

HOW RAILWAYS DRAINED THE WEALTH OF INDIA IN BRITISH PERIOD

Dr. Hareet Kumar Meena

Assistant Professor, Department of History, Indira Gandhi National Tribal University, (A Central University Established by an Act of Parliament), Madhya Pradesh.

Abstract

The introduction of railways marks a turning point in the history of modern India. In a sense, the Indian railway was the result of a vast European scientific movement. The economic implications which inspired the British to launch the movement in India was the exploitation of natural resources and raw material to meet out the demands of Industrial Revolution in England and at the same time to carry the industrial products of Lancashire and Manchester to the remotest markets of India. Fundamentally, railway infrastructure accelerated the process of tribute system, de-industrialization, poverty and frequent famines. Through-out the colonial phase, railway and famines went hand in gloves, as maximum food grains were transported to Europe and Indians were forced to face terrible famines. Therefore, it is quite simple to understand the obnoxious nexus of development of magical wheels (railways) and drain of wealth from India to Britain. Dadabhai Naoroji was the first who critically evaluated this in-human procedure in his classic paper entitled 'The Poverty and Un-British Rule in India' (1876). He emphasised that the drain of wealth and capital from the county, which started after 1757, was primarily responsible for the absence of development in India.

Key Words: Closed Economy, Famine, Free Trade, Landless Labour, Nationalism, Railway.

Objectives of the Study

The paper examines the relationship between the extension of railways and the process of drain of wealth from India in colonial period. While interpreting the reasons behind the introduction of railways, the present study deciphers the real character of British rule in India.

Methodology

An elaborative research methodology was used to investigate and interpret the obnoxious nexus of railways and drain of wealth from the mid of 18th century. The researcher has relied both on primary sources as well as secondary sources for collection of data. Primary data has been gathered from archival records; whereas secondary data is based on analysis and discussions.

Introduction

In their expedition from trade to colonization, the British government carved out various instruments to maintain their hegemony in which colonial railways were the single largest and the most significant investment programme made in the history of the British Empire. Under the facade of laissez faire doctrine, the British rule released open support to encourage private investors for railway introduction and extension in India. Railway infrastructure was given priority at theory, policy and practice levels (Kumar, 2008). From 17th century onwards, the East India Company (EIC)¹ enjoyed the status of vital trader partner of India. In the initial phase, the balance of trade² was in favour of India, but with political subjection of the country the company started functioning according to the doctrine of colonialism. The most influential ideology behind British political development was the classical theory propounded by Adam Smith. Accordingly, a *laissez-faire³* doctrine of market capitalism was introduced in the late 18th century (Nanda, 2003; Hartwell, 1971). This doctrine guided the European imperialist approach in which governmental interference in the economy was objected, even in the incidence of acute crisis like famine. In the later phase, the *laissez-faire* doctrine was added by Malthusian theory⁴ of population where famine was regarded as a natural check over population and relieving the government from the responsibility of expenditure on relief related works. Further, the utilitarian⁵ principle that relief should be bitterly punitive in order to discourage dependence upon the government was overtly followed by British rule in India (Dutt, 1950). British conservative officials and Viceroys as Lord

¹ The East India Company (EIC) or the Governor And Company of Merchants of London trading into the East Indies was a Britain based commercial company. Founded on 31st December 1600, this company carried out trade and commerce in Indian sub-continent. They entered in India as traders, but the unstable political condition made them the masters of the country.

² The balance of trade is the difference in value between a country's imports and exports. A positive balance consists of exporting more than the imports; whereas negative balance/trade deficit or trade gap consists of more imports in comparison to exports.

³ This doctrine favours an economic environment where commercial transactions, between various ventures, are free from interfering government restrictions as tariffs and other taxes.

⁴ It explains a moral restriction in form of epidemic, famine, war, etc. over rapid increase of population.

⁵ In utilitarianism theory, everything useful to happiness is good. Therefore, the name of the doctrine is utilitarianism, based on the principle of utility. Utility is found in everything, which contributes to the happiness of every rational being.



