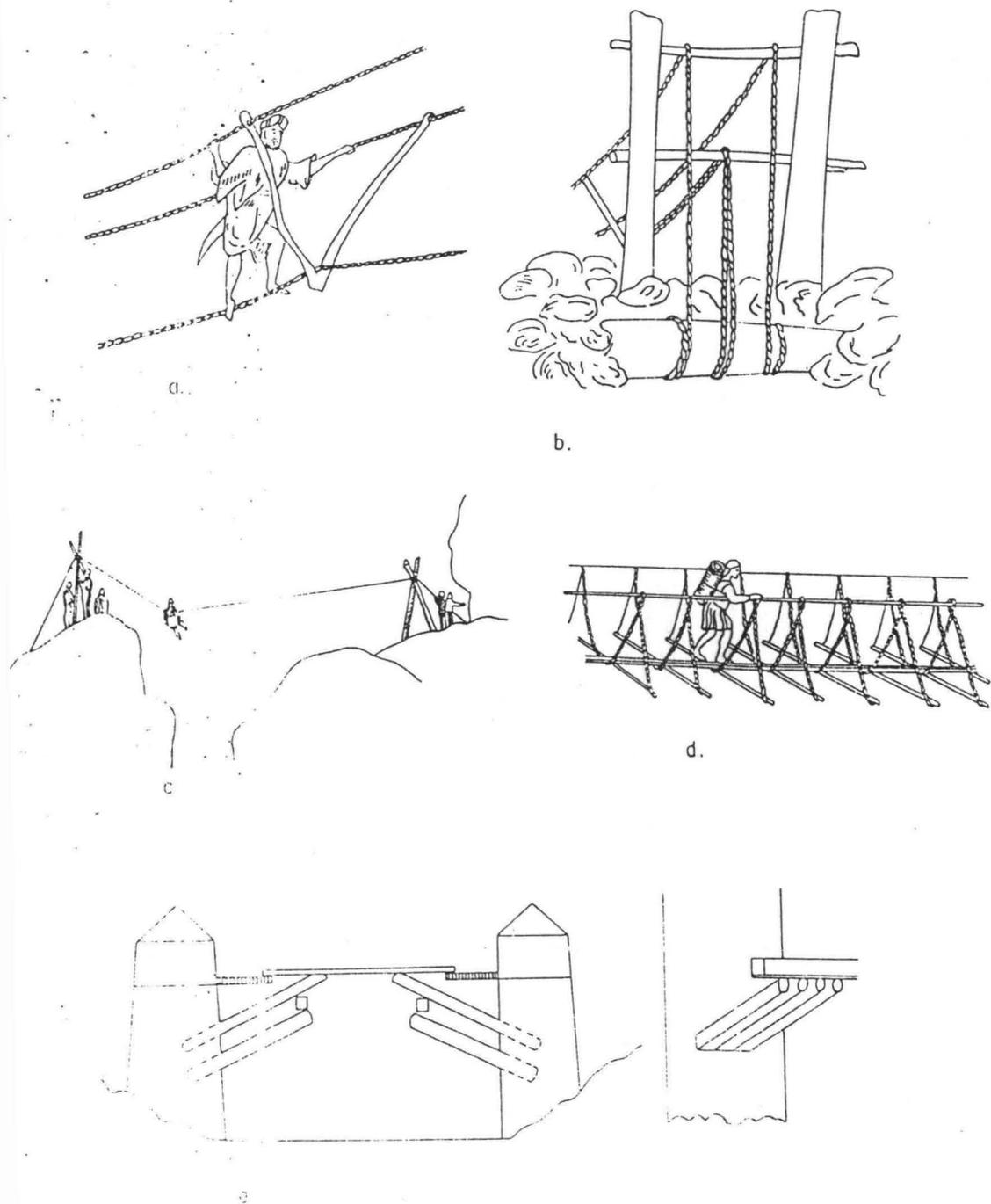
Rope-bridge:

In mountainous regions, rope bridges were used. They were common in Kashmir. Jahangir describes the construction of a rope bridge during an expedition against the raja of Kishtwar, to the south of Kashmir. At Bhadarkot, a place surrounded by hills on the bank of the river Maru, it was difficult to cross the river. Here, "... *they attach strong ropes, and place planks of a width of a cubit between two ropes, and fasten one rope's end to the top of the hill, and the other on the opposite side of water. Then they attach two other ropes a gaz higher than those, that foot-passengers may place their feet on the planks, and taking hold of the bottom, and so cross the River. This bridge they called Zampa, in the language of the people of the hill country.*"¹³⁵

¹³³ Bernier, 402.

¹³⁴ Ibid, Tuzuk, II, 127-8.

¹³⁵ Tuzuk, II, 137.



XVI. Hīmalāyan bridges, based upon earlier drawings: a. and b., *jhulā* at Dopattā on the Jhelam in October 1847 (sketch by R.G. Taylor, *Political Diaries*, vol. VI, f. p. 104); c., cableway in Bhūṭān (drawing by Daniell, *Orient. Annual*, 1837, f. p. 9); d., *jaluṅga* in Sikkim in 1848 (drawing by Hooker, *Himal. Journals*, vol. 149); e., *saṅga* in the Pañjāb (sketch by Baden Powell, *Handbook*, 333).

In Kashmir and other parts of the Himalayas, several types of rope bridges were to be found. The imperial highway from Kashmir was specially favoured in this respect. Over a stretch of 12 miles, between Bahramgala and Pusiya on the route from Bhimbar to Srinagar, Vigne and Temple noted 25 to 30 beam bridges which were repaired annually at the end of the winter season.¹³⁶ And perhaps some of its type still exists. In the nineteenth century Srinagar, Temple counted seven large Kadal (a kind of rope bridge), having approximate lengths of 90 meters spanning the stream, and eighteen bridges constructed of wood and stone over the canals.¹³⁷ At Badrinath, people used the rope bridges to cross Ganga because its banks were too high and precipitate for the use of boats. Methods similar to those of the Kashmiris were used to make these bridges. Usually thick ropes were firmly fixed on both banks and then used as a bridge by the people of Badrinath. They used to call it as *Chakna*.¹³⁸

Many of all these structures mentioned generally span small streams, but some afford the possibility to cross reasonably big rivers, as for instance the bridge on the Gomti river in Jaunpur. However, the Mughal's bridge construction policy has some criticism as well. Forbes, who was well acquainted with the routes of western India, writes that he encountered but a single bridge in his travels.¹³⁹ And Modave, who traveled in the heart of the Mughal empire says, "*Although I have traveled throughout the better part*

¹³⁶ Vigne, I, 259; Temple, II, 21.

¹³⁷ Temple, I, 290.

¹³⁸ India of Aurangzeb, 19.

¹³⁹ Forbes. J, II, 287.

of Hindustan, I do not believe I found not even fifteen bridges there, and of those three or four merit attention."¹⁴⁰

Involvement of the Local factors:

Physical sources and technical capability were not enough to convey travelers across the rivers. The cooperation of local chiefs, and *zamindars*, particularly those holding sway along the river banks, were equally essential. Since they possessed numerous boats, as part of their military resources and exercised a firm control over the passage across the rivers. Conversely, their indifference or opposition could effectively block movement of traffic at the fords. It was not without reason that Akbar, while marching, in 1581, towards Kabul in pursuit of Mirza Hakim, conciliated the Dilazak chiefs before that the emperor secured forty boats as well as a huge quantity of timber, with which an equal number of fresh ones were fabricated.¹⁴¹

The role of the local *zamindars* were pushed to the centre stage when the imperial army was pursuing in 1606, a rebellious Khusro, through the plains of Punjab. Acting in compliance with Jahangir's orders, the *zamindars* did not leave any boat for Khusro at Sultanpur, one of the recognized crossings at the Chennab. When the prince tried to cross the river from the ferry of Sodhara, the *zamindars* used violent means to prevent the boatmen from providing any service to the fugitive who were consequently stranded. The *zamindars* blocked the movement of the rebels by fortifying the eastern bank and collaborated with the imperial *jagirdars* in capturing the leading malcontents. Recognizing the invaluable support extended by the *zamindars*, based between Chenab

¹⁴⁰ Modave, 322. Cf., From Deloche.

¹⁴¹ Monserrate. 122.

and Jhelum rivers, Jahangir rewarded some with village headships and others with land grants.¹⁴²

Improvement in communication, through the construction of bridges, went a long way in strengthening the imperial control over hitherto isolated pockets. This development undermined the position of *zamindars* in the rural society, by eroding their traditional privileges. In such situations, they constructed the construction of bridges in their localities. Buta, a *zamindar* who earned his livelihood by ferrying travellers across the Degh, opposed Shah Daula's move to span the stream by a masonry structure. He breached the embankment, which was raised to hold the water back, with a view to drown the workers. Shahjahan ordered the *zamindar* to be brought at Lahore, where he was hung from a tree. On being released through the intervention of Shah Daula, he cooperated with the local community in the completion of the bridge.¹⁴³

Contemporary records have failed to mention the role of boatmen (*mallah*), at the fords and their position in the society. The boatman was *jhinwa* by caste and muslim by religion. He combined his special work of boat management with such other occupation of his caste as fishing and growing water nuts.¹⁴⁴ However a survey carried out in 1837, by officers of Bombay engineers traces the state management of boatmen at Attock to the sixteenth century. Akbar was found to have assigned a village in Pargana Cahch to boatmen. Yielding an annual income of rupees five hundred, the *jagir* enabled forty

¹⁴² Jahngirnama, 66-9.

¹⁴³ Elliot, 59.

¹⁴⁴ Ibbeton., D., "Panjab Caste," Patiala, 1970, 308.

households with eighty boatmen to settle in Malhayi Tola, a village outside the Attock fort. The boats, fifteen in number, were treated as the boats from Attock. They were not permitted to remove the boats from Attock. They were required to keep the boats in a state of repair, as the government did not pay them to acquire a new one which was sunk. When a pontoon was formed, each boat was paid at the rate of four annas per day as long as the structure stood. At other times, the boatmen plied at the ferry between Attock and Khairabad, charging in accordance with the nature of cargo.¹⁴⁵ The practice appears to have been followed since the reign of Akbar.

Dangers in river crossing:

Despite the availability of a variety of means, the task of crossing a river was never free from danger. Contemporary sources recorded the occurrence of a series of accidents, which at times resulted in the loss of hundreds of precious lives. During the course of his retreat from Lahore to Kabul, in 1581, Mirza Hakim crossed the Chenab near Jalalabad and the Jhelum near Bhera. But the task was accomplished in such panic that several of his companions were drowned in the two rivers.¹⁴⁶ Following in pursuit, the Mughal army failed to lay a pontoon on the Chenab, as the volume of water was excessively large and the boats had been destroyed by the intruder. The troops were left to ford the river, but the three day exercise resulted in the drowning of four hundred men of all ranks "*who could not swim.*"¹⁴⁷ In the summer of 1607, Jahangir averted a catastrophe when he did not permit his men to ford a wild Jhelum, while the specially

¹⁴⁵ Burnes, A., and others., 66.

¹⁴⁶ Akbarnama, III, 508.

