This chapter attempts to focus on the evaluation of British writings on the issue of system of communication network. The themes covered by these writings include: the extent of growth in means of communication including telephones, post-offices and telegraphs along with correlating this component of economy of the province in the development of trade and its utilization as a relief measure in controlling the famine conditions, purpose of development of roads along with means of road transportation and position of roads, objectives of development of railways and impact of this development on road transportation, extant of development in water transportation and beneficiaries of development of communication network.

Communication network comprises different components including both channels of communication and transportation system which emerged as a vital part of communication-network having three main streams viz. roads, railways and water. Road transportation was the basis of other two means. British officials included them in their writings to boost up the set of ideas justifying their rule in the province, although the degree of justification varied from writer to writer.

The very first issue taken in this context is about the development of means of communication under British rule. Malcolm Lyall Darling, Anstey Vera, S. S. Thorburn, H. Calvert, H. K. Travaskis and Darlington W. discussed about this in their studies. Darling’s study is limited in scope, while other writers had covered it in a detailed manner. On the issue of introduction of technology and telephones only two writers, namely Darling and Darlington had remarked about it. They observed that this development was used by limited population. Darlington commented, “Telephones were still little
used and not well managed being expensive and unsatisfactory."527 Darling also supported the views of his contemporary writer on the issue of expensive nature of telephones. Darling wrote, “In Lyallpur colony a Sikh owner of 150 acres of land was hardworking, was the first agriculturist to have a telephone in his house. He drove to market in his tonga.”528 His study explored that only well-to-do people could afford telephone which was a matter of pride. Establishment of colonies provided chances to the peasants to try the new instruments. Along with this he appreciated the attempts of the rulers to consider both the towns and villages at par for developing channels of communication. His study depicts the changes in communication set-up of the province.

The next observation under communication is about the introduction of telegraphic service under the British rule. Darlington W., Anstey Vera, H. Calvert and James Wilson discussed about it. First two writers, namely Darlington and Vera had opposite views as far as the cost of this service has been concerned. While both Calvert and Wilson analysed its utility in the field of trade and commerce. Darlington wrote, “The telegraph service is also cheap and efficient with 19137055 telegrams and 87714 miles of lines and 347906 miles of wires in March 1918. 12 pence carries on ordinary telegram of 12 words anywhere in India, while telegrams at higher rates may be sent as urgent.”529 His contemporary writer, Vera stated, “By the end of the 19th century, a telegraph service had been introduced although its efficiency was hindered by high charges.”530 These writers gave different statements on same issue, but Darlington cleared it. The telegraphic service was available in varied rates depending upon the nature of service used by a person. He appreciated postal telegraphic office at Hariana, where postman visited the village to distribute the letters. He also appreciated the telegraph service for being cheap and

527 Darlington W., op. cit, p. 23
528 Darling M. L., Punjab Peasant in Prosperity and Debt, p. 122
529 Darlington W., op. cit, p. 24
530 Vera Anstey, op. cit, p. 129
efficient. There is identification of causes of less popularity of this means of communication and its uses by the people. He attempted to suggest the government to take timely action to remove the weakness in the communication system.\textsuperscript{531} Both Calvert and Wilson agreed on the use of telegraph service in the development of trade of province. They praised this facility being emerging as one of the factors which helped in improvement of economic condition of the people through the assistance in flourishment of the trade.\textsuperscript{532}

The next exploration discussed by these writers is about the establishment of postal services in the province. Darlington W., Anstey Vera, H. Calvert discussed about it in their studies. There is unanimity in appreciation of the British administration among these writers regarding the efforts made by them to develop communication-network. Darlington’s study is a detailed study in this context in comparison to other writers, who just touched this issue without analyzing its functioning and utility. Darlington wrote, “The post office is a marvel of good management, efficiency and cheapness. It costs a half penny to send a letter anywhere in Indian empire, half that for a post card and there is a parcel post system equally cheap and certain. Merchants are able to supply their customers by mail orders and have the bill collected by the postman and paid to the firm at the other end in the same way with receipts attached.”\textsuperscript{533} He appreciated this department of government that was providing multiple facilities to the users which were within the reach of local people. He also discussed about another facility in the form of money orders, which was helpful in the field of trade and commerce. Other writer, Vera also stated that an excellent and cheap postal service was evolved. She remarked that this facility was within the reach of people. She agreed with Darlington on this point.\textsuperscript{534} Other two writers, namely Calvert and Wilson observed positive correlation between evolution in the field of

\begin{itemize}
\item \textsuperscript{531} Darlington W., \textit{op. cit}, p. 23
\item \textsuperscript{532} Wilson James, \textit{op. cit}, p. 13; Calvert H., \textit{op. cit}, p. 14
\item \textsuperscript{533} Darlington W., \textit{op. cit}, p. 23
\item \textsuperscript{534} Vera Anstey, \textit{op. cit}, p. 129
\end{itemize}
Both Vera and Calvert termed the development in communication system as a revolution. Calvert wrote, “The internal communication of India including the Punjab underwent almost a revolution. Metal roads, railways, posts and telegraph were introduced from the west with results which throw into clear relief the economic position of the country prior to their day. They stimulated that growing organization of trade and commerce which has proved one of the most important factors in increasing the resisting power of the people.” Vera stated, “By the end of the 19th century, revolution had been affected in the means of transport and communication.” Darlington W. did a comparative analysis of both the Sikh and the British periods for suggesting the readers about sincerity of the rulers towards people of province. He wrote, “During Sikh period, communication of news or events was conveyed through travelers or through hereditary barbers.” He further stated, “Since the British occupation of the Punjab, the means of communication and trade have been developed, banks and cooperative credit societies have been established.” The writer observed that innovations in the field of communication took place during post-annexation period. He analysed difference between the extent of development of communication during both pre and post annexation periods. This analysis of Darlington was based on his efforts to criticize the Sikh period in order to convince the readers about dedication of rulers for bringing changes on modern lines in which province was earlier lagging behind.