*IJMSRR E- ISSN - 2349-6746 ISSN -*2349-6738

Lytton (1876-80)⁶, Richard Temple, Curzon (1898-1905), etc. strongly adhered to the fact that the empire had to be governed for revenues and not expenditure. The British imperial policies prevented the transformation of Indian economy from agrarian to industrial (Stephenson, 1916). Functioning according to the classical controlled economy, India exported raw material and consumed finished goods. In order to sustain this functioning, state investments mostly went into maintaining the institutions of control like extended railway network, vast army, bureaucracy, etc. Very little amount was expended for the development of human resource capital or for carving an economic infrastructure that would benefit the general population of India. The burden of high land revenue demand and government refusal to remit even in times of famine made the suffering of the people intense.⁷ Even while the heavy toll of deaths was going on, record amounts of tax were recovered from the people by the most violent methods, which included murder, rape etc. This draws the inhuman tendency of British rule in India.⁸ Evaluating the effects of the worse Bengal famine, the acting Governor of East India Company, Warren Hastings (1772-85), himself quoted, "*Notwithstanding the loss of at least one-third of the inhabitants of the province, and the consequent decrease of the cultivation, the net revenue collections of the year 1771 exceeded even those of 1768. It was naturally to be expected that the reduction of the revenue should have kept an equal pace."*

The battle of Plassey, fought in 1757, laid the foundations of the colonial economy well before the introduction of railways (Chaudhuri, 1971; Fuller, 1922). After this battle, the English Company started draining the wealth of India to England.⁹ In the words of John Sullivan, President of Madras revenue board, "*Our system acts very much like a sponge drawing all the good things from the banks of river Ganges, and squeezes them down on the banks of the Thames.*" The railway only strengthened this foundation. A report furnished by an East India Company agent in mid-1840s aptly sums up the fundamental significance of railways in the colonial economy of India. The report narrates, "*If we can cheapen carriage, we may greatly increase the imports of foreign articles into the interior; and in a corresponding degree, export cotton and other agricultural produce.*" In 1846, Thomas Williamson, the revenue commissioner of Bombay, wrote to the chairman of the *Great Indian Peninsular Railway Company in London stating that, "The great trunk-line, running by the Malseje Ghaut in the direction of Nagpur, would be most direct which could possibly be selected to connect Bombay to Calcutta. Commercially, it would be best for the cotton of Berar, while for the first 120 miles from Bombay we would proceed in the immediate direction of the military stations of Ahmednuggur, Jaulna and Aurangabad." From the above-mentioned literary evidences, it is quite simple to understand the twin purpose of colonial railways was commercial and military (Rao, 1988). These two objectives set the tone for the introduction of imperial railways in India.*

Dadabhai Naoroji, the grand old man of India, was the first who systemically concluded that internal factors were not the major reasons of poverty in India but poverty was caused by the colonial rule that was draining the wealth and prosperity of India. He spoke that the drain of wealth was the portion of India's wealth and economy that was not available to Indians (Chandra, 1966; Bhattacharya, 1987). This theory was further analyzed and developed by Rajni Pam Dutt, Mahadev Govind Ranade, etc. In 1867, Dadabhai Naoroji put forward the Drain of Wealth theory in which he stated that the Britain was completely draining India. In 1876, he mentioned this theory in his book *Poverty and Un-British Rule in India*. He put forward the idea that Britain was draining and bleeding India. Further in his book, he stated the loss of 200-300 million pounds of revenue to Britain as drain of wealth.

He opined that the drain consisted of two elements. The first arose from the remittances by European officials of their savings for their expenditure in England and from pension and salaries paid in England; while the second arose from similar

⁶ Reacting against relief requisition during the 1876-79 famine, the acting Governor- General Lord Lytton (1876-80) replied, "There will be no interference of any kind on the part of Government with the object of reducing the price of food." He instructed district officers to discourage relief works in every possible way. He further said, "Mere distress is not a sufficient reason for opening a relief work."

⁷ Revenue and Agriculture department was the largest and the most organized executive arm of the British Empire in India. It extracted more than 85% of the imperial revenues. It also encouraged cash crop cultivation and thus helped immensely in the industrial growth of Britain.

⁸ The British East India Company began the administrative takeover of India in 1764-65. The company was appointed as diwan (revenue collector) of Bihar, Bengal and Orissa. Henceforth, the British acted as the administrative officers and tax collectors of the Mughal court. In comparison to previously collected £818,000 sterling, in 1765-66, the company was able to collect £1,470,000 as land revenue; and by 1790-1791 this figure had risen to £2,680,000.