¹⁴⁷ Monserrate, 109.

erected boat bridge had broken into pieces due to torrential rain and violent hailstorm.¹⁴⁸ Almost a hundred years later, in 1712, when Jahandar Shah crossed the Beas on his way from Lahore to Delhi, it was reported that the multitude of drowned bodies were floating down the river. Simultaneously a boat, packed with several passengers and soldiers, was overturned by an elephant leading to several deaths. On May 1712, a number of troopers met a watery grave when they fell into Sutluj while crossing an overcrowded pontoon.¹⁴⁹

The water bodies posed a formidable challenge to the users of land routes. The challenges were met by a variety of structures and devices, the use of which was determined by local conditions, material resources and available technical skill. The communities of boatmen, who were maintained at the fords by the Mughal state, appear to have worked under the supervision of *darogha-i-guzr*. The support of the local authorities was crucial to the functioning of the communication system. But unexpected changes in Mother Nature, poor knowledge of the local geographical conditions and the pressure to travel in haste rendered the task of river crossing a hazardous task, especially in the case of large bodies of men and beasts.

Criticisms have been levelled against the road system of the Mughals. It was described as selfish and devoid of any public utility. But from earlier arguments and references, it can be suggested that the Mughals were fully aware of the need for good roads. Accounts of the tour and campaigns of the emperor along with hoards of foreign travellers, gives us a good picture about the management of roads. Their descriptions are valuable as they were directly involved with travelling activity.

¹⁴⁸ Tuzuk, I, 92.

¹⁴⁹ The Dutch Embassy, 36-9.

III. Travels

Means of Transportation:

The victory over the ocean was a great achievement which created a global network of communications. But it did so without altering the deficiencies and delays of traditional means of transport which remained permanent limitations on ancient regime economies.¹ Land transport is usually represented as inefficient, for centuries, roads remained more or less in a state of nature. But this was only comparative inefficiency, the traffic of the past corresponded to the economy of the past. The carts, beasts of burden, horses and men all played their part in relation to specific demand. Before setting out for Agra, Tavernier wrote, "*conveyances and of the manner of travelling in India, in my opinion, is not less convenient than all the arrangements for marching in comfort either in France or in Italy.*"²

Oxen:

Tavernier said, "*Differing from the custom in Persia, you do not employ in India in caravans or journeys either asses or mules, or horses, everything being carried here on oxen or by wagon, as the country is sufficiently level.*"³

In our age of high speed and quick transport an ox drawn coach may be contemptuously dismissed as a slow, inconvenient and uncomfortable. But for those days Indian oxen

¹ Braudel, F., "Civilization and Capitalism," 15th – 18th century, translated from French. revised by Sian Reynolds, London, 1981, I, 415.

² Tavernier, I, 32-3.

³ Ibid.

were, generally, used for the purpose of charge and were swifter than their English counterparts and would carry a man 20 to 30 miles a day. Tavernier says, "*They give an ox a loag weighing 300 or 350 livers.*" He goes on by saying, "*When the season presses, and they wish to get the goods quickly to Surat, in order to ship them, they load them on oxen, and not on carts.*"⁴ The term *balad* was used for the oxens who carried the goods on their backs from long distance.⁵

Fryer had a great praise for the Indian oxen. At Surat he saw a number of them. According to him, "*Here are brought up large gallant milk-white oxen with circling horns, artificially modeled in cases which they tip with silver, gold or brass, and make them shine like jet, putting a rope through their nostrils, and a headstall on them of London cloath, surrounding their necks with collars for bells, feeding them delicately as their horses; and one of these fitted for a coach, will sell for 30 or 40 rupees. The other oxen are little, but all have a bunch on their back.*"⁶ Della Valle describes them as, "*faire, large, white with two bunches like some camels, and run, and gallop like horses.*"⁷ Tavernier cautioned against buying an ox with long horns (not more than 1 foot) as, "*when the flies sting him, he chafes and tosses back the head and may plant a horn in your stomach, as happened several times.*" These oxen, he further remarked, "*Allow themselves to be driven like our horses, and have for sole bridle a cord, which passes through the tendon of the muzzle or the nosrtills*"⁸ In level tracks, the oxen were

⁴ Ibid.

⁵ Kagdo ki-Bahi, no. 3, cf., Gahn Shayam Lal Davra, "A Study of the Trade Relations between Rajasthan and Sindh/Multan," (1650-1800 A. D.) in PIHC, 1978, 581-594.

⁶ Fryer, "New Account of the East Indies," I, 295-96.

⁷ Della Valle, 21.

⁸ Tavernier, I, 43-5.

not 'shoed' but in the rough tracts, they were always protected against heat and stones and, therefore, 'properly shoed'.⁹ Tavernier also laments on the food provided to them. He writes, "*At morning wheaten flour, kneaded with butter and sugar and in the evening they were given chick peas, crushed and steeped in water.*"¹⁰

During seventeenth century, the Indian Ox was a noble fleet of foot, strong of limbs and inured of long journeys. The cart drawn by oxen, called a *bahal*, was of two types; the *chatridar*, which was covered with four or more poles supporting a canopy, while the other was an open cart.¹¹ Thevenot describes Indian carts as, "*They are flat and even, having a border four fingers broad, with pillars all round more or fewer, according to the fancy of him for whom it is made... This machine hath no more but two wheels put under the side of chariot and not advancing outwards, they are of the height of the four wheels of our coaches.*"¹² The ox chariot was not deemed unworthy of royalty. According to Roe, Jahangir once had a joyride with Nurmahal, "*in open wagon.*"¹³ Mundy once saw twenty coaches for the "*kinge's owne use, whereof 2 only were drawn by 2 horses,*" and "*the rest by oxen some of extraordinary greatness, and some againe as little, chosen of purpose.*"¹⁴

In 1641 Manrique while travelling from Patna to Agra expressed the desire to hire horses, however, local peoples suggested him that it would be more convenient and serve him better to take cart. "*These are covered like our coaches and not only protect*

⁹ Ibid, 43; Indian Travels of Thevenot and Carreri, 73.

¹⁰ Ibid.

¹¹ Ain, I, 157.

¹² Indian Travels of Thevenot and Carreri, 75.

¹³ Roe, 426.

¹⁴ Mundy, II, 193.

one form the inclemencies of the weather out also from bodily concussions, as most of these roads are level and so suited to these instruments of the Yritonian (?) inventor."¹⁵

A strong cart can cover 8 to 10 kos in a day.¹⁶

The English president of Surat factory sent an 'Indian coach, drawn by two white oxen', to bring Mandelslo to his house.¹⁷ When Mandelslo visited Ahamdabad, Benjamin Roberts, the chief of English Factory there, came to receive him with his coach. Mandelslo writes, "*His coach was made after the Indian fashion, was gilt all over, covered with several pieces of Persian tapestry, and drawn by Oxen which expressed as much metal as we could expected from the best horse in Germany.*"¹⁸ At another place Mandelslo noted, "*In travelling through the countrey, they make use of camels, mules, horses, and oxen. They have also a kind of coaches, for two of three persons which are drawn by oxen, whereto they are so accustomed, that they easily get ten or twelve leagues a day. The upper part of covering of these coaches of all sides is of cloath or velvet; but those which carry women are close of all sides.*"¹⁹ Herbert mentions chariots drawn by buffaloes,²⁰ and poor people not infrequently rode buffaloes and oxen which Mandelslo found exceedingly comfortable.²¹ Tavernier holds a different opinion, "*Oxen,*" he says, "*takes the place of horses, and there are some of them whose paces are as easy as those of our hacks.*"²²

¹⁵ Manrique, II, 43-5.

¹⁶ Mundy, II, 286.

¹⁷ Mandelslo, 12.

¹⁸ Ibid, 22.

¹⁹ Ibid, 65.

²⁰ Herbert, 42.

²¹ Mandelslo, 45.

²² Tavernier, I, 65.

In Surat, Della Valle saw coaches like the ancient chariots described by Strabo. *“They were, generally, covered with crimson silk, fringed with yellow round about the roof and the curtains. They were drawn, as in ancient times, by oxen, ‘faire large and white’, which galloped like horses. They were also covered with the same stuff ‘but beset with many tufts or tasseis, and abundance of bells at their necks, so that when they ran or galloped through the streets they were heard at a sufficient distance, and made a ‘very brave show’. With these kind of coaches in India, they not only go in cities, but also for the most part travel in the country, driven by oxen, was advantageous as he (the traveller), while travelling from Surat to Cambay in two of these countrey chariots which crossed a shallow part of the gulf of Cambay at low tide without even wetting the floor, for the water did not come above the belly of the big oxen.”*²³ At another place Downton’s lack of care *“in lettinge one legge hang out of the coach, and (in talke) moving it to and fro”* almost cost him that limb.²⁴

Fryer distinguishes between coaches and carts. He writes, *“The coaches and carts are much alike, the last being only stronger built with main timber for strength... Two large milk white oxen are putting in to draw it... The chariot itself is not swinging like ours, but fastened to the main axle by near arches which support a four-square seat, which is inlaid with ivory, or enriched as they please; at every corner and turn’d pillars, which make (by twisted silk or cotton cords) the sides and support the roof, covered with English scarlet cloth, and lin’d with silk, with party-colour’d borders; in these they spread carpets and lay bolsters to ride cross-legged, sometimes three or four in one; it*

²³ Della Valle, I, 65.

²⁴ Nicholas Downton, 141

borne on two wheels only, such little ones as fore-wheels are and pinn'd on with a wooden arch, which serves to mount them...Those for journeying are something stronger than those for the merchants to ride about the city."²⁵

The rentals for oxen, ox-carts or coaches varied. Coach oxen were not at all expensive as Tavernier purchased a pair in 600 rupees. But he warns the reader not to be surprised for some often "*make journeys lasting sixty days at 12 or 15 leagues a day and always at the trot.*" And it could be hire for 25 pence a day. The journey from Surat to Agra took 35 to 40 days by road and the traveller paid only 45 rupees.²⁶ Carts which carry goods and merchandise had different rates. A cart could be hired at Rs.3 per maund for Agra to Burhanpur.²⁷ From Patna to Agra the charge for a cart was 1 ¼ to 2 ¼ rupees per maund of 62 ½ lbs., including the pay of the native supervisor, which was 10 to 15 rupees for the journey.²⁸ On difficult routes and in bad season, when it was impossible for carts to travel oxen were used as pack animals. Then the charges were probably higher.

Camels:

Camels were commonly used in sandy regions of the country like Rajasthan, Gujarat and Multan. Camel remained the unmatched and unchallenged mode of conveyance in these regions. Nature has favoured this animal with number of qualities which no other animal possesses. For its catholic appetite, its hardiness and its loading capacity camel

²⁵ Fryer, op. cit., III, 157-58.

²⁶ Tavernier, I, 43; Indian travels of Thevenot and Carreri, 73; Mundy, II, 278.

²⁷ E.F.I, 1618-22, 190.

²⁸ Mundy, II, Appendix D., 367.

had been in use most commonly. The movement of trading caravans depended on the availability of camels. The animal was used not only by the traders but also by the state and its armies for water and other provisions for their soldiers.²⁹ Ain tell us that, "*Five rows (qatars) of the camels were always ready for imperial use. Each row consisted of five camels, the first of each Qatar was called peshang (the vanguard), second pesh-dra (frontpiece) third was miyana (the middle), the fourth dum-dast (dum - tail; dast - hand) and th last row was known as dum-dar (the rearguard).*"³⁰ At times the imperial treasury was also carried on camels, as Babur has mentioned.³¹ Camels also bore a kind of litter, which was generally used by women, called *imaris* and *mihafas*.