The British officials namely James Wilson, Paustine Paul, H. Calvert, and Anstey Vera argued that development of communication

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535 Wilson James, op. cit, p. 13; Calvert H., op. cit. p. 14
536 Ibid, pp. 14-15
537 Vera Anstey, op. cit, p. 129
538 Darlington W, op. cit. p. 23
539 Ibid, p.24
system resulted in the economic development of Punjab. In order to lay stress on their views, they had taken different aspects of the economy. James Wilson said that the development of communication during post-annexation period resulted in increase in the trade of Punjab. He wrote, “The great and rapid increase of trade which has taken place in recent years is due mainly to the improvement in communications in railways, roads, post offices and telegraphs.”

His views centered on the enhancement of trade as a result of communication-network during the British period. He remarked that now any important change in prices is at once felt all over the province and led to corresponding movement of goods. Now better prices for surplus produce could be obtained in remote villages.

Darling also supported views of Wilson as he remarked, “The first railway in Punjab (from Amritsar to Lahore) in 1861 made conditions to change. By 1870, goods could be booked to Bombay, Calcutta and Karachi. By 1872, there were 400 miles of railways, 1000 miles of metal roads and 2750 miles of canals. Thus trade began to flourish.” H. Calvert followed protective policy in order to convince the readers about efficient management system of rulers. He wrote, “The main effect of the creation of modern communication was the taking up of the Punjab fields with the world market and approximation of the prices received for the produce with the world prices.” He tried to develop positive attitude of the readers towards the policies of British rulers. He remarked that as a result of the imperial rule, economy of the Punjab was attached to world economy because British government had broken the isolation of economy of Punjab by widening its area.

Paul and Travskis’s studies attempted to highlight control over famine from the province as a result of British efforts. Paul covered a period of 1849 to 1927, while later writer analysed economic

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540 Wilson James, *op. cit.*, p. 13
543 Calvert H., *op. cit.*, p. 281
conditions of the province covering the whole of British period. As per the sources of information are concerned, Paustin Paul made use of official published sources i.e. irrigation reports, administration reports, district gazetteers, Punjab census reports etc. On the other hand Travaskis’s study was based on the works of Adam Smith, Baden Powell, Calvert H., M. L. Darling, Sir James Douie, S. S. Thorburn and Sir Alfred Lyall etc. He also made use of gazetteers. First writer commented on purpose of development of communication and second writer observed results respectively. So far control over famines was concerned, Paustin Paul wrote, “During the early years of British control of Punjab, efforts were being directed not only towards the development of irrigation canals but also to the construction of roads and railways. Eventually, the dread of famine in the Punjab was to be entirely removed through better means of producing food crops in irrigation levels and the development of an efficient system of transportation and communication.”

It depicts that British policies on communication were interrelated and well planned so as to resolve the economic problems of the Punjab. Writers followed Adam Smith’s remarks as to the desirability of non-intervention in the corn trade of a country. Later writer namely Travaskis opined that communication network helped in control of famines. He wrote, “But the real relief from the famine was obtained when the development of communication by rail and road enabled food to be transported easily a surplus produce for export could be diverted to relieve the affected districts in times of scarcity.” He concluded that threats of famine diminished at any visitation, as the spread of knowledge among the people and the development of communication and agricultural resources of the province enabled the government to cop with them more effectively.

The foremost work on the introduction and development of road transportation in Punjab is by David. He mentioned in his book *Land*
of Five Rivers and Sindh, which was published in 1883, about the initiatives on the part of local kings to develop this means of transport. He followed a balanced and unbiased approach. His study does not depict the merely praise of the British rule rather he was impartial and provided due consideration to those people who were taking serious steps in this regard. He wrote, “A new road suitable for wheeled vehicles is now being constructed in the valley of the Jhelum, on the left bank of the river, by the Maharaja of Kashmir. The Dak Bungalow is situated at the junction of the Knazan streams with the Jhelum.”547 The purpose of writing this book was to give details about the villages and cities covered under communication system in Punjab. It was not primarily based on the analysis of efficient aspects of economy of Punjab during the British conditions. The writer described historical background of the areas covered under study along with general description. Another set of imperial writers including S. S. Thourburn, H. K. Trasvaskis and Anstey Vera wrote in the defense of imperialism. They praised Lord Dalhousie, who realized the need for the development of roads in the province. H. K. Trasvaskis wrote in his book An Economic History of Punjab from Earliest time to 1890. Vol. I, “For the carrying out of important public works some provincial coordinating authority was even more desirable than in the prevention of the crime. The Mugul roads had degenerated under Sikhs and even the British had cared a little for roads till the energetic Dalhousie took the matter in hand.”548 On the other hand Anstey Vera, author of the Economic development of India, stated, “Despite Lord Bentick’s attempted improvement in the road system of the North, no far reaching scheme was carried out until the time of Lord Dalhousie.”549 S. S. Thorburn, the third writer in the group remarked, “Lord Dalhousie was essentially the great road maker of India. East India Company cared a little for roads. G.T. road from Calcutta to Delhi was rough and unsatisfactory until 1849. Lord