⁹ From 1600 to 1757 the East India Company's role in India was that of a trading corporation which brought goods and precious metals in India and exchanged them for Indian goods like textiles and spices. The company accumulated enormous profit from the sale of Indian goods abroad. However, after the Battle of Plassey (1757), the pattern of the company's commercial relations with India underwent a qualitative change. Henceforth, the company used its political control over Bengal to acquire monopolistic control over Indian trade through legal and illegal practices. The Company's servants began to carry home immense fortunes extorted from Indian rulers, zamindars, merchants and common people.



remittances by non-official Europeans. Dadabhai Naoroji considered it as a major evil of British in India. Naoroji observed in 1880 that, "It is not the pitiless operations of economic laws, but it is thoughtless and pitiless action of the British policy; it is pitiless eating of India's substance in India and further pitiless drain to England, in short it is pitiless perversion of Economic Laws by the sad bleeding to which India is subjected, that is destroying India." Naoroji pointed out that the drain took the form of an excess of India's exports over its imports for which India got no return. As per the findings, the export of raw material from India to Britain went up from £ 1.5 million in 1750-51 to £ 5.8 million in 1797-98. At the same time British industrial imports rose rapidly. Imports of British cotton goods alone increased from £1,100,000 in 1813 to £ 6,300,000 in 1856 (see fig. 1 & 2).



Source: Naoroji, D. (1901). Poverty and Un-British Rule in India. London: Swan Sonnenschein & Co. Ltd. 52-67.

After Dadabhai Naoroji, R. C. Dutt vividly explained this unilateral flow of wealth from India. He in his book, *Economic History of India*, wrote that, "*Taxation raised by a king is like the moisture sucked up by the sun, to be returned to earth as fertilizing rain, but the moisture raised from the Indian soil now descends as fertilizing rain largely on other lands, not on India.*" M. G Ranade also talked about drain of wealth and saw the need for heavy industry for economic progress of India (Gordon, 1978).

From 1757 onwards English East India Company consolidated its political and economical possessions and India experienced the bitterness of colonialism. The British came to India as commercial traders, but unstable political circumstances made them the supreme masters. After the battle of Plassey, the English East India Company had succeeded in establishing its authority over the major productive regions of India and afterwards the colonial government directly introduced the era of exploitation of both natural and human resources of India (Dutt, 1906; Dutt, 1950).¹⁰ Whatever fortunes the Company's servants had extorted from Indian rulers, zamindars, merchants and common people by way of gifts, trading fortunes, etc. were carried to their home county. It is said that sum of nearly £ 6,000,000 was sent to England between 1758 and 1765 and this amount was more than four times of the total land revenue collection of the nawab of Bengal in 1765. This amount did not include the trading profits of the Company. When the Company acquired the *Diwani* of Bengal in 1765, it soon organised the drain even more than its servants. It began to use much of the land revenue for purchasing Indian goods and exported them. These purchases were known as 'Investments'. Between 1765 and 1770, the Company is said to have sent nearly four million pounds in the form of goods to Britain. This sum represented about 33 per cent of the net revenue of Bengal (Misra, 1942; Egerton, 1904). The drain was so obvious that even British officials accepted the phenomenon of Indian drain, however, they differ in fixing the exact amount of the annual drain. Lord Ellen borough, chairman of the select committee of the House of Lords and subsequently governor-general of India, admitted in 1840 that, "India was required to transit annually to Britain a sum amounting to between two and three million sterling without any return except in the small value of military stores." Even after the transfer of power to the crown in 1858, the drain continued. But it was now in the form of Home-charges. They constituted the payments towards interest for debts which India had incurred, annuities on account of railways and irrigation works, payments due in connection with civil departments, pensions, gratuities, furlough allowances and payments for stores, etc. Before the Revolt of 1857 the home charges varied from 10% to 13% of the average revenues of India. After the revolt the proportion shot up to 24% in the period 1897-1901. In 1901-02, the home charges amounted to £ 17.36 million (Bagchi, 1970). During 1921-22, these charges sharply increased to 40% of the total revenue of the British Government, as shown in figure 3.

¹⁰ From 1757 to 1850, the English East India Company acquired a huge geographical area under their hegemony. Various mighty India political powers as Bengal, Mysore, Maratha, etc. surrendered through the authorized and unauthorized policies.