Mundy while travelling from Burhanpur to Agra saw 150 camels with litters on their back. He writes, "*A pair of Cojavas (Khajawa, panniers covered with red cloth) resembled a greate panniers in which mat sitt two on each side.*"³² Carreri estimated an astonishing number of camels in Aurangzeb's camp. There were around 50,000 camels.³³

The swiftest camels came from Ajmer while the best for carrying burden, were from Sind. Jodhpur, Nagor, Bikaner, Jaisalmer, and Bhatinda were the places where camels were found in abundance. Ain contains the description of varieties, nature, regulations and the food administered to the camels. They were looked after very well. Akbar had

²⁹ Bernier, 392.

³⁰ Ain, I, 258.

³¹ Baburnama, 338.

³² Mundy, II, 290.

³³ Indian Travels of Thevenot and Carreri, 218.

given names to the camels as '*Bughadi*' for male and '*Janmazah*' to the females.³⁴ The use of camels in caravans was not popular on all routes. They were in demand from Surat to Agra, and Sind and Baluchistan. According to Tavernier, "*They use camels also for caravans, but rarely, and they specially reserved to carry baggage of the nobles.*"³⁵

In, 1619, the rate for conveyance from Agra to Surat was 14 $\frac{3}{4}$ rupees for a camel load of 500 lbs. In 1651, rupees 15 $\frac{3}{4}$ was the charge per camel from Agra to Ahamadabad; while in 1639 goods could be carried from Agra to Lahore for rupees 2 per maund of 74 lb.³⁶ Fremlen paid 9 $\frac{1}{2}$ rupees per camel for the journey from Surat to Agra, in 1639.³⁷

Horses, Mules, Ponies:

Horses, mules, ponies and even donkeys were employed for riding or carrying from one place to another. Mules and donkeys were also used for carrying goods but their use was restricted to local travel. But on some occasions mules were employed for imperial journey.³⁸ Good horses, generally, were brought from Persia and Tartary and thus could not be put to such drudgeries. The Indian counterparts were not very fit for burthens.³⁹

Persons of importance had a stable of Persian horses for their personal use. The East India Company kept a set of Persian horses for the use of their factors and servants in

³⁴ Ain, I, 143-48.

³⁵ Tavernier, I, 33.

³⁶ Moreland, W., "From Akbar to Aurangzeb," 150.

³⁷ Mundy, II, 278.

³⁸ Bernier, 392.

³⁹ Gommans, J., (art.), "The Horse Trade in Eighteenth Century," in JESHO, 1994, 228-47.

principal settlements of India.⁴⁰ Every *Amir* had, according to his *mansab*, 10, 8, 5 or 6 horses of several breeds like the Persian, Arabian, Kachhi etc. The *kachhi* was the hollowed backed horses from Cutch and had the reputation of being equal to the Arabian horse, according to Mundy.⁴¹

Ain says, "In the northern mountains of Hindustan, a kind of small but strong horses is bred, which are called 'Gut', and in the confines of Bengal near Kucch Bihar another kind of horses occurs, which rank between the Gut and Turkish horses and are called 'Tanghan'. They are strong and powerful."⁴² There used to be frequent fairs and markets in many cities where horses, cattle and salves were displayed and sold. The market for horses or cattle was known as 'Nakhas'.⁴³

The great craze that existed in India for Persian and Arabian horses is well known. It is evident from later references that the hope of a good supply of these valuable animals was the main motive of the concession made to Europeans in India. In return it was only stipulated that royal officers should be allowed the first opportunity of purchasing whatever horses of curiosities the Europeans might bring from Persia. Thomas Rastell writing from Swally informed the company that they captured two ships of Portuguese carrying coconuts and Arabian horses.⁴⁴

⁴⁰ Mundy, II, 52-4.

⁴¹ Ibid.

⁴² *Ain*, I, 133.

⁴³ Mundy, II, 189.

⁴⁴ E.F.I., 1634-36, XXXIV.

Palanquins:

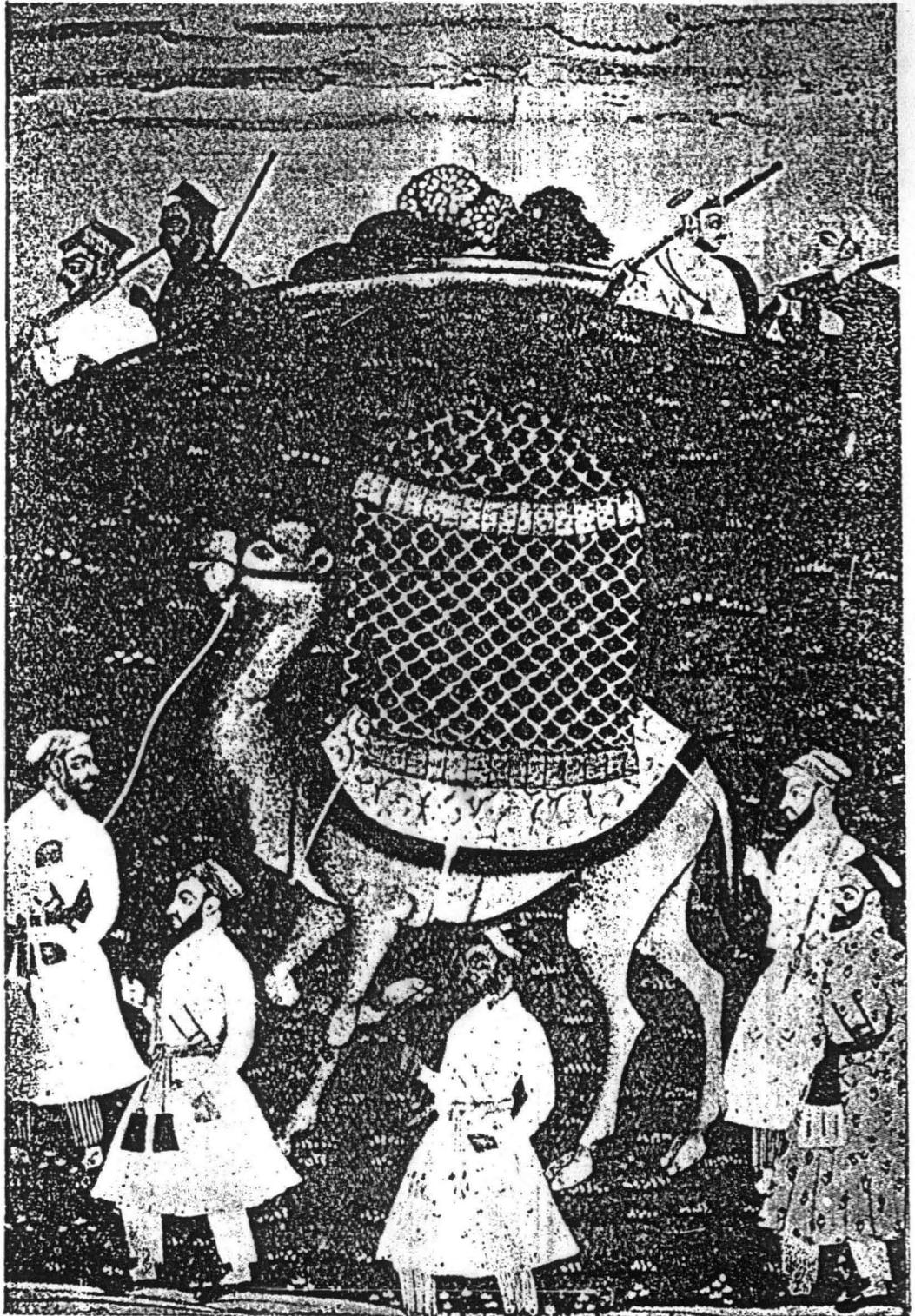
*"A palanquin," Bowery noted, "Was of a long square frame about six feet long and 3½ feet broad. It was very neatly inlaid with ivory and turtle shell of excellent workmanship plated with silver (as the owner's pleasure is to bestow casts thereon) with a large bamboo of about 15 to 16 feet long, crooked in the middle for the convenience of sitting upright or 'may lie down in it, with a scarlet or broad cloth called a pingaree, stretched out square. This was carried out by four men at once a journey. The bearers could carry it upto 40 miles."*⁴⁵

According to Herbert Moll, *"when a man of substance travelled, he usually hired eight or ten persons to carry his palanquins. It was, usually, well contrived with pillows, had an arch canopy over it, usually, well contrived with pillows, had an arch canopy over it, usually of scarlet cloth. It was spacious enough for a man to sit or lie in it. Two coolies in front and two at the rear carried it on the shoulders at a speed of four or five miles an hour, with the provision of 'chairmen'. They charged the travellers only 3 pence per coolie. These coolies also helped the travellers or other persons sitting in it, in getting provisions from the nearby villages, firewood from the jungles, and earthen pots for a half a penny for the purpose of cooking their meals."*⁴⁶

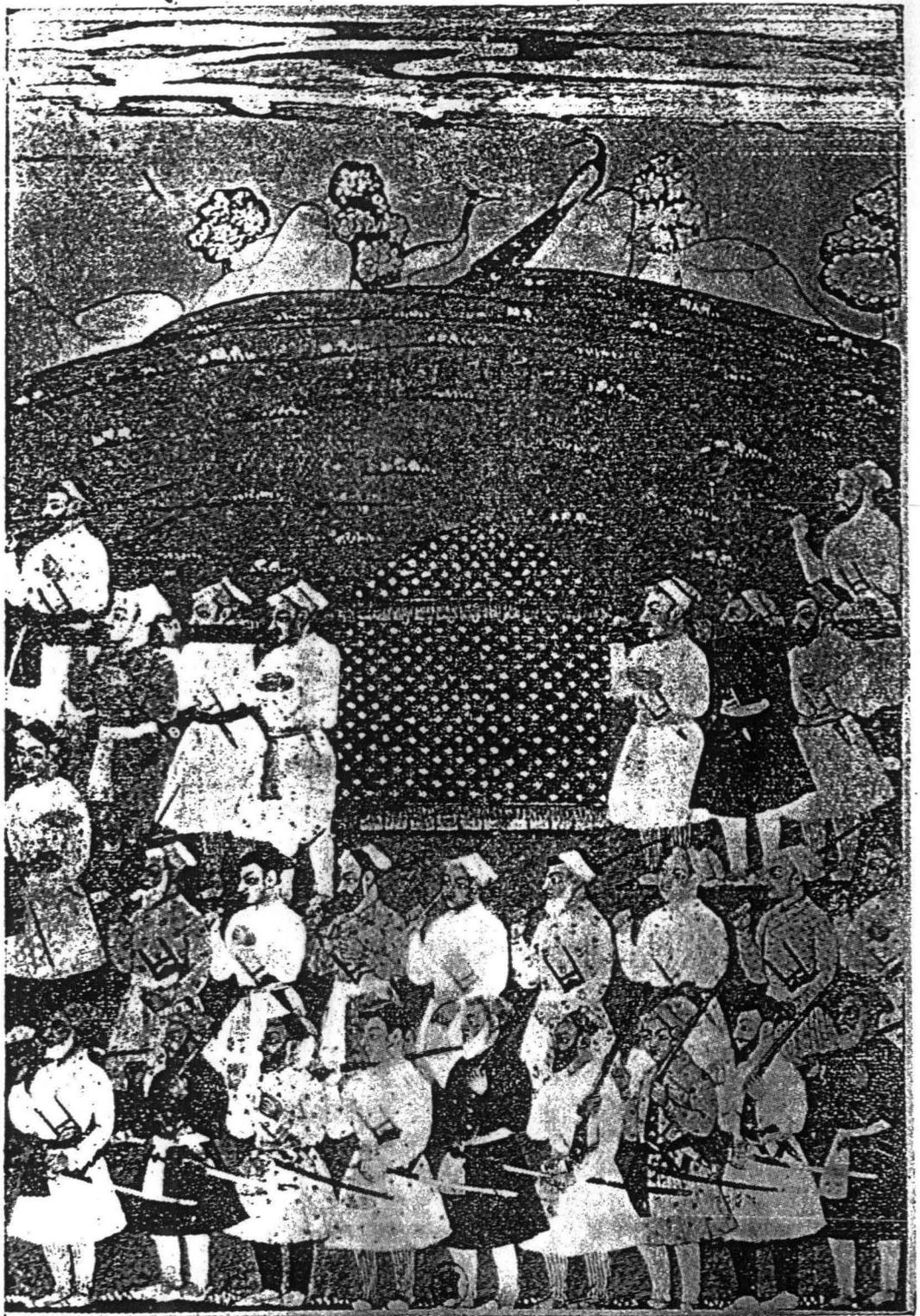
According to Tavernier, *"Palanquin was meant for comfortable journey. It was a kind of bed, 6 or 7 feet long and 3 feet wide with a small rial all around. A bamboo sustains the cover of the palki which was of a satin or brocade. Three persons carried it, if to*

⁴⁵ Bowery, "A geographical Account," 87.