547 Ross David, op. cit., p. 163
549 Vera Anstey, op. cit, p. 130
Dalhousie’s greatest achievement was his completion of Asia’s greatest highway to and beyond Delhi and the planning, cutting and opening of some of the stations of its extension to Peshawar."\textsuperscript{550} He further wrote, “During Lord Dalhousie’s eight years of office (1848-1856) crores of rupees were spent on the neglected arteries of commerce; probably his most useful achievement was his completion of Asia’s greatest highway to and beyond Delhi and the planning, cutting and opening of some of the stations of its extension to Peshawar.”\textsuperscript{551} The above mentioned views of writers moved around appreciation of Lord Dalhousie, who took considerable steps to develop roads of the province. He attempted to improve the weaknesses of the East India Company which failed to provide full attention towards the road transportation system of the Punjab. Apart from Lord Dalhousie, Thorburn also appreciated efforts of John Lawrence for developing roads in Doabs for un-interrupted export trade of the province.\textsuperscript{552} He attempted to highlight that British colonial officials were very much sincere towards the development of economy of the Punjab. H. K. Travaskis also correlated the period of development of roads with the tenure of British administrator Lord Dalhousie. He observed that Dalhousie was more lavish in his expenditure on public works than any of his predecessors. He was most lavish in this province.\textsuperscript{553} Travaskis supported the issue of spending huge amounts on the roads by British Governor General. He understood the necessity of roads for development of economy as he commented that as with the roads, so with the railways the original impetus to construction was given by Dalhousie who had laid his plans for running lines all over India.\textsuperscript{554} Anstey Vera analysed that efforts of William Bantick which failed to get favourable results till the arrival of Lord Dalhousie. The views of these writers stressed to explain that prior to imperial rule roads of

\textsuperscript{550} Thorburn S. S., \textit{The Punjab in Peace and War}, pp. 162-163
\textsuperscript{551} \textit{Ibid}, p. 163
\textsuperscript{552} \textit{Ibid}, p. 184
\textsuperscript{553} \textit{Travaskis H. K., The Punjab of To-Day, Volume- I}, p. 224
\textsuperscript{554} \textit{Ibid}, p. 225
Punjab were neglected. Lack of farsightedness could be considered as a cause of ignorable attitude of rulers towards roads. But Anstey Vera clearly highlighted the basic cause of neglect of roads. Her study depicted that before the British rule roads were ignored due to its expensive nature which emerged as a hurdle in the way of development of roads.\textsuperscript{555} She considered Dalhousie’s period as the period of reform of the administration, which later on became beneficial to the British rule. Melcolm Lyall Darling enquired from the people covered under his study about different issues related to economy of province. He followed interview method as a source of getting information from masses. In his book \textit{Wisdom and Waste in the Punjab Village}, he remarked, “Mr. Brayne’s passion was roads. We all made roads. Much money was spent here in collecting stones to make a big road; but he was transferred and the metal was auctioned for nothing and no one thought anymore about roads when deputy commissioner says a door must be opened, we all throw ourselves against it because we want to please him; not because it is in our hearts to do this.”\textsuperscript{556} By the narration of a villager it could be concluded that the ruled population paid appreciations to the efforts of the British officer. Darling in his study attempted to raise a set of arguments for justifying imperial rule and highlighted critical attitude towards the ruled population of the province, who were rigid and orthodox. These people wanted to do any thing which was in their hearts and it was a question as to how to put it into their hearts.\textsuperscript{557}

Coming to the factors of development of roads, only two British administrators named S. S. Thorburn and H. K. Travaskis have stated in their works. Thorburn mentioned in a brief manner while Travaskis tried to consider this issue to some extent in a detailed way. S. S. Thorburn wrote, “If roads were necessary for military, trading and civilizing purposes, irrigation was equally so for the development of

\textsuperscript{555} Vera Anstey, \textit{op. cit}, p. 128
\textsuperscript{556} Darling M. L., \textit{Wisdom and waste in the Punjab Village}, p. 39
\textsuperscript{557} Darling M. L., \textit{Wisdom and waste in the Punjab Village}, p.29
resources of the country.\textsuperscript{558} He said that British rule paid due attention towards construction of roads. He commented that they were not following self-centered approach. While on the contrary Travaskis wrote, “Dalhousie took the matter in hand, such roads as there had been constructed for strategic rather than economic reasons.”\textsuperscript{559} He further remarked that first road of the British converged on Karnal, the frontier post; hence watch was kept on the Sikh states. Security was the first consideration and a road was rushed to the Khaibar pass.\textsuperscript{560} He remarked that in starting years of annexation of Punjab peace and control were two main objectives of government so it ignored economic consideration for the same. They followed flexible and not static approach in this respect. Later on economic reasons became more prominent in comparison to security. He praised imperial rulers for amending its policies on the basis of need of hour and carrying on a systematic pattern in this context. The policies depended upon the initiative and priority of district authorities. The government was democratic and not autocratic, so decentralized system based on districts was followed during post annexation period. H. Calvert highlighted, “Internal communications have stimulated that growing organizations of trade and commerce which has proved one of the most important factors in increasing the resisting power of the people.”\textsuperscript{561} The writer observed that means of transport like roads and railways along with other means of communication made accumulation of wealth and it was reflected in the investment of funds in a multitude of improvement.\textsuperscript{562} Calvert attempted to clear the path of glorification of imperial rule by holding the view that idea of development of roads was taken from west. British wanted to take the province on the pattern of Britain. They wanted facilities of Europe in the Punjab so as to achieve the goals of

