ABSTRACT

In Mughal India land revenue (which was about 50% of total produce) was mainly realised in cash and this resulted in giving rise to induced trade in agricultural produce. The urban population of Mughal India was over 15% of the total population - much higher than the urban population in 1881 (i.e. 9.3%). The Mughal ruling class were largely town-based. At the same time foreign trade was on its rise. Certain towns were emerging as a centre of specialised manufactures. These centres needed raw materials from far and near places. For example, Ahmadabad in Gujarat a well known centre for manufacturing brocade, received silk from Bengal. Saltpeter was brought from Patna and indigo from Biana and adjoining regions and textiles from Agra, Lucknow, Banaras, Gazipur to the Gujarat ports for export. This meant development of long distance trade as well.

The brisk trade depended on the conditions and techniques of transport. A study of the economy of transport in Mughal India is therefore an important aspect of Mughal economy. Some work in the field has already been done on different aspects of system of transport in Mughal India. This thesis attempts a single study bringing all the various aspects of economy of transport together.

The most prevalent mode of transport was pack animals in Mughal India while carts were also used to a lesser extent. Pack oxen
were used for carrying the goods of bulk in most of the regions whereas, camels were employed in the North-Western part of the empire, and in other rocky and hilly regions; mules, asses, indigenous breeds of horses were the other beats of burden used for carrying trade. Chapter 2 deals in detail with means of land transport covering the breeding, prices etc. of the beast of burden and cost of transport, speed and turnover of trade on different routes and by different means.

Mughal India had considerable coastal area and many navigable rivers, therefore coastal and river navigation played important role in carrying both the goods of bulk as well as high-grade products. The Ganga River System and Indus Rivers System were the main navigable system which contributed much in transportation of merchandise by utilising various types of vessels. Whereas most of merchandise was carried mainly on Ganga River System from Bengal up to Agra, Indus River System proved main route for merchandise from Lahore to Thatta. Coastal navigation was also noticeable and merchandise were transported from Bay of Bengal in the East to Gujarat a major centre of manufacture and over-sea trade of the empire in the west. Though different types of boats were built locally at various places, major centres for ship and boat building were Surat and Swally in Gujarat, Badgara on Malabar Coast, Narsapur and Madapollam on Coromandel Coast and Balasore in the Bay of Bangal and on the land Lahore was also a shipbuilding centre. Details about these besides the characteristics of
Indian shipbuilding and cost and prices of indigenous as well as European vessels, freight charges have been discussed in Chapter 3.

Chapter 4 covers the description of the main land and river routes, also covering aspects such as types of land routes, their surface, various facilities provided on the routes such as kos-minars, avenues of trees on the sides, the halting places such as sarais (inns), bridges and various fording places on the rivers to continue the land routes etc.; and types of rivers such as perennial and seasonal rivers. Conditions prevailing on the land routes and highways and the difficulties faced by the merchants are also discussed in this chapter.

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 has been discussed in the Chapter 5. On the land routes, the smooth flow of transport was affected by exactions of various legal and illegal tolls and cesses -- generally called rahdari. The burden of these taxes and exactions differed from region to region depending upon the degree of imperial and administrative control. An often used arrangement for security on the routes was to undertake journey in a caphila (qafila) or caravan. The system of hundi (bills of exchange) and bima was an important private arrangement in Mughal India. This institution was so efficient that even the Imperial revenues were transmitted through it. The complains of insecurity by certain merchants
appears to be exaggeration in face of recorded experience of Manrique, Taverniers and others as well as the elaborate arrangements for security made by the Mughal administration. The routes passing entirely through the imperial land were safer in comparison to the routes passing through the region of the tributary chiefs and neighbouring kingdoms. In 1820, merchants had to insure their merchandise by paying more even for less distance than they paid in the Mughal period. As the rate of insurance is the best indicator of level of safety on the routes, one can perhaps assume that the level of safety on the routes during the Mughal period was better than that in the regime of the English East India Company.

As far as security in the coastal trade or on the high seas is concerned, the major problem was indeed piracy by the Portuguese, and other European trading companies, and private pirates, outsiders as well as Indian. The piracy was a continual menace on the ocean, but there were several methods, adopted by merchants and ship-owners to save themselves and their trade to a great extent. This lack of safety appears to have led to development of marine insurance and bottomry.

For this study a large number of sources Persian as well European have been utilised. Persian sources such as Akbarnama and its last volume known as Ain-i Akbari of Abu-l Fazl, the most important repositories of information on nearly all aspects, Tuzuk of Jahangir, Padshahnama of Abdul Hamid Lahori, Tarikh-i Mazhar-i Shahjahani (c.1634) of Yusuf Mirak, Fathiya-i Ibriva of Shihabuddin Talish,
Alamgirnama of Muhammad Kazim, Mirat-i Ahmadi of Ali Muhammad Khan, etc. proved very important. Various primary documents like Blochet, supp. Pers. 482, Waqa-i Ajmer, &c., A.D. 1678-80, a report sent by a waqia navis of Ajmer and epistolary collections such as collections made by Balkrishn Brahman, Durrul Ulum, a collection of papers belonging to Munshi Gopal Rai Surdaj, Ruqat-i Alamgiri, a collection of letters and orders of Aurangzeb (Add. 18881) and Persian geographical accounts, such as Haft Iqlim (Or. 204) of Amin Ahmad Razi and Chahar Gulshan of Rai Chaturman Saksena etc. yielded value data on most of the aspects.

A large number of European sources in the form of travelogues such as that of Ralph Fitch, Finch, Withington, Coryat, Terry, Della Valle, Mundy, Manrique, Tavernier, Bernier, Fryer, Hamilton, etc., diaries of Pieter van den Broeke, Strenysham Master, etc. and reports of the various factors of the European trading Companies such as the Factory Records of the English East India Company, the Dutch Company and those of Denmark, France supplemented the information.