Source: Dutt, R. C. (1950). *The Economic History of India under Early British Rule*. Routledge: Trubner's Oriental Series. 103-11.

Discussion

The controlled political condition and economic trends of the 19th century induced the British to construct railways in whole India. Railways, in the opinion of English historians, would assist the economic development of India and provide both a market for British goods and a source of raw materials. Till the last decade of the 18th Century India remained the valuable market of luxury goods and clothes for European countries (Habib, 1963; Moreland, 1968). However, by the 19th Century the balance of trade was completely reversed.¹¹ Through a pre planned strategy, the East India Company made India a source of raw material and a profitable market for their finished goods. Due to the pressure created by the Manchester and Lancashire textile industries the Company was forced to identify numerous hinterlands as the depots of raw material. Therefore, it became inevitable to link such hinterlands with the prime ports as Calcutta, Madras, Cochin and Mangalore (Crook, 1933). More to silk and cotton certain kinds of goods like salt and sugar could not be carried in wet seasons because of the inconvenience of transport which in turn forced the British to carve out the railway tracks.

The procedure of drain of wealth increased or expanded with the expansion of the railroad infrastructure. Figure 4 explains that there were 288 miles of railroads in India in 1857; which rose frequently in the coming yeras, as 1599 miles (1861), 3373 miles (1865), 9891 miles (1881), 19,555 miles (1895), and 34,056 miles (1914). With the expansion of the railroads, the exports of food grains rose rapidly. The export of rice grew from 12,697,983 hundred-weight in 1867-68, to 18,428,625 hundred-weight in 1877-78. Wheat exports grew 22 fold during this same period (Morris & Dudley, 1975; Ghosh, 1944).



The railway network grew rapidly in the last decades of nineteenth century. Rail route mileage increased from 8,995 miles in 1880 to 23,627 miles in 1900 representing an average annual growth rate of 7.5%. The rapid pace of development slowed down comparatively in the beginning of twentieth century and by the 1920s mileage growth averaged 1.3% per year. By the end of 1920, the route mileage of railways in India was 35,406 miles (59,591 km) of which 26,889 miles (43,272 km) were owned by the Government. By this time India had the fourth largest rail network in the world. Nonetheless, the scale of the network relative to India's population was not so impressive.

The period from 1931-35 was the period of the economic depression that obviously affected the pace of railways. During this period 2,080 km of railway lines were laid. After 1940 the background of Second World War gave stress and strain on the

¹¹ The introduction of Industrial Revolution compelled the British to find market for finished products. Consequently, there was a demand for controlled areas (colony) to get uninterrupted supplies of raw materials for their factories.



resources of the Indian Railways (See Table 1). During the war time, materials and equipments were diverted to the war efforts up-to the maximum possible extent. With independence India was divided into India and Pakistan and this led to the partition of railway assets between India and Pakistan (Roy, 2013).

S. No	Details	1860	1880	1900	1920	1940
1	Total Routes (Miles)	838	8,995	23,627	35,406	41,852
2	Route miles per '000 miles	0.53	5.69	14.94	22.39	25.96
3	Route miles per m persons	3.4	35.0	82.9	115.9	107.0
4	Passengers carried	n. a.	48	166	524	604
5	Goods carried (tons)	n. a.	n. a.	n. a.	86	129
6	Employment in railways	16,789	154,108	338,041	727,184	1,046,843

Table 1: Selected Railway Statistics, 1880-1940

The inhuman British policy can be understood by this fact that since 1876-78 were major famine years, the export of rice reached 30.3 million hundred-weight, and wheat reached 30.3 million hundred-weight in 1896-97. Therefore, it could be said that railways and famines remain hand in gloves throughout the British rule in India. The existence of railways never supported to encounter the effects of famine. The sole motive of railways was to the transport the food grains towards the coastal ports where they were sent to Europe. Substantial amounts of both food and non-food crops began to be shipped overseas (Sen, 1982). It is estimated that as much as 13 percent of the wheat produced in India went to Britain. By 1886, India was supplying 23 percent of Britain's wheat imports. Much of the wheat and rice surplus was exported to England. On the eve of 1896 famine, the wheat belt of northern India had been depleted by massive exports to Britain. Millions of famine ridden in India died along the railroad tracks starving and exposing the hollow imperial claims of the life-saving benefits of railway transportation (Nanda, 2003). In all the famines, which occurred in the British period, there never was a shortage of food in the country. In fact, during the worst famines of 1876-79 and 1896-1902 surplus food grains were being exported from India.