\textsuperscript{558} Thourburn S. S., \textit{The Punjab in Peace and War}, p. 163
\textsuperscript{559} Travaskis H. K., \textit{The Punjab of To-Day Volume I}, p. 224
\textsuperscript{560} \textit{Ibid}, p. 225
\textsuperscript{561} Calvert H, \textit{op. cit}, p. 15
\textsuperscript{562} \textit{Ibid}, p. 15
colonialism. He never mentioned that in order to get easy facilities and good working conditions along with imperial security, rulers preferred to develop roads rather he concealed this fact but laid stress that it was for the betterment of province. His study is concentrated on enhancement of wealth which became basis of formulation on policies of the rulers.

The next perception is about the use of the means of road transportation. The British administrators-cum-writers may be divided into two categories on the basis of their views. Both Anstry Vera and M. L. Darling represented first category while Darlington W., S. S. Thourburn, and H. K. Travaskis fall in second category. They differed on the issue of use of means of road transport during the British period. The writers belonging to second category viewed that there was dominance of traditional means of transport like bullock-carts, horses, oxen-carts, ponies, donkeys, camel, sheep, goat, gigs (tumtum) and mules. Travaskis observed, “The utility of cattle is not confined to ploughing and milk production. There are 30000 bullock carts in the province with the increase in number of roads and improvement in quality, the number of carts is also increasing. They belonged to small holders and found in largest number in Rohtak and Ferozepur.” He also pointed that orthodox nature of the people emerged as a major cause of preference for traditional means of transport. S. S. Thourburn analyzed that not only the ruled population, but rulers were also using them. In English infantry, these means were used on preferable level. He wrote, “Nicholson seized all the carriages with reach, light carts and ponies and allowing neither man nor beast any rest. He caught up his prey at the crossing.”

He further wrote, “To meet the military demands in the emergencies and 1897 the civil power collected roundly 160000 animals and carts and 40000 attendants.” It depicts that the government was busy in

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563 Ibid
564 Travaskis H. K., *The Punjab of To-Day Volume- II*, p. 373
566 Ibid, p. 328
establishment and consolidation of British rule, so it did not pay attention to modern means of transport. Hence conditions compelled the people for depending on the old means.\textsuperscript{567} On the other hand, Anstey Vera and M. L. Darling’s study is based on both traditional and modern means of transportation. They appreciated the government for taking initiative in the development of means of road transport. M. L. Darling wrote in his book, \textit{Wisdom and Waste in the Punjab Village}, “Mares, pony, camel, bullock and donkeys were used as means of transport. Apart from these traditional means of transport, cycles and motor lorries represented the new age.”\textsuperscript{568} So he tried to convince the readers that the British efforts took economy of the province on the modern lines. There was transformation in the use of means of transport viz. traditional to modern. He further wrote that change was observed in the province. Horse back was the matter of past, but place has been taken by motors.\textsuperscript{569} He mentioned that the government was following similar policy both for plains and hilly areas, as well as in colony and non-colony tracts.\textsuperscript{570} He criticized the ruled population for their stagnant behaviour which emerged as a hurdle in the way of change. Instead of government’s dedication whole of the ruled population failed to get benefits out of it. On the other hand, Anstey Vera praised the British period for creating conditions for use of modern means of transport like, motor car, motor cycle and ordinary cycles. She viewed that 1914 war conditions enhanced the popularity of motor cars by rich Indians and Europeans. Her study depicted that although use of modern means of transport enhanced but it was not within the reach of common people due to its expensive nature and villagers for their orthodox nature. She wrote, “During and just after the war the use of motor cars by Europeans and the rich classes of Indians began to prevail in the cities and to become common in the large towns. Whilst the use of motor lorries (mainly as feeders to

\textsuperscript{567} Ibid, pp. 200, 216, 328
\textsuperscript{569} Darling M. L., \textit{The Punjab Peasant in Prosperity and Debt}, p. 172
\textsuperscript{570} Darling M. L., \textit{Rusticus Loquitur}, pp. 31, 68, 294
railways) also increased.”  

The study of Anstey is more transparent, who analyzed conditions of position of road transportation from various aspects. Instead of blaming the people she inquired the causes which led to less use of modern means of transport in comparison to traditional ones. Being a British writer, she apart from showing her loyalty to government on one hand and also blamed them for the late entry of modern means of transport in the province on the other side. Anstey Vera remarked that road transport was developed in order to boost up the development of other means of transport i.e. railways. It was not only faster mean of transportation but also helpful to develop trade. She wrote, “Although rail road completion has become a serious problem in certain districts of Punjab on the whole improved roads and motor traffic have so far acted primarily as essential adjuncts to the railway system.”

