CHAPTER 1

INTRODUCTION

In Mughal India like any other medieval state land tax was the basis of the economy. However, there were certain peculiarities: In the Mughal Indian system the land tax was realised from the agrarian sector in cash, so much so that even the demand came to be stated in cash and the magnitude of the land revenue was as high as 50% and above of the total produce.¹ This realization of revenue in cash compelled the peasants to sell the surplus produce directly or through the agent of the jagirdars in the local market or the town market or to the banyas or mahajans (money lenders)² and in case of high-grade crops like indigo to the merchants who tried to make direct purchases in the village such as merchants from Dutch and English companies and Armenians.³ This realisation of land tax in cash gave rise to what may be termed ‘induced’ trade in agricultural produce in spite of the fact that the village remained more or less self-sufficient. Thus a one way trade between villages and town developed. On the other hand the Mughal nobility remained almost entirely town based and did not live off

¹ Irfan Habib, Agrarian System of Mughal India, 1556-1707, revised ed, Delhi, 1999, pp. 230-36, 276-281. For more than 50% share of Agriculture in the GDP of Mughal India see Shireen Moosvi, ‘The Indian Economic Experience, 1600-1900: A Quantitative Study’ in People, Taxation, and Trade, New Delhi, 2008, pp. 2-4.
² Irfan Habib, Agrarian System, pp. 85-86.
the land.\textsuperscript{4} The immense revenue realize in cash from the rural sector facilitated this phenomenon. This led to the growth of towns and emergence of many townships. In the closing decade of the sixteenth century, Nizamuddin Ahmad reported that Akbar’s empire contained '120 big cities and 3200 townships (qasbas), each have around it 100 to 1000 villages.'\textsuperscript{5} The proportion of urban population was, therefore, quite high, according to a guesstimate around 15 \%\textsuperscript{6} and an estimate based on revenue statistics over 17 \%.\textsuperscript{7} To meet the food requirements of this nearly one-fifth of the population a voluminous and brisk village-town trade had to be there. Nizamuddin’s statement implies that even to satisfy the demand of a small township surplus in the form of grains and raw materials from 100 villages was required while for big towns the number of villages may be as large as 1000.

Persian chroniclers as well as European travellers and English East India Company’s Factors have provided us with their estimates of size of certain towns. The largest Indian city in the seventeenth century was Agra with a population estimated at 500,000 and 660,000 in the days when it

\textsuperscript{4} Irfan Habib designates such a system of extraction as ‘Form A’, ‘Potentialities of Capitalistic Development in the Economy of Mughal India’, \textit{Essays in India History: Towards Marxist Perception}, New Delhi, 1995, pp. 184-85.

\textsuperscript{5} Nizamuddin Ahmad, \textit{Tabaqat-i Akbari}, vol. III, ed. B. De, pp. 545-6.

\textsuperscript{6} Irfan Habib, ‘Potentialities’, pp.222-26; Shireen Moosvi, \textit{Urban Population in Pre-Colonial India, People, Taxation, and Trade, in Mughal India}, p. 127.

contained the court. In 1580s Lahore had a population of around 250,000. Delhi by 1660s was as populous as Paris which had been estimated well over 350,000. Dhaka and Patna had estimated population of 200,000 each in 1630-1631. Ahmadabad in 1600 contained about 250,000 inhabitants. The population of Surat was estimated at 100,000 in 1663 and by 1700 it increased to 200,000. Besides these big towns the 3200 townships must have accounted for a considerable consumer population. The average population of a qasba has been worked out at nearly 4500. Most of these towns were centres of production in certain cases known for some specialised crafts. While some were centre of trade or enterport as well.

These thus required raw material from far off places. For example,

8 The former estimate has been given by Fr. J. Xavier, (Letters, 1593-1617, transl H. Hosten, JASB, NS, XXIII (1927), p.121); while the later estimate was given by Manrique, Travels, 1629-43, transl. C. E. Luard assisted by H. Hosten, London, 1927, II, p. 152.

9 Monserrate, Fr. A. Monserrate, Commentary on his Journey to the Court of Akbar, transl. J. S. Hoyland, annotated by S. N. Banerjee, Cuttack, 1922.

10 Francois Bernier, Travels in Mogul Empire, 1640-68, pp. 281-82.


12 Letters Received by the East India Company from its Servants in the East, vol. II, p. 28; Withington in Early Travels, p. 206.


Ahmadabad, a centre of manufacture of brocade received silk from Bengal. These manufacturing towns’ produce was in demand by the imperial establishment, nobility and the rich in other towns as well as by merchants, Indian as well as foreign for export. Again due to entry of European Companies in Mughal India, foreign trade was on its rise. These Companies and other merchants involved in foreign trade collected merchandise from almost all over the empire and brought them to the important ports of the empire for export or send them overland. Such as, saltpetre was brought from Patna and indigo from Bayana to the Gujarat ports for export. Indigo from Bayana was also sent overland through Lahore, Kabul and Qandahar to the Middle East.