The same miserable story was repeated again in the terrible famines of 1896-1902.¹² This time also the rice and wheat exports soared to record levels in the years when the famine was at its apex. Writing about the worst famine of 1896-97, eminent scholar Bhatia wrote, *"There was civil commotion and unrest in Bombay against continuing exports of food grains from the presidency at a time when the people faced the threat of famine. Even then, the British government refused to change its food policy and steadfastly tried to mitigate the views so far"* (Bhatia, 1968).

Tirthankar Roy estimated total famine-related mortality during the regional crises of 1876-78 and 1896-1902 was between thirteen and sixteen million people (Roy, 2013). While railways had a role to play in facilitating food distribution, the British regime entirely focused on the export of food grains and other raw materials to Britain. The planning and execution of railway construction in India was entrusted almost exclusively to British civil and military engineers. This gave the Indian railways a colonial character. Thus, Indian railways generated employment and industry for Britain rather than for India. Indian people paid for these colonial railways with their taxes while the profits benefited the English. The introduction of railways pushed India into an era of classical colonialism (Report of the Acworth Committee, 1923). Right from the inception, the British government had a double objective behind the introduction of railroads. Firstly, to secure a more reliable source of raw material, and secondly, to sell Britain manufactured cheap machine made goods to the millions of Indian masses.¹³ Karl Marx in 1853 predicted, "*The English company intend to endow India with railways with the exclusive view of extracting, at diminished expenses, the cotton and other raw materials for their manufactures.*"

Introduced as a means of so-called modernization the railways had to confront a great deal of opposition and popular criticism. Many Indian nationalists criticized and claimed that railways had impoverished India through the accompanying higher taxes and lessened disposable income, which diminished resistance to famine. The economic historian Ramesh Chunder Dutt condemned the construction of railways as a wasteful expenditure. Sir Arthur Cotton, the architect of magnificent Godavari and Kaveri irrigation works, stated that, "What India wanted were waterways and not railways. It was also very difficult to convince the common people that a journey by rail was safe." Besides the above-narrated arguments the

¹² The famine of 1896-97 in the Madras Presidency was made more acute by the Colonial government's policy of laissez faire in the trade of grain. The two of the worst famine deteriorated districts in the Madras Presidency (Ganjam and Vizagapatam) were forced to export grains throughout the course of famine.

¹³ First, the British destroyed India's worldwide exports in handloom textiles and then invaded country's own home market and destroyed the domestic industry.



*IJMSRR E- ISSN - 2349-6746 ISSN -*2349-6738

nature, the physical conditions and the geographical terrain of India also created greater obstacles. India was neither a flat country like Russia nor a small country like England. However, several surveys made by Simms, Robert Stephenson and others finally led to the conclusion that railway lines could successfully connect the various parts of India and the railways could be run safely and profitably under existing Indian conditions (Kerr, 1995).

Throughout the 19th century, Britain enjoyed positive balance of trade with India. But at the same time it had a growing deficit in its overall international trade, which was compensated by Indian export surpluses up to a significant extent. The exports from India primarily constituted agricultural raw materials such as cotton, jute, tea, coffee, sugarcane, tobacco, wheat, rice, oil seeds, opium, etc, while imports mainly include clothes, railway and military hardware (Gadgil, 1929; Beer, 1962). Thus, Indian economy exclusively serviced the Industrial revolution in Britain, while at the same time Indian economy was forced to be agricultural based. Ironically, the Indian cottage industries collapsed at the same time as the required raw material was being drained to England.

Conclusion

The British came to India as commercial traders, but unstable political circumstances made them the supreme masters. From 1757 onwards, English East India Company consolidated its political and economical possessions and India experienced the bitterness of Colonialism. With the policy of conquest and compromise, the English Company succeeded in establishing its authority over the major productive regions of India and afterwards the colonial government directly introduced the era of exploitation of both natural and human resources of India. In terms of economy, railways inaugurated a new industrial age, broke down the static character of Indian economy, made the population mobile and revolutionized trade and commerce. However, the main objective of English Company behind the introduction of Railways in India was the exploitation of natural resources and raw material to meet out the demands of Industrial Revolution in England. Through a pre-planned strategy, the East India Company made India a source of raw material and a profitable market for their finished goods.