The next issue is about the use of monetary transactions in exchange relationship in the field of transportation. Darlington W and M. L. Darling appreciated British government for bringing transformation in Punjab i.e. from Barter system to Cash transactions. Darlington stated, “Yakkas and tongas drawn by horses and bahies (passenger carts drawn by oxen) and ox-carts run between Hoshiarpur and Hariana. The fair is from 8 to 12 annas per person. For carrying loads ox-carts are the only means, though sometimes pack animals such as ponies, donkeys and camels are also used. The ordinary charge for an ox-cart is Rs. 2.8 to Rs. 3.” Darlington commented that fair was charged according to the number of passengers load to be taken. He wrote, “The roads being so bad and the means of travel and transport being yakkas, bullock-carts, palkis, oxen, horses, donkeys and camels all of which were beyond the means of the poor folk long journeys unless absolutely necessary were not undertaken.” Darlington commented that fair was depending upon

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571 Vera Anstey, op. cit. pp. 129-130
572 Ibid. p. 130
573 Darlington W, op. cit. p. 127
574 Ibid. p. 13
number of passengers and load to be taken. He strongly defended the imperial rulers by criticizing the Sikh rulers for their failure to reduce the fair of traditional means of transport and making it approachable to all. Dominance of use of traditional means of transport during imperial period implies that these were cheaper, so poor people could also enjoy this facility. M. L. Darling wrote in his book, *Wisdom and Waste in the Punjab Village* that metalled roads also helped the bullock-carts and carters charges an anna or two less a maund for each stage along them. This is an advantage to the growers and the justification of the great cost of road making. Apart from lorry and cart, there are two other means of transport—camel and donkey and comparing the efficiency of the four, an *arora* (trading caste) put the bullock-cart first, the lorry second and the donkey last.\(^{575}\) He remarked that varied rates prevailed for metal and non-metal roads. He attempted to protect the policies of rulers by following the defensive approach. The writer emphasized readers that cash based economy was beneficial to both peasants and government which in turn could develop road transportation system through these resources. He opined that government was following democratic principles in their administrative network due to its policies which were similar both in colony and non-colony tracts. H. Calvert and M. L. Darling wrote that villages were neglected in the scheme of roads because towns were preferred in this aspect. It depicts that cities and places of offices of authorities were covered under metal roads as these were centers of trade while great majority of villages were ignored because government was making efforts to develop trade of the province from each and every angle because it was beneficial to the British economy.\(^{576}\) Calvert observed, “Outside the villages, large towns are few, great cities rare and the influence of such as there is still limited to a comparatively small radius. The majority of the villages is still untouched by metal road or railways, post office are


\(^{576}\) Calvert H., *op. cit.*, p. 6
many miles apart and telegraph office still were scattered.\textsuperscript{577} Darling provided observations contradictory to Calvert. He defended imperial rule by praising the administration for following equalization principal for development of communication network in the province of Punjab. Calvert was very much loyal to British government but he was as well, sincere towards his duty being an administrator. Through his study he tried to convince the government for removing shortcomings of the policy of development of roads in both urban and non-urban areas. The government preferred cities on the ground as these were places of offices of authorities of British Empire. The causes of opposite views could be the result of type of population under study, period of study and method of study. Calvert’s work is based on the arguments of enhancement of wealth so he tried to study the causes and effects of every economic policy while Darling’s analysis is a mere narration of people.

The next issue covered under these writings is the condition of roads and their views depending upon the period and area of study. M. L. Darling had mixed opinions about the condition of roads. Darling observed that during Sikh regime some roads were in good condition while the others in were in bad shape. He wrote, “Road from Hoshiarpur to Garhshankar was a \textit{pacca} road, it was beautifully shaded and near Hassan Abdal G.T. road runs from Rawalpindi to Peshawar.”\textsuperscript{578} On the other hand, he also gave evidence of poor condition of roads when Darling mentioned, “From Kasauli and Morni hills the district road was as bad as road could be, yet it could have been made passable, it was barely for carts, without much difficulty and expenses.”\textsuperscript{579} The writer found correlation between religion and communication when, he remarked, “A big village of Ludhiana Sikhs(namely Thikranwala) which like all canal colony villages had two wide roads intersecting at a well in the middle of the village. The road was remarkably clean, no doubt because the sweepers had been

\textsuperscript{577} \textit{Ibid.}, p. 15
\textsuperscript{578} Darling M. L., \textit{Rusticus Loquitur}, p. 31
\textsuperscript{579} \textit{Ibid.}, p. 68
given land for keeping them so."580 This analysis of Darling depicts that he considered colony areas as superior to other areas. He stressed that cooperation of people could do every thing. He opined that on some places lack of cooperation from people in repairing roads emerged as a cause of poor conditions of roads. British bureaucrat held people responsible for this because he felt that they left every such task on government’s shoulder. The writer commented, "We noticed in a Jat village namly Ladwa near Karnal which was evidently new. It proved to be choupal or village meeting place and had cost Rs. 1500. This had been raised by a toll tax of ten rupees on every male in the village. Good instances of cooperation of villager with villager did not extend to repairing the roads, which 100 yards from the village was almost impossible with mud and water. The villagers protested that it was entered in the map of government property and that it was for the government to repair it. It is rare for villagers to repair their own roads. Yet costly choupals are constantly being built up in order that villagers may not be put to shame when relatives or marriage parties visit them."581 He remarked that ruled population failed to realize the importance and necessity of roads for the development of agriculture, industry, trade and commerce.582 The situation in colony and non-colony areas was not different. The government failed to realize the masses about future benefits of roads. It emerged as a hurdle in the way of good quality roads and lack of co-operation from ruled population.