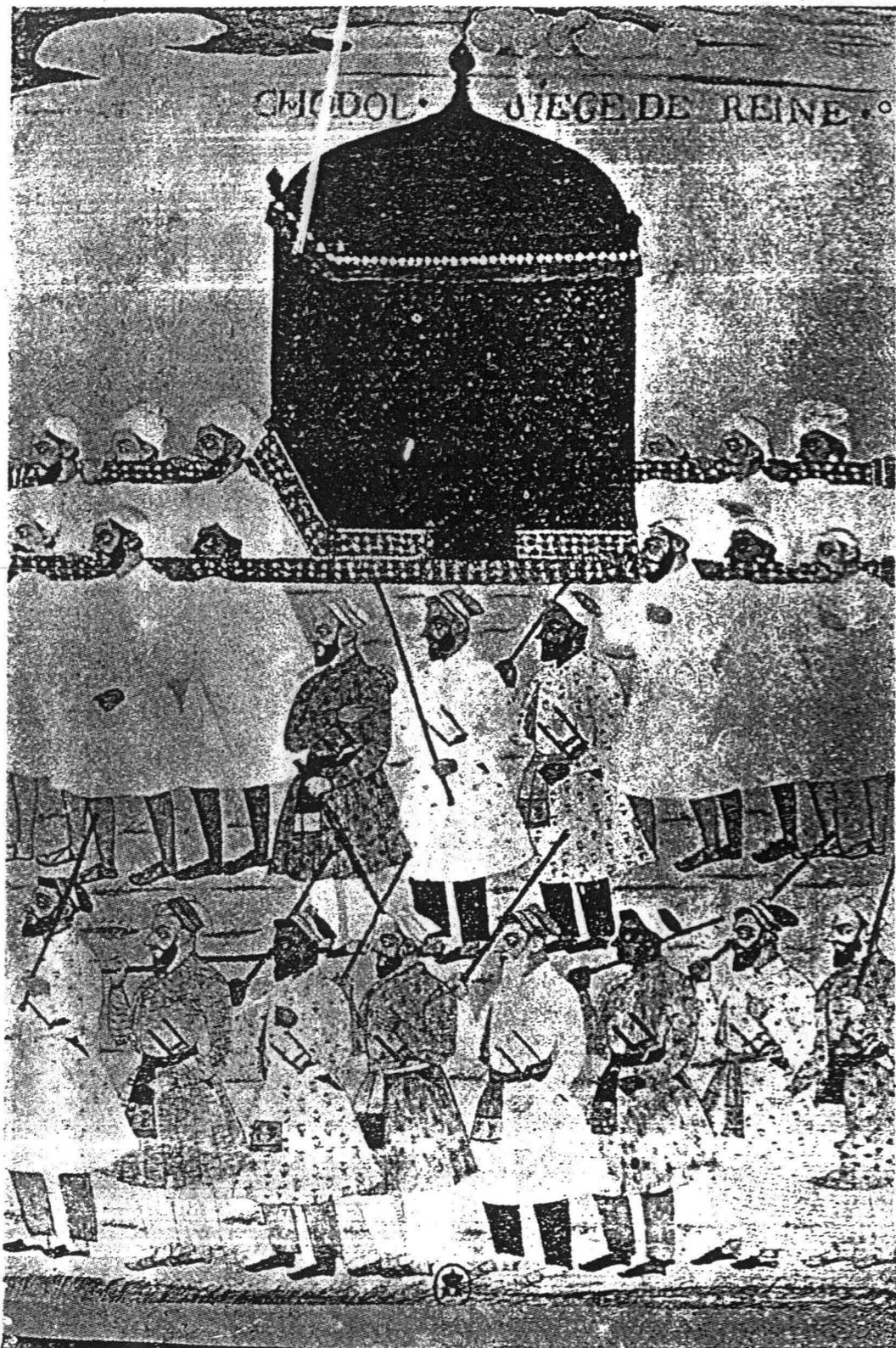
⁴⁶ Moll, H., "The Present State of Proper India," N. Delhi, 255.



CAMEL LITTER



PALKI OR LITTER FOR A HAREM LADY



CHAUDOL, A KIND OF LITTER

make haste 12 men were to carry it."⁴⁷ Captain Mundy found the use of palanquins in nineteenth century as well.⁴⁸

During the seventeenth century four different kinds of palanquins were in fashion. They were *Dolis*, *Chaudols*, *Singhasan* and *Takhat-i-Ravan*. *Dolis*, were similar to *palkis* but usually smaller in size. Generally covered and mostly preferred by ladies. *Dolis* were carried by only two men.⁴⁹ *Chaudals*, favourite ride for Mughal ladies, was a conveyance with four bamboos. They were gilt painted and covered with magnificent silk nets of many colours, enriched with embroidery, and beautiful Tassels.⁵⁰ *Singhasan*, (a throne) and *takhat-i-ravan* (a moving throne) was the special ride for the king or by the high nobels.

Bernier gave a very vivid description of *takhat-i-ravan*. He says, "*This tact is a species of magnificent tabernacle with painted and gilt pillars and glass windows that are kept shut when the weather is bad. The four poles of this litter are covered either with scarlet or brocade and decorated with deep fringes of silk and gold. At the end of each pole are stationed two strong and handsomely dressed men who are relieved by eight other men constantly in attendance.*"⁵¹ The finest palanquins of India were made at Thatta. It was well known for chariot and palanquins.⁵²

⁴⁷ Tavernier, I, 45-6.

⁴⁸ Captain Mundy., "Pen and Pencil Sketches; Being The Journal of a Tour in India," London, 1949, 1-2.

⁴⁹ Mundy, II, 189.

⁵⁰ Ibid, 91; Bernier, 371-72.

⁵¹ Bernier, 370.

⁵² Indian Travels of Thevenot and Carreri, 75.

Ain has given a description of the palanquin bearers, according to which, "*They carry heavy load on their shoulders and travel through mountains and valleys with their palkis, they walk so evenly that the man inside is not inconvenienced by any jolting. There are many in this country but the best came from Dakhin and Bengal. At court, several thousands of them are kept. The pay of hired bearer varies from 192 to 384dams, common bearer get 120 to 160 dams.*"⁵³ Generally the wages depend upon the journey covered. Once a factor sent a palanquin with three *Kahars* to a colleague near Burhanpur, paid 2 rupees each for the trip.⁵⁴ If a journey lasted longer than sixty days, *Kahars* received about 4 to 5 rupees each per month.⁵⁵

Caravans:

The caravans were both the oldest and the most popular method of travelling in large groups. It provided the maximum of safety and security and made an important contribution of social and commercial life.

People with pack animals, carts joined and left caravans as they proceeded on their way. In 1630, Mundy left for Agra for Surat, he was accompanied by only 150 people and fifteen to twenty carts with some camels in his caravan, but soon the number rose to between 1,700 and 1,800 persons and 250 to 300 carts, besides beasts.⁵⁶

⁵³ Ain, I, 254.

⁵⁴ E.F.I., 1630-33, 42.

⁵⁵ Tavernier, I, 46.

⁵⁶ Mundy, II, 45-6.

Caravans consist of number of men and animals posed many problems, of discipline, work-sequence, forage, and protection. A caravan-master occupied a position unlike that of a captain in charge of a ship. His experience of the actual routes and of the management earned him the appointment, and the authority of a caravan leader. The leader of the caravan was called *Mir*, *Salar*, or *Bakshi*.⁵⁷ Probably he was employed by the merchants forming the caravan, and normally made important decision after full consultation with them.⁵⁸ His influence and efficiency could be of considerable help to members of the caravan. He knew how to deal with the custom-officials and occasionally was even able to evade the formalities of customs through bringing his influence to bear on the officials.⁵⁹ Mundy with his party reached Biana in February 1632 in the company of Faujadar Baqir Khan, a Mughal *mansabdar*, who promised to protect and free them from paying customs on the way.⁶⁰ He was responsible for selecting halts, and for announcing departure of the caravan.⁶¹ Mundy gives an account of the responsibilities and duties of a caravan leader. Searching for missing camels, arranging for the repair of a cart, settling the customs rates, looking after the safety of the caravan, were only a few among the others.⁶²

The qualities required for selecting the caravan leader are not clear. When sending their goods through land Europeans gave the responsibility to a reliable and efficient man.

⁵⁷ Manrique, II, 340.

⁵⁸ Ibid, 341-51.

⁵⁹ Ibid, 344.

⁶⁰ Mundy, II, 273.

⁶¹ Ibid, 341-51.

Mundy had the opportunity to lead such caravans on few occasions.⁶³

Caravans usually traveled during the dry season, as roads were impassable in rainy season.⁶⁴ Manrique writes, "*Adhering to the well known rule that is always observed in these parts in journeying during summer time, and that is to start three hours before dawn and travel until eleven o' clock, on account of the heat.*"⁶⁵ Tavernier says, "*When they (travellers) enter towns which they must leave by sunset, if they wish to take the road. For when night comes and the gates are closed, the governor of the place. Who has to answer for thefts which occur within his jurisdiction, does not allow any one to go out, and says that it is the emperor's order, which he must obey.*"⁶⁶ In the morning drums were beaten to announce the departure of the caravans.⁶⁷

Defending Caravans:

The members of caravans had to guard against both betrayals from inside and the attack from outside. Although caravans were not completely immune from the depredation of bandits and robbers, their very size offered a measure of security. While travelling in the hostile circumstances one had to keep a constant vigil during the nights as well. Mundy says, "*The manner of watching the caphilla, is by the continuall beatinge of a great kettle drum (which most commonly carry with them), and once in a quarter of*

⁶² Mundy, II, Relation XVII.

⁶³ Ibid.

⁶⁴ E.F.I., 1624-29, 90.

⁶⁵ Manrique, II, 145-46;

⁶⁶ Tavernier, I, 39.