References

- 1. Arnold, D. (1991). Famine: Social Crisis and Historical Change (New Perspectives on the Past). Wiley-Blackwell publication. 133-36.
- 2. Baden-Powell, B. H. (1894). A Short Account of the Land Revenue and its Administration in British India; with a Sketch of La. Oxford: Oxford Clarendon Press. 164.
- 3. Bagchi, A. K. (1970). Private Investment in India, 1900-1939. Cambridge: Cambridge University Press. 53-55.
- 4. Balachandran, G. (2003). India and the World Economy 1850-1950. New Delhi: Oxford University Press. 403-09.
- 5. Bardhan, P. K. (1984). Land, Labour and Rural Poverty: Essays in Development Economics. Delhi: Oxford University Press. 167-72.
- 6. Beer, G. L. (1962). The Origins of the British Colonial System. London: Kessinger Publishing. 183-88.
- 7. Bhatia, B. M. (1968). Famines in India, 1860-1965. New York: Asia Publishing House. 99-103.
- 8. Bhattacharya, S. (1987). *Essays in Modern Indian Economic History*. New Delhi: Munshiram Manoharlal Publishers. 38-43.
- 9. Blyn, G. (1966). Agricultural Trends in India, 1891-1947: Output, Availability, and Productivity. Philadelphia: University of Pennsylvania Press. 137-40.
- 10. Bose, S. (1994). Credit, Market and the Agrarian Economy. New Delhi: Oxford University Press. 194-95.
- 11. Bowen, H. V. (2002). The Worlds of the East India Company. Suffolk (UK): Boydell Press. 409-17.
- 12. Chandavarkar, R. (1998). Imperial Power and Popular Politics: Class, Resistance and the State in India c1850-1950. New York: Cambridge University Press. 275.
- 13. Chandra, B. (1966). *The Rise and Growth of Economic Nationalism in India: Economic Policies of Indian National Leadership 1880-1905*. New Delhi: People's Publishing House. 112-36.
- 14. Chandra, B (2008). India since Independence. New Delhi: Penguin Books India Pvt. Ltd. 292-307.
- 15. Charlesworth, N. (1982). British Rule and the Indian Economy 1800-1914. London: Macmillan. 62.
- 16. Chatterji, B. (1992). *Trade, Tariffs, and Empire: Lancashire and British policy in India 1919-1939.* Delhi/New York: Oxford University Press. 231-33.
- 17. Chaudhuri, K. N. (1971). *The Economic Development of India under the East India Company 1814- 1958*. London: Cambridge University Press.10-19.
- 18. Chopra, P. N. (1973). The Gazetteer of India; History and Culture. Vol. II, New Delhi. 374-79.
- 19. Crook, N. (1933). India's Industrial Cities: Essays in Economy and Demograph. New Delhi: Oxford University Press. 199-205.
- 20. Das, M. N. (1959). *Studies in the Economic and Social Development of Modern India 1848-56*. Calcutta: Firma K. L. Mukhopadhyay. 155-57.