Coming to more such observations, the next writer is F. L. Brayne, whose study moved around poor conditions of roads and he was unsatisfied with the structure of roads. He wrote in his book Better Villages, "The roads are tight and became drains in the wet weather and became useless for all wheeled traffic. Roads must be straight and wide enough for two way cart traffic. Proper culverts are essential to make traffic easy and to prevent flooding and waste of

580 Ibid, p. 192
581 Darling M. L., Rusticus Loquitor, p. 95
582 Ibid
He followed suggestive approach and further perceived that roads should be according to the need of villages. He laid emphasis on day-to-day care of roads so as to keep them in good state. He believed in quality rather than quantity. The writer further opined that full facilities were pre-requisite instead of excess roads. He tried to convince the government for giving due consideration to this aspect of communication. David Ross observed good condition of roads in north-western areas and Kashmir. He wrote, “There is a good road from railway station to Haripur and Abbottabad the distance being forty two miles. About three miles from Kala-ka-Sarai on the Attack road, occurs the Margala Pass which is erected an obelisk and drinking fountain in the memory of General John Nicholson, who fell at the siege of Delhi in 1857.” He further stated, “The road on the Kalka, 37 miles, is wide, well metalled and shaded by trees the greater part off the way.” He felt satisfied with the efforts of the government in this concern. H. K. Travaskis viewed that use of different types of animals as source of transportation could also emerge as a factor to trace the improvement in roads. Colonial officials analyzed that increase in number of carts by small holders in Rohtak and Ferozepur highlighted the good quality of roads while dominance of donkeys as a means of transport indicated the poor condition of roads. Like his contemporary writers, Travaskis also appreciated the government for improvement in the roads of the province.

Imperial writer M. L. Darling compared the roads of province with that of England. He wrote in his book Wisdom and Waste in the Punjab Village, “Roads in comparison to England were very poor. It was same as half melted snow at London. On these surface, motor cars, motor lories, cycles, donkeys, sheep, and goats were moving.”

583 Brayne F. L., op. cit. p. 49
584 Ibid. p. 50
585 Ross David, Land of Five Rivers and Sindh, p. 174
586 Ross David, Land of Five Rivers and Sindh, p. 234
He analyzed that roads were used both for modern and traditional means of transport. His comparison of roads of Punjab with that of England is unbalanced and awkward. It was a part of their discriminating policy. The British writer failed to consider the differences in state of free and dependent economy under British rule. The government set standards on the basis of British but never tried to come at the level of ruled population who were part of under-developed economy ruled by them. David Ross observed that routes by roads in Kashmir were under full control of rulers. Due to monopoly of government common people could not use these roads freely. Even British officers had to get permission from government if they wanted to use a route other than specified for them.\textsuperscript{589} It is an indication that government was strictly centralized one in this concern. The policy of government varied depending upon requirement of particular area. Brayne followed suggestive approach for the development of roads in the village. He neither discussed railways nor water transport as earlier stated that his study was basically concentrated on development of villages. He wrote, “Too many roads and too wide roads inside the village are a nuisance when it comes to lighting draining, water paving or cleaning.”\textsuperscript{590} He opined that villages should come forward to keep roads in order as regular work was essential for this. He correlated the better returns with better roads. Brayne stated, “Village roads must be kept in order and raised above the level of the fields otherwise it will cost more to get the crop to the market.”\textsuperscript{591}

Another means of transport that developed during British period was railways. Imperial writers named Sir James Douie, M. L. Darling, H. K. Travaskis, Paustin Paul, David Ross and Anstey Vera discussed about it in their writings. They agreed on the issue of period of development of this means of transportation in Punjab. Out of these writers only Anstey Vera wrote in her book about the initiative of Lord Dalhousie for the development of railways. She observed it as a

\textsuperscript{589} Ross David, \textit{op. cit.}, p. 147
\textsuperscript{590} Brayne F. L., \textit{op. cit.}, p. 50
\textsuperscript{591} \textit{Ibid.}, p. 75
measure for reform of the administration. She stated that for proper implementation of plans for construction of railways, principles of management, finance and construction were recommended by him. She wrote, “Railway projects were first mooted in India in the 1840. Nothing was actually done until after the arrival of Lord Dalhousie in 1848. Full of plans for building of railways and canals and for the reform of administration.” She remarked that he recommended a general system for the whole country and discussed the basic principles of management, finance and construction. Her writings depict the praise of the British rule for this innovation which was started with the arrival of Dalhousie. Both Sir James Douie and Paustin Paul appreciated the imperial period through their studies about the development of railways in Punjab in a speedy manner. Former writer wrote in his book, “Development of railway started in last decade of 19th century. In 1912 there were over 4000 miles of open lines and 3 routes to Lahore from Delhi.” Later writer mentioned, “By 1928 India could boast of over 40000 miles of railway in efficient operation of which the Punjab accounted for 5500 miles within its boundaries. The officials in the Punjab in 1851 expressed their recognition of the interdependence of agriculture and transportation.” So study of both these administrators cleared that government was very much sincere to develop railways in the Punjab. They attempted to appreciate the post-annexation period, during which railways as a means of transport developed in a systematic way. On other hand, M. L. Darling, who discussed about railway in his three books, attempted to praise British Imperialism for developing railways both in plains and deserts. Side by side, he reacted in a low tone that this service was not equally distributed in whole province. The British bureaucrat failed to give reasons for the same.