⁶⁷ Mundy, II, 43.

halfe an hour one or other cryes, Khabardar, when all the rest of the people answer with a showte, Khabardar and this they do all night."⁶⁸

To ensure added protection of the caravan, armed sentries and guards were hired. Downton and Mandelslo had armed men to protect them and their goods against the robbers. Thevenot mentions another class of guards, the *Charans*, whose, novel method of defense was quite as effective and could be purchased at two rupee, a day. The armed guards were not expensive either, as Mandelslo points out. William Hawkins hired 50 *pathans* for the journey from Surat to Agra. These guards were relived by another set of 40 men at Dhaita.⁶⁹ As for the fidelity Terry's testimony is quite conclusive. "*I must needs commend the Mahumetans and Gentils for their good and faithful service; amongst whom a stranger may travel alone, with a great charge of money or goods, quite through the countrye and take for his guard, yet never be neglected or injured bucklers or bowes and arrows for their defence; and by reason of great plentie of provision in that kingdome, a man may hire them upon easie conditions, for they will not desire above five shillings the moone, paide after the next day after the change, to provide themselves all necessaries, and for it doe must diligent service.*"⁷⁰

According to Sidi Ali Reis, "*In India there was a tribe amongst the 'learned (Bami)' of this land of Bantias called as the Baats. Their business was to escort merchants of travelers from one land to another. For a petty remuneration, they guaranteed their*

⁶⁸ Mundy, II, 43.

⁶⁹ Early Travels, 78-80.

⁷⁰ Terry, Early Travels, 313.

*perfect safety. If a Rajput attacked the caravans, the Baats pointed out their daggers at their own breasts threaten to suicide. Out of respect for the Bats, Rajputs desisted from their evil purpose and allowed the travellers to proceed unmolested.”*⁷¹

Protection Cost:

Travels in seventeenth century were subject to various payments apart from pure transport costs. The cost of protection occupied a significant role. Steensgaard has highlighted the various types of Protection costs like customs duty, robbery, and extortion by the local potentates.⁷² The boundary line between the highway robber and a local Prince is blurred.

Banditry:

Inspite of the best effort from the Mughals, travelling was not considered safe on the highways without proper precautions. The travellers had noted their pleasant and unpleasant experiences. Mundy while on his journey to Patna wrote, *“Hostilities were eminent and the usual bands of marauding outlaws, ‘whoe take Jaggat or custome on the way by their owne authritie’, were on the lookout to despoil and rob.”*⁷³ Few days later another band of outlaws demanded Rs. 500 as jagat from the caravan in which Mundy was travelling. They threatened to take that sum by force, so that for a time there was fear of recourse to arms. In the end, however, the robbers agreed to accept

⁷¹ Sidi Ali Reis., “The Travels and Adventure of Turkish Admiral, Sidi Ali Reis,” London, 1899, 34-5

⁷² Steensgard, N., “Asian trade Revolution of the seventeenth century, the East India Companies and the decline of the Caravan Trade,” Chicago, 1974, Introduction.

⁷³ Mundy, II, 111.

Rs. 14. "And soe," Mundy says, "wee slept that night a little more quiter then wee expected."⁷⁴

Mundy at another place reports, "Today morning in our way there was seven or eight bundles of cowdunge fuell and a boy stadinge by it, whoe told us that a little before day certaine theeves had carried two women, 40 oxen and 6 asses, which were goeing towards Agra, and meeting them in that place, threw downe .he fewell and boy, takeinge along with them the women and cattle departed; hereabout beinge the most dangerous place for robbers that is in all India (by report), as usual neare to great cities."⁷⁵

Ralph Fitch writes that, "There bee very many thieves in this country which be like to Arabians, for they have no certain abode but are sometime in one place and sometime in another."⁷⁶ While going back to the Mughal court, Monserrate came across many thieves. He wrote, "The inhabitants of these Mountains (Satpura region) are always at war with the Mughals. The robbers here killed one of their guards and they could not take any action against them."⁷⁷ Even the highway from Agra to Lahore was "dangerously infested with thieves."⁷⁸ While traveling from Surat to Ahamdabad Mandelslo met a *caphilla* from which highwaymen extorted rs. 100, and on another

⁷⁴ Ibid, 118.

⁷⁵ Mundy, II, 154.

⁷⁶ Fitch, Early Travels, 23.

⁷⁷ Monserrate, 13.

⁷⁸ Purchas, IV, 268.

occasion he encountered a party of Rajput robbers near Ankleswar.⁷⁹ Mundy described the country between Agra and Ahamdabad as “*thievish*” and heard of a number of robberies near Mount Abu.⁸⁰

William Finch, records that, “*At Sultanpur, in Malwa, lived people called Orasis. They were ‘theevish’ and inhabited a place to the left of the hills. They, often, ungraciously entertained caravans. A hundred of them had done so to a caphilla now had not out coming prevented.*” According to him the road from Gwalior to Ahamdabad was “*theevish.*”⁸¹ William Hawkins, while on his way to Burhanpur, conducted at one place by a “*Pathan Sher Khan, governor of that lordship.*” Sher Khan accompanied him from dangerous places, “*at time he met with a troupe of outlaws and took foure alive and slew and burnt eight.*”⁸²

To counter with such menace travellers were obliged to take armed guards with them. Mandelslo writes, “*The Rasboutes (Rasjputs) make the way between Amadabath (Ahamdabad) and Cambaya very dangerous, which made me take for my convoy eight foot-souldiers arm’d with pikes and bucklers. Before the horses, and may be hired for a small matter; for I have them but eight crowns for the whole journey, though I had them three days in which time I travelled thirteen of the country leagues.*”⁸³

⁷⁹ Mandelslo, 35.

⁸⁰ Mundy, II, 264 & 246.

⁸¹ Finch, 143-44.

⁸² Hawkins, 79.

⁸³ Mandelslo, 30.

De Laet called the highway robbers as *Graciae* (grassias). the term *gras* meaning mouthful in Sanskrit was applied to land given for subsistence to cadets of chieftain's families. Afterward in practice the term came to signify the blackmail paid by a village to purchase the forbearance and protection of a neighbouring brigand. Thence the word *grassia* came to mean a professional robber. It was a generic term which included the species *koli*.⁸⁴

The Highway robbers in the eyes of laws were persons too powerful for travellers and pounced upon them with some weapon and robbed them far from the city. They were subjected to punishment if they were caught, before they had repented and returned the looted property.⁸⁵ There was a complaint lodged in Kachawar territory by a trader from Delhi that 45 camels of his loaded with salt were stolen. The administrative machinery became active and officials of the region were instructed that the stolen goods should be recovered and handed over to the trader immediately.

About the severity of punishment one can know from the accounts left by the various travellers. Nicholas Withington wrote at Bollodo (near Ahamadabad), "*A fort kept by newlooke Abram (a brave soldier) for the Mogull, whoe was that day returned from battle, bringing home with him 169 heads of the coolies (kolis)*."⁸⁶

Manrique while on his way to Agra mentions, "*We also saw in some places those trees*

⁸⁴ De Laet, 34 & note; Nicholas Withington, 21.

⁸⁵ Sangar, S. P., "Crime and Punishment in Mughal India," 41.

⁸⁶ Nicholas Withington, 21.

*which by their nature bear no fruit, only with 'robber fruit'; bearing, that is, bunches of hanging thieves, for in these parts justice is not meted out by those who, under the influence of bribes, hold any injustice to be justice. It is also a custom here, especially on high roads, to, erect at stated intervals, columns of stone and lime, in which the skulls of malefactors are enclosed as a warning of what was done in the name of justice, and what will be done in future."*⁸⁷

Mannucci refers to the above practice. He says, *"The heads of rebels were first sent to Agra, and shown in the Royal square, then, after twenty four hours the heads were removed to the imperial highway, where they were hung from the trees or deposited in holes on pillars built for this purpose...In the thirty four years that I dwelt in the Mogul kingdom I travelled often from Agra to Delhi, and every time there was a number of fresh heads on the roadsides and many bodies of thieves hanging from the trees, who were punished thus for robbing on the highway."*⁸⁸

According to the institution of Timur, *"Robbers and thieves, in whatever place they might be found, or by whomsoever detected, I commanded to be put to death. And I ordained that, if any one seized by violence the property of another, the value of that property should be taken from the oppressor, and be restored to the oppressed."*⁸⁹

⁸⁷ Manrique, 149.

⁸⁸ Mannucci, I, 134; Tavernier, I, 58.

⁸⁹ Sarkar, J. N., "Mughal Administration," 4th edition, Calcutta, 1952, 102.

During Aurangzeb's reign: (a) If a man convicted of highway robbery before the *qazi*, or confesses with the details required as a condition for the imposition of punishment – the *qazi* should carry out the appropriate punishment in his presence. But if his offence does not deserve death or (but ?) some other *hadd* punishment, and the opinion of the governor of the *subah* and the officers of the *adalat* is against his execution, then do him *siasat* (mutilation). (b) If an arrested thief speaks of his booty as lodged with another man, and it is discovered there, and the man is on investigation proved to be an accomplice of the thief – then in the case of this being the first offence of the accomplice, *tazir* him; but if it be habitual with him after *tazir* imprison him till he reforms; but if these do not reform him and he commits the offence again, keep him permanently in prison. Stolen property to be restored to the owner after legal proof of ownership, if he be present. Innocent purchasers of stolen property were not to be punished, but it should be delivered to its original owner on proof, or deposited in the *Bait-ul-mail* (treasury).⁹⁰

The Mughal administration was very vigilant about maintaining peace on the highways. There is a particular reference in *Anecdotes of Aurangzib*. According to which, a report of the province of Ahamadabad sent by Muhammad Azam Shah, the governor to the Emperor. From the report the Emperor learnt that Janaji Dalve, a commander of the enemy (i.e., Marathas) had plundered some merchants on the highway of Surat at a place 80 miles from Ahmadabad. This matter had become known to Shah Alijah (i.e., Prince Azam) from a news-letter; but he had said, “*It has occurred within the faujdari*

⁹⁰ Ibid, 110.

of Amanat Khan, the collector of Surat; I have no concern with it." After reading the report Aurangzeb wrote on the sheet of it. *"Decrease five thousand from the substantive rank of the prince, and take from his agents money corresponding to the (loss) reported by the merchants. If it had been an officer other than a prince, this order would have been issued after an inquiry. For a prince the punishment is the absence investigation. Bravo for your princship, that you consider yourself lower than Amanat Khan! As in my lifetime you are claiming to inherit the empire, why hten do you not make Amanat Khan a sharer of your heritage during my life?"*⁹¹

The seventeenth century was a period of war and turmoil in few regions of the empire, law and order could not be as strictly enforced then as in later times, and that sense of citizenship which alone ensure social security was yet to be developed. The arms of the state were nowhere long enough to reach every corner of the empire. The Rajputs and *Kolis* who have been indiscriminately classed as robbers of highwaymen really took advantage of the weakness in the administration. Besides them there were the ordinary highwaymen who terrorized the countryside. But on the whole conditions in many parts of the Mughal empire permitted organized bands of merchants and travellers to move in comparative safety.