*IJMSRR E- ISSN - 2349-6746 ISSN -*2349-6738

- 21. Das, S. (1991). Communal riots in Bengal 1905-1947. Delhi/New York: Oxford University Press. 109-13.
- 22. Desai, A. R. (1948). Social Background of Indian Nationalism. Delhi: Popular Prakashan Pvt. Ltd. 325-33.
- 23. Desai, S. S. M. (1982). Economic History of India. Bombay: Himalaya Publishing House. 137-38.
- 24. Dutt, R. C. (1906). Economic History of India in the Victorian Age 1837-1901. London: Kegan Paul. 159-63.
- 25. Dutt, R.C. (1950). *The Economic History of India under Early British Rule*. Routledge: Trubner's Oriental Series. 103-11.
- 26. Egerton, H. E. (1904). *The Origin and Growth of English Colonies and their System of Government*. Oxford: Neyro University Press. 287-310.
- 27. Fuller, J. B. (1922). Introduction to the Land Revenue and Settlement Systems of the Central Provinces. Nagpur: Government Press. 212.
- 28. Gadgil, D. R. (1929). *The Industrial Evolution of India in Recent Times 1860-1939*. London: Oxford University Press, Second Edition. 97-105.
- 29. Ghosh, K. C. (1944). Famines in Bengal-1170-1943. Calcutta: Indian Associated Publishing. 332-39.
- 30. Gordon, A. D. (1978). Businessmen and Politics: Rising Nationalism and a Modernizing Economy in Bombay 1918-1939. New Delhi: Manohar Publication. 348-52.
- 31. Gupta, R. M. N. (1940). Land system of Bengal. Calcutta: University of Calcutta. 88-91.
- 32. Habib, I. (1963). The Agrarian System of Mughal India (1550-1707). Bombay: Asia Publishing House. 303-11.
- Hartwell, R. M. (1971). *The Industrial Revolution and Economic Growth*. London: Methuen & Company Ltd. 119-33.
- 34. *History of the Indian Railways Constructed and in Progress* (May 1925). Corrected up to 31 March 1925, No. 731-St/3-4, New Delhi: National Archives. 217-25.
- 35. Hunter, W.W. (2005). *The Indian Empire its People- History and Products*, New Delhi: Asian Educational Services. 431-36.
- 36. Kerr, I. J. (1995). Building the Railways of Raj 1850-1900. New Delhi: Oxford University Press. 160-67.
- 37. Kumar, D. (1982). *The Cambridge Economic History of India (c. 1757c. 1970)*. Cambridge: Cambridge University Press, Vol. II. 191-203.
- 38. Kumar, S. & Mehrotra, S. (2008). *Bankruptcy to Billions- How the Indian Railways Transformed?* New Delhi: Oxford University Press. 206-23.
- 39. Misra, B. R. (1942). Land Revenue Policy in the United Provinces under British Rule. Banaras: Nand Kishore & Brothers. 113.
- 40. Moreland, W. H. (1968). The Agrarian System of Moslem India. Delhi: Oriental Books Reprint Corporation. 234-41.
- 41. Morris, M. D. & Dudley, C. B. (1975). Selected Railway Statistics for the Indian Subcontinent (India, Pakistan and Bangladesh). 1853-1946/47. Artha Vijnana, XVII: 3. 187-98.
- 42. Nanda, S. P. (2003). *Economic and Social History of Modern India*. New Delhi: Anmol Publication Pvt. Ltd. 119-23.
- 43. Naoroji, D. (1901). Poverty and Un-British Rule in India. London: Swan Sonnenschein & Co. Ltd. 53-67.
- 44. Neale, W. C. (1962). *Economic Change in Rural India: Land Tenure and Reform in Uttar Pradesh 1800-1955.* New Haven: Yale University Press. 342-48.
- 45. North, D. C. (2005). Understanding the Process of Economic Change. Princeton: Princeton University Press. 261-73.
- 46. Rao, M. A. (1988). Indian Railways. New Delhi: National Book Trust India. 137-43.
- 47. Rao, S. (1978). The Railway Board; A Study in Administration. New Delhi: S. Chand Publications, 1978. 94-107.
- 48. Report by F. W Simms (13 February 1847). Consultant Engineer to the Government of India, *On the Proposal for Constructing a Railway Line from Calcutta to Diamond Harbour*. Home Department, Legislative Branch, No. 17, New Delhi: National Archives. 124-26.
- 49. *Report of the Acworth Committee* (19 January 1923) Railway Board, Financial A, No. 800-F/14-19, New Delhi: National Archives, 66.
- 50. Roy, T. (2013). *The Economic History of India 1857-1947*. New Delhi: Oxford University Press, Third edition. 213-19.
- Sen, A. K. (1982). Poverty and Famines: An Essay on Entitlement and Deprivation. Oxford: Clarendon Press. 372-84.
- Seymour, S. (1970). Studies in Railway Expansion and the Capital Market in England 1825-1873. London: Taylor & Francis. 51-63.
- 53. Sharma, S. (2001). *Famine, Philanthropy and the Colonial State: North India in the early Nineteenth Century.* Delhi: Oxford University Press. 117-22.
- 54. Stephenson, J. (1916). Principles and Practice of Commerce. London: Sir I. Pitman & Sons Ltd. 237-43.