592 Vera Anstey, op. cit, p. 130
593 Ibid, p. 131
594 Douie Sir James, The Punjab, North-West Frontier Provinces and Kashmir, p. 129
595 Paul Paustin W., op. cit, p. 37
596 Darling M. L., Rusticus Loquitur, p. 1
He wrote, “Lyallpur colony tract was wide, croppy and desolate, the population hostile and the climate in summer of the fiercest. The tract only be reached by bullock-carts, camel or horse and even when the first harvest, there was no railways to take it to market.”

Darling highlighted that it emerged as a cause of problem of marketing of produce. He stated, “Good markets abounds- we have only to mention Lahore and Amritsar- and thanks to an elaborated network of railways, communications are upon a western scale.”

He remarked that development of railways helped in easy market facilities for the people and development of cities. He establishes correlation between these factors which assisted in making these cities as centers of trade. There was creation of facilities of sending goods to Bombay, Calcutta and Karachi. In Multan railway communications too are comparatively good whereas Dera Gazi Khan has no railway at all. Darling understood the necessity of railways for development of economy, but he only highlighted the limitations and could not dare to criticize the British government for its ignorable attitude towards some of the places. He could neither change basic policy of the government nor could he defy positions of general administrative structure and strategy. Ross also praised that due to direct railway communication with the Punjab and North-West provinces, position of Karachi city was greatly improved. Other cities were inter-connected through railway services. He wrote, “The lines of railways, besides being of vast communication and political importance as connected the districts of the Punjab and the North-Western provinces with the sea boards and Karachi also form the chain of communication between the great garrisons and cantonments which guarded the North-Western frontiers of India and are the main areas for military transport during times of peace and war.”

Views of British officials made it clear that it was British government which provided conditions for upliftment of

598 Ibid, p. 41
600 Ross David, *op. cit*, p. 12
economy and inter-connection of cities, which resulted in enhancement of both internal and external trade of the province.

Both H. K. Trasvaskis and Paustin Paul wrote about commencement of railway lines in canal colonies. Paul observed that at the start of colonization there existed no easy means of communication and conveyance. Railways had not yet pierced unproductive portion of Punjab. The immigrants had literally to walk through a desolate country to get the colonization area which proved to present a no less unpromising appearance than the wastes through which the land hungry peasants had travelled. As a result of it, people faced many problems in traveling to colonies and later they failed to sell produce due to lack of transportation facilities in those areas. Travaskis remarked that late commencement of railways in canal colonies affected the government revenue adversely, as it failed to get benefits of markets at the early stage due to lack of railway services in Punjab.

The next perception is about the issue of causes of development of railways during post-annexation era. The British officials named Darlington W., H. K. Travaskis, Paustin Paul, David Ross and Anstey Vera analyzed that basic cause behind development of railway in the province was military considerations. They viewed that in the starting phase of administration, government was making efforts for establishment and consolidation of their rule in the province. Darlington W. wrote, “The difficulty experienced during the mutiny of 1857 convinced the government for extension of railways which was a military necessity. At the same time the part they were to play in trade and commerce was not overlooked.” So security was the primary cause of providing attention towards this service in Punjab which other causes although not overlooked but fell in the second category i.e. secondary causes. H. K. Travaskis noticed, “The Punjab was fortunate in having a railway system which had commercial and

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601 Paul Paustin, op. cit. p. 53
602 Travaskis H. K., The Punjab of To-Day Volume- I. p. 259
603 Darlington W., op. cit. p. 20
industrial requirements. The first railway line from Amritsar to Lahore was put under construction in 1856 and opened for traffic in 1861."\textsuperscript{604}

He opined that rulers wanted to establish themselves before taking all economic means and ends in their own hands. They followed a well planed and systematic policy in this respect. So the initial objective was security for the rulers.

Paustin Paul writer of \textit{Canal Irrigation in Punjab} said, "Immediate motive for the rapid extension of railways in the Punjab following the mutiny of 1857-58 was the need for establishment of rapid means of transportation for strategic military operations."\textsuperscript{605} He wanted to say that conditions compelled the rulers for formulation of policies which could help them in achieving the goals of British rule. The writer agreed with Darlington on this issue apart from this, he along with Anstey Vera opined that entire removal of dreadful famine also became cause of establishment of railways in province.\textsuperscript{606} He mentioned, “The development of transportation facilities, railways, canals and highway share with the steady expansion of irrigation canals the honour of changing the Punjab from a constantly famine endangered province to one which is practically secure from such visitation.”\textsuperscript{607} Vera stated that Indian Famine Commission Report of 1880 also laid stress on the urgent increase of railway construction. It showed that government was not self-centered but giving due consideration to the problems of Punjab economy as well. She mentioned, “In 1880 the government, returned to the policy of encouraging private companies to construct railways by offering some kind of financial assistance, but on terms less onerous. Under these new conditions (which varied slightly in each particular case) several new companies were immediately promoted.”\textsuperscript{608}

\textsuperscript{604} Travaskis H. K., \textit{The Punjab of To-Day Volume-I}, p. 225
\textsuperscript{605} Paul Paustin W., \textit{op. cit.} p. 25
\textsuperscript{606} Paul Paustin W., \textit{op. cit.} p. 25
\textsuperscript{607} Ibid
\textsuperscript{608} Vera Anstey, \textit{op. cit.} p. 132
She further wrote that extending and revolutionizing trade, transferring famine problems, establishment of plantation and large scale factory industry on an economic basis emerged as cause of development of railways. She perceives that imperial government was not following static policy in this regard. She stated that railways have been tended to diminish village isolation. It provided full care to contemporary requirements and all-round development of the province. In case of transportation, it attempted to provide full facilities and opportunities to the people who wanted to exploit the resources of the economy by engaging themselves in trade, plantation or industries. Her views depicted justification of imperial rule and an attempt to convince the readers about concern of government with the development of province. David Ross also remarked that lines of railways were of commercial and political importance to connect the districts of Punjab. His perception moved around the fact that colonial government was not selfish rather very much serious towards the development of the economy of the province.