Oaten remarked, *"from one point of vies there is nothing that gives us such an insight into the comparatively high state of civilization in India during the medieval period as the immunity with which strangers from a foreign country were able to take their*

⁹¹ Sarkar, J. N., "Anecdotes of Aurangzib," 3rd edition, Calcutta, 1949, 65.

women-folk with them on their travels in India. In the fifteenth century we saw Conti doing so with perfect safety; at the beginning of the seventeenth-century Pietro Della Valle supplies us with a second example. Had the position been reversed and an Indian traveller attempted to travel with his family through any of the more civilized countries of Europe between the beginnings of the fifteenth and the close of the sixteenth century, it is doubtful whether the treatment he would have received would have been in any way comparable to natives of India, Hindu and Mohammedan alike, meted out to their 'Feringhi' visitors.⁹²

Terry also testifies to the civility of the common people and the general security of the road. "The truth is," he says, "that the people there in general are very civil, and we never had any affronts or ill usage from them, if we did not first provoke them." Terry conducted the journey from Surat to the Mughal court, a distance of about 400 miles in the safest manner as he did not bear any hardships or troubles. At places known to be notorious or where they entertained any suspicion, they were helped by a 'guard of horse' accorded them by prince Khurram. A footman sent by the Prince always kept company with them. They did not require their help throughout the journey for their defence, as there was all safety.⁹³

Inns and Rest-houses:

Every country has its peculiar way of catering to the travellers' needs. In Mughal India *sarais*, for the accommodation of travellers, were found at regular intervals along major

⁹² Oaten, Travels in India, 137-38.

⁹³ Terry, A voyage of East Indies, 391, 393-94.

highways and in cities. Like gardens and mansions, *sarais* were walled, and travellers entered through one of several large gateways. The walls were serrated with battlements and at each of the four corners were bastions lined the sides of the buildings. A pool of water, a well, a mosque, stables, trees, flowers and a *katra* (walled enclosure) for storing travellers' goods were found in most *sarais*.⁹⁴

According to Nicholas Withington, "*Between Adgmere (Ajmer) and Agra, at every ten courses (which is an ordinary days journey) there is a seralia or place of loding boothe for man and horse, and hostesses to dresse our vistuals if we please, paying a matter of 3d (?) both for horses and meat dressings.*"⁹⁵ Along the same road there were houses erected particularly for the convenience of women. The work is said to have done by Akbar. De Laet tells us about a *sarai* situated 2 kos from Candere (on Agra-Ajmer highway). He writes, "*2 kos from here (Candere) stands one apartment for ladies. It is a square building. Within the outer gate is a hall called the hall of the king's Darsany (Jharokha Darshan), leading off which are some other small rooms: within the second gateway are women's apartments, also square in shape, along each side are four bedrooms for the king's concubines, and of these there 16 in all; in the middle of each side and at each corner are spacious halls called Devoncon (Diwan-iKhana), hung with rich tapestries, in the middle of the whole palace is the king's bedroom.*"⁹⁶

Mannucci has also given good information regarding *sarais* in the Mughal empire. He writes, "*They were fortified places, built of stone or brick, having very strong gated. In*

⁹⁴ Mannucci, I, 67-70, 115.

⁹⁵ Nicholas Withington, 225.

⁹⁶ De Laet, 45.

every serai, there was an official whose duty was to close the gate in the evening. After he had shut the gates, he would warn every body to look after his belongings."⁹⁷

Zafar khan's sarai in Patna was the fairest in India, when Mundy saw it in 1632, it was under construction. Situated on the river bank, it had two fair courts, each having warehouses. "*Round about beneath and rooms with galleries to lodge in a loft, a very stately entrance.*" This sarai was mainly for merchants of strange countries as "*Mongollos, Persians, Armenians,*" who were allowed to stay and keep their belonging there on payment of charge "*by the moneth.*" The sarai was built by Saif Khan, the former governor of the place, with a faire mosque.⁹⁸

In 1633, while on his journey from Surat to Agra Mundy stayed at Hasanpur, which had fair, strongly built and 'well contrived' sarai of brick, by which ran beside river Asa. It was situated in the province of Malwa. Mundy and his party stayed there a little while and enjoyed themselves with the site if sarai, the flowing river and the fertile country round about where they did not find even "*one spott of untilled ground.*" They saw the fish playing and leaping in the clear water of the river.⁹⁹ Mundy mentioned about a sarai situated one kos from Agra. Nur Mahal-ki-sarai, named after the queen of Jahangir. It could accommodate 3, 000 persons and 500 horses. The sari was built of stone without

⁹⁷ Mannucci, I, 68.

⁹⁸ Mundy, II, 159.

⁹⁹ Mundy, II, 57.

the use of any timber. All the rooms had arches, each with a "several cupola." It was surrounded by two gardens, which were also built by her.¹⁰⁰

According to Manrique, the city of Orissa had an excellent caravan sarai of moderate size, containing 33 rooms. At the city of Narangor, they stayed in a sarai having good clean rooms. At Agra, there was a sarai of the Armenians, there were 90 other sarai in the city, notes Manrique.¹⁰¹

From Agra to Lahore, the towns and large villages, situated along the road, were all well and plentifully supplied with provisions and good sarais. Some of them were handsomely built, in which, sometimes one could not find rooms as it was usually pre-occupied due to the great stream of passengers. Moreover, this route being more popular owing to the presence of court at Lahore, the sarais were mostly stuffed with travellers and merchants.¹⁰²

According to Tavernier, "*The word 'sera' signifies a great enclosure of walls or hedges within which 50 or 60 thatched huts are arranged all round. Here there are men and women, who sell flour, rice and butter, and vegetables who make it their business to prepare bread and cook rice. If by chance a Musalman arrives, he goes into the village to seek for piece of mutton or a fowl, when those* who supply the food to the traveller*

¹⁰⁰ Ibid, 78-9.

¹⁰¹ Manrique, II, 152.

¹⁰² Ibid, 152.

* These people are known as 'Bhatiyara'. Crooke, W., "Tribes and Castes of North Western Provinces and Oudh," II, 34.

clean out for him the room which he wishes to occupy, and they place in it a small bed of girths (a charpai), upon which he soreads the matterss which he carries with him on his journey."¹⁰³

These sarais were in great cities. The other sorts of sarais were in all places, serving for all sorts of travellers who came to stay there only for the night.¹⁰⁴ The "Most of the sarais or 'carmossoras'," according to Manrique were, "located on high roads frequented by travellers. They were sometimes erected by neighbouring villages, princes or some influential people who erected them in order to keep their memory green. Sometime it was constructed due to 'consciousness' of a wealthy person who wanted to satisfy it through some work of piety. These sarais were built in a square like clusters in a monastery and were divided up into dwelling rooms and chambers, with a female or a male regent, for women could also carry on in this occupation. These attendants were called meters and meteranis (scavengers). Their business was to keep these rooms clean and provide them with cots without beddings, which travellers, in these regions, almost carry with them. These servants were also entrusted with the preparation of the food for guests, as well as doing all their duties essential to comfort within the house, even to provide hot water for washing feet. However, on reaching a 'caramossora' all that one had to do was to set out and purchase food in the bazaar and leave other matters to these attentive servants. Besides these duties, if the guests had horses, they were also required to cook mung or chickpea for horses. Throughout the greater part of the Mughal empire, especially in Bengal, they fed the horses a kind of vegetable which was very good and nurshing. The metras and meterani were stewards

¹⁰³ Tavernier, I, 45.

¹⁰⁴ Mundy, II, 159.

of these inne or 'caramossoras'. They were very obliging and felt contended with one copper coin or at the most two. Manrique compares them with the stable men and inn keepers of Europe, who were 'wicked and robbed of their substance of the poor travellers who fell into their hands'. Thus, uncivilized and heathen they surpass over obligation to be most moderate in all things, outwardly and inwardly. But many of them do exactly the reverse."¹⁰⁵

The lack of inns in India, however, was a subject of common complaint among the travellers. Downton recorded, "*They have not the use of innes, as in 'Christendome' and travellers had to lodge in serais as well.*"¹⁰⁶ The inconvenience was elaborated by Terry in more explicit terms. He says, "*In this kingdom there are no innes to entertaine. Onely in great townes and cities are faire houses built for their receipt (which they call sarray) not inhabited, where any passengers may have room freely, but must bringe with him his beddinge, his cooks, and other necessaries wherein to dresse his meete; which are usually carried on camels, or else in carts drawne with oxen, wherein they have tents to pitch when they meete with no serras.*"¹⁰⁷

Mandelslo found that, "*There were no common inne in all the kingdom of Guzurrate, nor indeed in all the Mogul's country, but instead thereof in cities, as also in some villages, there are certain public buildings, called serrai, built by some persons out of charity, for the convenience of strangers and travellers, who were forces to tie in open air. These are the caravan serais, which have only the flour walls, and a covering*

¹⁰⁵ Manrique, II, 100-02.

¹⁰⁶ Nicholas Downton, 139.

¹⁰⁷ Terry, Early Travels, 311.

overhead, so that to be accommodated therein, a man must bring along with him what is not be had there."¹⁰⁸

The travellers have given a vivid description of the ordinary as well as good sarai, their management and highlighted their importance. Some of them, Bernier in particular, was critical of the working and management and remarked, "*The eastern caravan serais mesrable large bharns, raise, and paved all round, in the same manner as our pontneuf. Hundreds of human beings seen in them, mingled with horses, mules and camels. In summer, these buildings are hot and suffocating and in the winter nothing but the breadth of the so many animals prevents the inmates from cold.*"¹⁰⁹

Moreover, the travellers like Mundy, Moll, Abbe Carre, Ovington, De Laet, Mannucci and many others have given a better picture of the working of sarais and though it 'essented for the safety and comfort of travellers'. Against the inclemencies of weather, tedious, journey, sarais, certainly provided much needed respite.

Toll-tax:

According to Ain, *Rahadari* (toll-tax) was a nominal fee levied on travellers in proportion to the number of carts, bullocks, or persons in a party.¹¹⁰ When a person was awarded with a zamindari, it became mandatory for him to provide protection to the travellers traversing through his dominion. Shah Jahan's *farman* of 1650, clearly lays

¹⁰⁸ Mandelslo, 20.

¹⁰⁹ Bernier, 233.

¹¹⁰ Ain, II, 43-4.

down that in lieu of services on the imperial route. The Zamindar had the right to collect some customary dues. This is corroborated by the *parwana* of Jaswant Singh of Mewar, in which he instructed Nansi, an official to keep vigilance on the imperial highway. It is also stated that the right of *dan* (toll-tax) should be protected.¹¹¹ The emperor, generally, did not interfere with the internal administration.¹¹²

The information about the rates of toll-tax is very scanty. The amount of Rahadari varied place to place. Mundy, at Barnoli, was asked to pay Rs. 20 as *Jagat* (toll) for two carts, but after much persuasion he got away by paying only one shilling (about 12 annas).¹¹³ Between Bichola and Icchawar, Mundy had to pay Rs. 3 for camel loading each and 2 pice a man.¹¹⁴ At Dhaita, the governor of the place demanded *jagat* for every cart, but Mundy got away by the intervention of Mirza Mahmud Safi, a noble travelling with him.¹¹⁵ Tavernier writes, "At Baldelpoora (Bahadurpur) loaded carts have to pay the Brampour (Burhanpur) custom dues, but the carts which carry only passenger pay nothing."¹¹⁶ A Dutch traveller passed through Bargaon in 1662, the entry-post of Marwar route from the side of Ahamdabad, paid Rs. 11 to the village head. He also paid Rs. 26 ½ as toll at the village Malwara.¹¹⁷ According to English factories, "the custom rate between Agra and Multan is 2 and 2 ¼ rupees per camel, and from Multan to Thatta not more than 1 rupees."¹¹⁸

¹¹¹ Bhadani, (art.), "The Mughal Highway and Post station," 443.