Moreover Gujarat the most commercialised region of the empire was the big importer of food stuff. It not only obtained wheat and other food crops from Malwa and Ajmer but also received wheat, sugar from far away places via Agra that an entreport specially between the eastern and the western region of the empire. Thus there was a substantial trade in luxury goods between towns and port along with trade of bulk in food crops short distance as well as long distance.

This brisk trade that was the mainstay of the mughal economy required adequate means of transport and for long distance trade the network routes as well. A study of the system and structure of transport indeed appears to be of importance for delineating the economy of the Mughal Empire.
For discussing the different aspects of economy of transport in Mughal India, brief discussion on the geographical and physical conditions is required since due to differences in the geographical terrains, different means of transport to suit the terrain of specific regions were used. (See Plate- I, for different means of transport in Mughal India). Mughal India being a vast region encompassing almost the present three countries namely Bangladesh, India and Pakistan and Afghanistan up till the Durand Line was comprised of different geographical terrains. Northern region was mainly consisting of alluvial plains with grasslands, north-western parts was hilly as well as contained desert and dry region and the southern part was hilly and partly fertile plateau. All the rivers in these parts however, were not navigable for commercial purposes, while certain areas had access to coasts.

Therefore, there is a need to explore what were the conditions which contributed to the use of different means of transport in different geographical terrain? How and where they were procured? What was structure of the means of transport? What was the cost of transport? What was the pace of means of transport? Who were associated with them? What was the role of Mughal administration?

Another important aspect to be studied is the conditions of security on the routes, whether inland or coastal or on seas and mechanism of security attempted by the Mughal administration and merchants themselves with special attention to system of insurance, cost of transport and turnover of trade.
A study of economy of transport in Mughal India becomes possible because of the availability of the evidence in contemporary sources on its different aspects such as means of transport which appear to be mainly pack animals and partly carts, locations of and condition on land, river, coastal and sea routes and data on insurance rates and exaction of taxes legal as well as illegal. Besides the Persian historical works and documents, the accounts given by the European travellers and merchants and the records of the two major European companies, the English and the Dutch are rich in information relating to transport economy. Some other indigenous sources also offer useful information.

_Akbarnama and its last volume known as Ain-i Akbari_ of Abu-l Fazl, are among the most important repositories of information on nearly all aspects. _Akbarnama_ records various regulations and _farmans_ issued by Akbar for the protection of the routes, land as well coastal and oceanic, such as _farmans_ prohibiting either entirely or with some exception, transit dues variously known as _baj, tamgha, zakat, and mir bahri_ and other various tolls and taxes, generally called _rahdari_. It also provides information regarding various routes, breeding places of different beasts of burden, construction of boats and ships, etc. _Ain-i Akbari_, ‘The first gazetteer of India’ provides ample materials in an organised manner on the various means of transport employed in different parts in accordance with the geographical terrain, such as oxen, camels, mules, asses, country bred horses, variously known as Gunt, Tanghan etc. goats, yaks, boats and ships,
and human porters also. It also gives information regarding prices of beast of burden their fodder, harnessing, breeding places, etc. Important information on the various routes joining the empire and the foreign lands is also contained in this work. Regarding measures for security on the routes it highlights the interest of the Mughal emperor and responsibility of the Mughal officers.

_Tuzuk_ of Jahangir appears to have valuable detailed information regarding the routes on which Jahangir took for his campaigns and pleasure trips especially routes leading from Agra to Gujarat, from Agra to Kashmir and to Kabul. He not only gives information about the routes, but also informed us about each station, river, bridges and hardships on the routes. Jahangir also gives us information about the various means of transport especially in Gujarat and Kashmir. He also records his orders about the abolition of various tolls and transit dues, exacted by the various zamindars and hakims in their respective area. Jahangir offers most reliable information on the banjaras, the main carriers of trade mainly in the commodities of bulk.

Valuable information regarding the various routes, especially of North-West frontier, and beyond to Central Asia comes from the _Padshahnama_ of Abdul Hamid Lahori, that covers the major period of reign of Shah Jahan (1628-58). From its detailed account of expedition of Balkh and Badakhshan, one can cull the information regarding routes, rivers, means of transport etc. At the same time it provides ample information on
the conditions of road and transport in Kashmir and other parts of India. It also helpfully mention the presence of sarais on the routes wherever they existed.

Tarikh-i Mazhar-i Shahjahani (c.1634) of Yusuf Mirak, which is basically an administrative history of Sindh under the Mughals, down to 1634, with separate accounts of Bhakkar, Thatta and Sehwan, gives details of cattle rearing in that region and also the tribes and clans involved in cattle rearing particularly that bred the camels of good quality.

Fathiya-i Ibriya of Shihabuddin Talish is an important source for the history of Assam during Aurangzeb’s period. Besides other information, it gives very important information regarding various boats used in Assam and adjoining areas. It also provides information regarding the various route and types of boat of that region.

Alamgirnama of Muhammad Kazim, is an important source for the early period of Aurangzeb’s reign. Besides giving information regarding farmans prohibiting illegal dues and taxes on the routes, it provides information about the condition of routes, means of transport used, etc. in the suba of Bengal and Assam. It specially mentions the roads and the form of embankment. It also provides information about condition of rivers and ports in those subas. And it also records the measures adopted to check the misuse of authority by the officials especially in exacting illegal tolls and transit dues.
However, *Mirat-i Ahmadi* of Ali Muhammad Khan is a work of mid-eighteenth century, it is a very important work, whenever corroboration is needed. It contains basically administrative information, such as *farmans* issued by the Mughal emperors, time and again for the prohibition of the illegal taxes and dues exacted on the routes. It also provides us information regarding the geographical condition and cattle and horse breeding of *suba* of Gujarat. One of the important information it provides in detail is the information about the intelligence system of the empire, with special reference to Gujarat, very useful for checking the misuse of the authority by the officials.

Various primary documents preserved in various archives, published and unpublished, such as Blochet, suppl. Pers. 482, a volume of documents, mostly relating to Surat and neighbouring localities in Gujarat, ranging from 1583-1648 and probably transcribed in 1650, are of much help to know administrative measure taken by the Mughal Emperors, to ensure security and abolishing tolls and illegal taxes on the routes, as well as study of shipbuilding. Similarly *Selected Documents of Shah Jahan’s Reign*, edited by Yusuf Husain Khan, in 1950 in Hyderabad-Deccan and preserved in the State Archives (Andhra Pradesh), is collection of documents from 1634 onwards; *Selected Documents of Aurangzeb’s Reign, 1659-1706*, edited by Yusuf Husain Khan, in Hyderabad in 1959 and *Waqa-i Ajmer, &c., A.D. 1678-80*, a report sent by a *waqia navis* of Ajmer, is useful for assessing the security on routes and measures adopted by the state.
Epistolary collections i.e. collections of copies of personal and official letters, is another kind of source materials, such as collection of Balkrishn Brahman, letters and other writing of Shaikh Jalal Hisari compiled in the late years of Shahjahan and early years of Aurangzeb, provide and important source information on breeding of cattle in Hisar and their average prices, besides other information. *Durrul Ullum*, a collection of papers belonging to Munshi Gopal Rai Surdaj, and arranged by Sahib Rai Surdaj, in 1688-89 (Bodl. Waiker 104) emphasises the responsibility of the officials in maintaining security on the routes. Similarly *Ruqat-i Alamgiri*, a collection of letters and orders of Aurangzeb (Add. 18881), provides us information about the condition of security on the routes, besides other information.

Geographical accounts, such as *Haft Iqlim* (Or. 204) of Amin Ahmad Razi and *Chahar Gulshan* or *Akhbar-i Nawadir* (MS Bodl. Eliot 366) of Rai Chaturman Saksena, are useful in finding various stages and distances between places on the various routes in the Mughal Empire.

European sources belonged to another genre which supplements as well as complements the information on economy of transport. For the period under study a large number of sources in the form of travelogues, diaries, reports of the various factors of the various companies etc. are the factory records of the English East India Company as well as the Dutch Company besides those of Denmark, France etc. Similarly Portuguese
records are also important. These sources not only provide economic evidence, but also information regarding various administrative measures.

The pioneering works in the field of study have been done by W.H. Moreland in his two work *India at the death of Akbar*, published in 1920 and *From Akbar to Aurangzeb*, published in 1923, this work is largely based on European evidence. Irfan Habib in *The Agrarian System of Mughal India*, published in 1963, provided a sketch of various means of transport and condition of security on the routes and also of the role of the state in maintaining law and order on the route and in *Atlas of the Mughal Empire*, published in 1982, he presented information in the detailed notes, regarding the various routes, rivers, bridges, breeding places of beast of burden, ports, and centres of boatbuilding and shipbuilding etc. in his ‘Technology in Medieval India’ he offers valuable information on constructions of ships. Tapan Raychaudhuri in *The Cambridge Economic History of India*, vol. I, published in 1982, presented a short but very useful account of trade and its related aspects in Mughal India, using again mostly European sources. Shireen Moosvi, mainly using the Persian sources discussed the level of monetisation and urbanisation, as well turn over of trade, shipping, shipbuilding and other related aspects. Ashin Das Gupta, Om Prakash K. N. Chadhuri and Jean Deloche and other etc. also have made useful contribution in this field.

But a detailed work exclusively devoted to Economy of Transport perhaps required to be undertaken.
A Mughal painting from *Padshahnama*, section showing various means of land transport (c. 1656) (Royal Library, Windsor Castle) (Courtesy : Dr. Syed Ali Nadeem Rezavi, CAS, Dept. of History, Aligarh.)