¹¹² Tirmizi, S. A. I., "Mughal Documents," (1526-1627), N. Delhi, 1989.

¹¹³ Mundy, II, 40.

¹¹⁴ Ibid, 54.

¹¹⁵ Ibid, 40.

¹¹⁶ Tavernier, I, 42.

¹¹⁷ Bhadani, (art.), 444.

¹¹⁸ E.F.I, 1634-36, 130-31.

Although the references presents a much distorted figure of rates levied ad *Rahdari*. The rates were depending on the local incharge of the territory. The travellers werew subjected to molestation by the officials of the local rulers. One such incidence was recorded by English company. According to which, “ A caravan passed through Raja jai Singhs’ territory (Jaipur) with payment of *Jakat* (road-dues), so long as the raja was there; buit after his departure for Lahore, both English and Dutch found themselves forced to pat at the rate of 3 ¼ rupees per cart (though this is only half pf what is exacted from other merchants).¹¹⁹ Similar incidences like this one shows that, the demands were not in accordance with the usual levis. Some were made by rebels and robbers. Mundy once was asked by armed men to pay *jagat* of Rs. 500.¹²⁰ On such occasions, the officials were supposed to take all necessary steps to protect the travellers and their goods.

Along the highways there were numerous toll-chawkis for the collection of *jagat*. On the Surat-Burhanpur highway, a traveller had to pay tolls at Baroda, Broach, Ankleswar, Khirka, Varias, and Dhaita.¹²¹ On the route from Agra to Surat via Ahamdabad, the traveller had to pay at Sirohi, Shud, Mehsana, and some other places.¹²²

At some places travellers had to declare their possessions, and the purpose of visit. The customs officer entered their names, the purpose of their visit and merchandise in his

¹¹⁹ E.F.I, 1651-54, 114.

¹²⁰ Mundy, II, 117.

¹²¹ E.F.I, 1622-23, 310; E.F.I, 1624-29, 28.

¹²² Mundy, II, 255-60.

register. A traveller then received a certificate, so that on return journey he would not ask to pay more than what was agreed upon.¹²³

Custom stations were also maintained on river crossings as well. The system of paying toll at river-crossings was regularised by Akbar.¹²⁴ After crossing Ganga at Allahabad, Tavernier noted, "The *Darogha* allows no one to without an order; and he takes note also of the complete merchandise carried, each wagon being charged four rupees, and a chariot paying but one, without counting the boat for which it is necessary to pay separately."¹²⁵ At Rajmahal, Manrique had to wait for nine days to get clearance.¹²⁶

The picture created by the travellers is blurred. No particular clear references can be drawn about the money levied as the toll. However, one thing is clear that it varied from region to region depending upon the local authorities, independent from the central administration.

¹²³ Tavernier, II, 260.

¹²⁴ Ain, I, 291-92.

¹²⁵ Tavernier, I, 117.

¹²⁶ Manrique, II, 135.

Conclusion

The physical features of the Indian subcontinent are such that the movement from one place to another can be done with not much of the difficulty. The northwestern region of the Indian subcontinent has been provided with the chain of mountains, which offer the phenomenon of a natural frontier. This natural frontier is formed by the region consisting of the Kirthar range, the Sulaiman mountains, the slopes of Hindukush and the Himalayas. To the south of Himalayas lies the great plain of India. It is formed by the solid waste of the Himalayas brought by hundreds of descending streams. The alluvium thus formed made the region most fertile and more conducive to travelling.

Transport and means of communication formed an integral part of a government of a vast empire, like that of the Mughals in the period under review. Fortunately for the travellers, the contemporary rulers had already contributed to the building of roads for official administration and control of the various parts of the empires. The process began with the rise of Sher Shah Sur (1540-1545).

One of the most notable features of the Sher Shah's administrative system was building of important roads which were well connected with the capital Agra, and ran in different directions. The longest and the best known road among them ran from Sonargaon (Dacca) to the Indus, which was 1500 kos in length.¹ He built another road from Agra to Burhanpur, and a third he made from Jodhpur to Chittor. The fourth road

¹ Qanungo, Sher Shah, 388.

ran from Lahore to Multan. The roads were well planned and well connected with all the strategic frontier cities. For the comfort and convenience of travellers, trees were planted on both sides and sarais were constructed at every two kosses.² These sarais were veritable arteries of the empire.³ In every sarai, he built different apartments for the Hindus and the Muslims. There were provisions for water, bed, food and fodder for men and their horses. In every sarai, two horses were kept for the fast delivery of news.⁴ The process later intensified with the rise of Akbar.

Thus, it is seen that during the seventeenth century the imperial capital Agra and later Delhi were well connected to the rest of the empire by three main highways. The highway from Agra to Lahore and Kabul was by common consent the best in the empire.⁵ The second most important highway ran through the fertile tracts of Malwa region connecting Agra to the commercial port of Surat. Lastly, but equally important was the highway connecting the Bay of Bengal with the imperial capital, via Patna.

By the standards of medieval times the facilities of transport in Mughal India were efficient and adequate. Pack-oxen and ox-drawn carts, as well as camels, were the chief means of transport. Poorer people used oxen both for carrying loads and as mounts. Those who could afford it travelled by the very comfortable palanquins, "Whose carriage," Ovington remarked, "is as easie and pleasant as that of our chairs in the

² E&D, IV, 417.

³ Qanungo, *op. cit.*, 392.

⁴ *Ibid.*, 390-91.

⁵ *Early Travels*, 37; Herbert, 62; Tavernier, I, 78.

streets of London.”⁶ However, the light two-wheeled bullock-cart was the form of transport widely used.⁷

The belief that in Mughal India horses were used only by the rich ones and exclusively for wars, is not entirely true. We find that Banarsidas, travelled on a horseback from Jaunpur to Agra and Khairabad,⁸ as so many other travellers like Tavernier and Manrique.⁹ Camels the most important draught-animal, were bred in large numbers in western Rajasthan, Gujarat and Sind. For transport of goods in large scale, a qaphila of the best camels was considered most convenient.¹⁰ Asses and buffaloes were also used as draught animals.¹¹

Given the technology of transport in seventeenth century, and the level of security, the times taken in journeys across the country were not very long. The journey from Agra to Surat by cart took thirty five to forty days.¹² Manrique travelled the 544 miles from Patna to Agra in twenty five days averaging 21 $\frac{3}{4}$ miles a day.¹³

Travel conditions in India, as Tavernier noted, were not less comfortable than in France or Italy of his days. The remark, however, was true only for the better roads, especially the wide imperial highways, with their avenues, wells distance markers, and sarais. But

⁶ Ovington, 151.

⁷ Fitch, 17-8.

⁸ Banarsidas, 64.

⁹ Tavernier, I, 73, 107; Manrique, II, 98, 145.

¹⁰ Mundy, II, 283.

¹¹ Ovington, 151.

¹² Mundy, II, 367-8; Tavernier, I, 37-8.

¹³ Manrique, II, 36-7.

not all the roads were so well provided with and no road was especially negotiable round the year.

Under the Mughals, provincial governors and district officers were mainly responsible for the safety of roads, but the principal burden of protecting travellers and merchants from harassment and robbery fell on the *zamindars*. They were required to appoint guards and other officials for such purposes. The merchants, specially the Europeans, while taking the goods from one place to another deployed their own guards who were well armed and remained at the front and rear of the caravans.

Jahangir, for the benefit of travellers ordered the *zamindars* to plant trees on the routes throughout the empire. Also mile-stones at every kos, wells and reservoirs and sarais were provided for the comfort of travellers.¹⁴ While attendants or regular staff was employed to keep the sarais clean and tidy for living.¹⁵ Thus, travelling became easier and safer.

According to Tuzuk, the roads which went through Baramulla in Kashmir had two important officers, Mehdi Nayak and Hussain, who were responsible for maintaining peace and order in that particular region. Whenever any major disturbance or upheaval took place in their region and these officers were supposed to make immediate contacts.¹⁶ The safety of the roads from the Khyber pass to Kandahar was threatened by

¹⁴ Tuzuk, I, 321.

¹⁵ Manrique, II, 100-02; Tavernier, I, 54.

¹⁶ Ibid., 100.

the activities of marauding Afghan tribesmen. A strong contingent was posted at all the important outposts on the road, and the local chiefs were required to police and maintain it.¹⁷ The very concept of making such men responsible for the maintenance, repair and safety of the roads, seems to have greatly eased the movements of caravans.

¹⁷ Ibid., 200.

BIBLIOGRAPHY:

PRIMARY SOURCES:

PERSIAN AND TURKISH WORKS:

Abul Fazl, Allami, *'The Akbarnama'*, translated by H. Beveridge, Vol. I, first Indian edition, Delhi, 1972.

_____, *'Ain-i-Akbari'*, translated; Vol. I by H. Blochmann, Calcutta, 1873; Vol. II by H. S. Jarrett, second edition, corrected and further annotated by J. N. Sarkar, Calcutta, 1949; Vol. III, by H. S. Jarrett and Sarkar, Calcutta, 1948.

Aftabchi. J., *'Tazkirat-ul-Waqiat'*, (Hindi translation), by S. A. A. Rizvi., "Mughal Kalin Bharat," I, Aligarh, 1969.

Babur, Zahir-ud-din, *'Baburnama'*, 2 volumes, translated by A. S. Beveridge, reprint, New Delhi, 1970.

Chatumal Kayath, *'Chahar Gulshan'*, translated by J. N. Sarkar, in *India Of Aurangzeb*, Calcutta, 1920

Elliot and Dawson, *'The History of India as told by its own Historians'*, 8 Vols. London, 1867-68.

Fuqueer Khyrooddeen Moohummud, *'History of Jaunpur'*, a translation of *'Jaunpurnama'*, by an officer of Bengal Army, Calcutta, 1814.

Jahangir, Nooruddin, *'Tuzuk-i-Jahangiri'*, translated by A. Rogers and H. Beveridge, two volumes, Royal Asiatic Society, London, 1909.

_____, '*Jahangirnama*', translated, edited & annotated by M. Thackston
Wheeler, New York, 1999.

Sujan, Rai, '*Khulasat-ut-Tawarikh*', translated by J. N. Sarkar in *India Of
Aurangzeb*, Calcutta, 1920

TRAVELS and ACCOUNTS:

Banarsidas, '*Ardh Kathanaka*' translated by Mukund Lath, "Half a tale," Jaipur,
1981.

Bernier, F., '*Travels in the Mughal Empire, 1656-1668*', translated by A.

Constable, Second Revised edition by Vincent A. Smith, First Indian
Edition, New Delhi, 1983.

Bowrey, T., '*The Countries Round the Bay of Bengal*', edited by R. Temple,
Haklyut Society, No. XII, Series II, London, 1905.

Burnes, A., '*Travels into Bokhara*', 3 Vols, London, 1834.

_____, '*Cabool being a Personal Narrative of a Journey to & Residence in that
City*', London, 1842.

Captain Mundy., '*Pen and Pencil Sketches; Being The Journal of a Tour in India*',
London, 1949.

Carre, A., '*The Travels of Abbe Carre in India and the near East, 1672-1674*', tr.

By Lady Fawcett, ed. C. Fawcett, three vols. Haklyut Society, 1947 and
1948.

- Commissariat, S., (ed.), *'Mandelslo's Travels into Western India (A.D. 1638-39)'*,
London,
1931.
- De Laet, *'The Empire of the Great Mogol'*, translated by Hoyland and S. N.
Bannerji, Bombay, 1975.
- Downton, N., *'The Voyage of Nicholas Downton'*, Hakluyt Society, London, 1939.
- Elphinstone, M., *'An Account of the Kingdom of Cabul'*, London, 1815.
- Fox, E. F., *'Travels in Afghanistan,'* (1937-38), New York, 1948.
- Foster, W.(ed.), *'Early Travels in India 1583-1619 (Accounts of Ralph Fitch, John
Mildenhall, William Hawkins, William Finch, Nicholas Withington,
Thomas Coryat and Edward Terry)'*, London, 1921 (photo-offset edn,
Delhi, 1968).
- Fryer, J., *'A New Account of East India and Persia being Nine Years' Travels 1672-
81'*, ed. W. Crooke, three vols. Haklyut Society, 1909,1912 and 1915.
- Hamilton, A., *'A New Account of East Indies, being the Observations and Remarks
of Captain A. Hamilton (1688-1723)'*, printed in J. Pinkerton, *'General
Collection of the best and most interesting Voyages and travels in all parts
of the World'*, VIII, London, 1811, 258-522; also ed. by W. Foster, two
vols., London, 1930.
- Hamilton, W., *'A Geographical, Stastistical and Historical Description of
Hindostan and the Adjacent Countries'*, 2 Vols. Reprint, Delhi, 1971.
- Heber, R., *'Narrative of a Journey Through the Upper Provinces of India'*, in three
volumes, London, MDCCCXXVIII.

- Herbert, J., *'Some Years Travels into Asia and Africa'*, London, 1677.
- Hodges, W., *'Travels in India during 1780, 1781, 1782 and 1783'*, London, 1793.
- Jourdain, J., *'The Journal of John Jourdain, 1608-1617'*, edited by W. Foster,
Haklyut Society, Series II, Vol. XVI., Cambridge, 1905.
- Manrique, F. S., *'Travels of Manrique, 1629-43'*, translated by C. E. Luard and H.
Hosten, Vol. II, Haklyut Society, Series II, Oxford, 1927.
- Mannucci, N., *'Storia Do Mogor'* or *'Muhgul India'*, four volumes, translated by W.
Irvine, London, 1907-8.
- Moll, H., *'The Present State of Proper India'*, N. Delhi,
- Monserrate, F. S. T., *'The Commentary on his Journey to the Court of Akbar'*,
translated by Hoyland, annotated by S. N. Bannerji, Oxford, 1922.
- Masson, Charles in Forrest, G.W., *'Selections from the Travels and Journeys'*,
Bombay, 1906,
- Masson, Charles., *'Narratives of Various Journeys'*, London, 1842
- Mundy, P., *'The Travels of Peter Mundy in Europe and Asia 1608-67'*, edited by R.
Temple, TRAVELS IN ASIA 1628-34, Vol. II, Haklyut Society, Series II,
London 1914.
- Ovington, J., *'A Voyage to Surat in the year 1689'*, ed. H. G. Rawlinson, London,
1929.
- Pelsaert, F., *'Jahangir's India'*, translated by W. H. Moreland and Geyl, Cambridge,
1925.
- Purchas, *'His Pilgrimage'*, by S. Purchas, 20 Vols. London, 1626.

- Pyrard, *'The Voyage of F. Pyrard'*, translated by Gray in two volumes, London, 1887.
- Raverty, H. G., *'Notes on Afghanistan'*, London, 1890,
- Rennell, J., *'Memoir of a Map of Hindustan, the Mogul Empire'*, London, 1788, 1792.
- Roe, T., *'The Embassy of T. Roe to the Court of Great Mogul, 1615-19, as narrated in his Journal and Correspondence'*, edited by W. Foster, two volumes, Haklyut Society, London, 1899.
- Sen, S. N., *'Indian Travels of Thevenot and Careri'*, edited by S. Sen, New Delhi, 1949.
- Sidi Ali Reis., *'The Travels and Adventure of Turkish Admiral, Sidi Ali Reis'*, London, 1899.
- Tavernier, J. B., *'Travels in India'*, translated by V. Ball, two volumes, London, 1899. Ball's tr. Revised and edited by W. Crooke, London, 1925
- Tieffenthaler, *'The Mid- Gangetic Region in the 18th Century'*, by S. N. Sen, New Delhi, 1986.
- Twining, T., *'Travels in India a Hundred Years Ago'*, London, 1893.
- Valle, P. D., *'The Travels of Pietro Della Valle in India'*, (1623-24), edited by E. Gray, two vols. London, 1892.
- Vigne, G. T., *'A Personal Narrative of a Visit to Ghuzni, Kabul, and Afghanistan'*.
- Wood, J., *'Journey to the Sources of the River Oxus'*, London, 1872.

RECORDS, REPORTS, PUBLICATIONS AND GAZETTEERS:

Browne, J, Major, J., '*India Tracts containing a description of the jungle Tarai districts and a history of the Sicks*', Blackfriars, 1788.

'*Calendar of State Papers, Colonial Series, East Indies and Persia, 1630-34*', edited by W. Sainabury, London, 1892.

'*Gazetteer of the Rawalpindi District, revised edition*', 1893-94.

'*Imperial Farmans (A.D. 1577 to A.D. 1805) granted to the ancestors of His Holiness the Tikayat Maharaj*', edited and translated into English, Hindi and Gujrati by K. M. Jhaveri, Bombay, 1928.

'*Imperial Gazetteer of India*', Oxford, 1907-09, Vols. VI, VII, VIII, XII, XV, XXI.

'*Imperial Gazetteer of India, Provincial Series*', Punjab, II, 1908.

'*Imperial Gazetteer, Provincial Series*', U.P., XII, & XV.

'*The New Encyclopedia Britannica*', Chicago, 1987, vol. 10.

'*The English Factory in India 1618-69*', edited by W. Foster, thirteen volumes, Oxford, 1909-27. The volumes are not numbered and, therefore, have been cited by the years each of them covers and which appear on the cover pages.

'*The English Factories in India, Vol. I, New Series*', edited by C Fawcett, The Western Presidency, 1670-77, Oxford, 1936.

SECONDARY SOURCES:**(Books and Articles)**

Beni Prasad, *'History of Jahangir'*, Allahabad, 1940.

Blake, S., *"Sahajanabad: The Sovereign City in Mughal Empire,"* 1639-1739,
C.U.P., 1993.

Brij Narain and Sri Ram Sharma, *'A contemporary Dutch Chronicle of Mughal
India'*, Calcutta, 1957,

Burnes .A and others (ed.), (art.), *'Political, Geographical and Commercial reports
1835-37'*, in "The Punjab Past and Present," XII, April 1978.

Braudel, F., *'Civilization and Capitalism'*, 15th – 18th century, translated from
French, revised by Sian Reynolds, 2 vols., London, 1981.

Bryans, J., *'Gateway to the Khyber'*, London, 1959.

Carl, S., *'Archaeology and Monumental remains of Delhi'*, Allahabad, 1967.

Chaudhury, K. N., *'Trade and Civilization in the Indian Ocean'*, N. Delhi, 1985.

Cunningham, A., *'Archaeological Survey of India'*, Simla, 1878.

_____, *'Archaeological Survey of India'*, Varanasi, 1966.

_____, *'The Ancient Geography of India'*, Varanasi, 1963.

Deloche. J, (art.), *'Geographical Considerations in the Localisation of the Ancient
Sea-Forts of India'*, in I.E.S.H.R, vol. XX.

Deloche, J., *'Transport and Communication in India prior to Steam Locomotion'*,
OUP, 1993, 2 vols.

Elliot. A. C., *'The Chronicles of Gujarat'*, Patiala, 1970.

- Farooque, A. K. M., *Roads and Communications in Mughal India*, Delhi, 1971.
- Fawcett, C., *The English Factories in India*, new series, four vols., London, 1936-55.
- Forrest, C. W., *Cities of India, Past and Present*, London, 1903.
- Gahn Shayam Lal Davra., (art.), *A Study of the Trade Relations between Rajasthan and Sindh/Multan*, (1650-1800 A. D.) in PIHC, 1978.
- Goblet, Y. N., *Political Geography and the World Map*, New-York, 1955.
- Gokhale, B. G., (art.), *Ahmadabad in the XVIIth Century*, JESHO, XII (2), 1969.
- _____, (art.), *Burhanpur – Notes on the History of an Indian City in the XVIIIth Century*, JESHO, XV (3), 1972.
- Gole, S., *Early European Maps of India*, Arnold Heineman, 1976.
- Habib, I., *Atlas of the Mughal Empire*, OUP, Delhi, 19
- Ibbeton., D., *Panjab Caste*, Patiala, 1970.
- Irvine W., *The Army of the Indian Mughals, Its Organization and Administration*, N. Delhi, 1962.
- List of Muhammeden and Hindu monuments*, IV, Calcutta, 1941.
- Qanungo, K. R., *Sher Shah and His times*, Longman's Limited, 1965.
- Khan, Z. A., *Medieval Archaeological Remains in U.P. – A Geographical Study*, cyclostated paper presented at the Indian History Congress, Aligarh, 1975.
- Kunen, D, and Vogel, J. Ph; (art.), *Embassy of Mr Johan Josua Katelaar, Ambassador of Dutch East India Company of the Great Mughals – Shah Alam Bahadur Shah and Jahandar Shah*, in Journal of the Punjab Historical Society, X, Part I.

- Moreland, W. H., *India at the Death of Akbar*, London, 1920.
- _____, *From Akbar to Aurangzeb, a study in Indian economic history*,
Delhi, 1972.
- Motichandra, *Trade and Trade Routes in ancient India*, Delhi, 1977.
- Naqvi, H. K., *Urban Centers and Industries in Upper India 1556 – 1803*, Bombay
1968.
- _____, *Urbanization and Urban Centers under the Great Mughals*, Simla,
1972.
- Nath, R., *Monuments of Delhi*, New Delhi, 1979.
- Parihar, S., (art.), *The Relics of Agra-Lahore Road at Sultanpur Lodi*, in
Indological Jaipurensia, II, 1988-95.
- Qureshi, I. H., *The Administration of the Mughal Empire*, Karachi, 1966.
- Rehman, A. and Wescot, L J., *Pivot of the Punjab; the Historical Geography of
Medieval Gujarat*, Lahore, 1993.
- Sangar, S. P., *Crime and Punishment in Mughal India*.
- Saran, P., *The Provincial Administration of the Mughals*, Allahabad, 1941.
- Sarkar, J. N., *The Mughal Administration (six lectures)*, Patna, 1920.
- _____, *The History of Aurangzeb, Five Volumes*, Calcutta, 1928.
- _____, *Anecdotes of Aurangzeb*, fourth edition, Calcutta, 1949.
- _____, *India of Aurangzeb*, Calcutta, 1901.
- Singh, S., (art.), *River Crossing in North Western India during Mughal Times*, in
IHC proceedings, 59th session, 1998.
- Skyes, P., *Afghanistan*, 2 vols, London, 1956.

Steensgard, N., *Asian trade Revolution of the seventeenth century, the East India*

Companies and the decline of the Caravan Trade, Chicago, 1974.

Tirmizi, S. A. I., *Mughal Documents*, (1526-1627), N. Delhi, 1989.

Tod, J., *Travels in Western India*, London, 1839.

Verma, H. C., *Medieval Routes to India*, Delhi, 1978.