Further the next point is about the impact of the railways on the economy of the province. Most of the Imperial writers agreed that it resulted in rapid rise in the trade of the province. Darlington W. M. L. Darling, James Wilson, David Ross, and H. Calvert mentioned in their writings that trade began to flourish as a result of railway in Punjab after its annexation. Through their studies they attempted to create an environment of appreciation of the British rulers who provided conditions for the development of economy of the province. James Wilson wrote in his book *Recent Economic Developments in the Punjab*, “The improvement in the railway resulted in great and rapid increase of trade. This rapid improvement in the means of transport enormously quickened the trade, so that the effect of any important change in prices is at once felt all over the province and led to corresponding movement of the goods. It altered the conditions of the

\[609\] *Ibid*, p. 144

\[610\] Ross David, *op. cit*, p. 10
trade in the most remote villages, giving better prices for the surplus produce which they had to sell at cheaper prices than before.”

He appreciated the advent of railways which opened new avenues for the ruled population irrespective of the area they belonged; even the people of remotest areas were getting benefits of such change. His views moved around the glorification of the British rule which eased out the living condition of the people by enhancing sources of income.

H. Calvert stated that development of railways in Punjab became a cause of rising trend in case of export of wheat. Prior to annexation there was no export of agriculture produce worth mentioning. He further wrote, “Land-locked province like Punjab could not afford to import large varieties of food from other countries on an extensive scale, because the people were too poor to pay the heavy freight by the rail. So they must depend chiefly on what the soil produces.” Being an administrator, he was very much conscious about the fact that the dearness of the railway freight became hurdle in the way of import. He blamed the poverty of the people in order to protect the rulers from criticism. He opined that conditions compelled the people to depend chiefly on what soil produced. He commented, “People of Punjab can no more become a great fish eater than the Japanese can become great wheat eater; it is no use Tibetans or neither Scotchman pining for neither rice nor the Bengalis to sigh for barley and oats.”

Calvert appreciated the conditions of England in which people were not confined to local products but vary their diet importing from other countries and the diet of Englishmen probably was as varied as any in the world. His study was an attempt enforces to change in railway facilities of the province to enhance import of other items by motivating people to consume varied items. The consequences in both

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611 Wilson James, *op. cit.*, p. 13
612 Calvert H., *op. cit.*, p. 157
613 *Ibid*
614 *Ibid*, p. 96
615 Calvert H. *op. cit.*, p. 157
ways were beneficial to Britain i.e. increase in export of wheat and import of other items. On the other hand, Darlington W. gave contradictory statement as given by H. Calvert. He said that railway freight was cheap so as to be within the reach of everyone. It resulted in increase of trade. Darlington expressed, “Railway travel in India until very recent has been as cheap as anywhere in the world, being $\frac{1}{2}$ d. per mile for first class, $\frac{3}{4}$ d. for second class and $\frac{3}{8}$ d. for intermediate and $\frac{1}{4}$ d. per mile for third class fare. Freight is also very cheap, being less than $\frac{1}{2}$ d per ton per mile. Special rates are given for inward merchandise, but the outward being much bulkier such as grains and cotton, oil-seed and hides, is granted very little concessions.”

He agreed with this system of government because this was the universal custom of railways in all countries. So he ignored the complaints made against this policy. The difference in approaches of Calvert and Darlington was due to period of study.

Anstey Vera along with H. Calvert appreciated railway facilities which exercised control on price fluctuations which resulted in enhancement of sources of income of cultivators residing in the Punjab. Vera wrote, “As a result of railways Punjab economy was not limited to national economy rather it was attached to world markets. It emerged as a chief cause of general economic transitions at present in progress.” Her study showed her favourable attitude towards the Imperial rulers as she observed economy of Punjab from the angle of British administrator hence failed to realize the problems of ruled people. She attempted to provide protection to Imperial policies which were oriented to the benefits of the British rulers. Her outlook failed to give details of the actual beneficiaries of this economic transition of the province. Anstey Vera discussed the social effects of railways as well as highlighted both pros and cons of this means of transportation. She wrote, “Railways increased contacts between individuals, classes, areas and ideas. It increased mobility of

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616 Darlington W., op. cit., p. 22
617 Vera Anstey, op. cit., p. 144
population which negatively resulted in enhancement of diseases and loss of security by handicraftsmen." It is clear that transformation of population took place as a result of advent of railways. People came close to each other and could share their views. She attempted to convince the readers that during pre-British period people were compelled to stay in limited areas. It was the British period which developed broader outlook of the people. Her analysis was an effort of justifying policies of rulers.

Darling remarked that advent of railways was beneficial to both internal and external trade of the province. Trade began to flourish at high speed. He attributed favourable changes in economic conditions of the province as an outcome of the efforts of rulers. While discussing the effects of British rule Darling wrote, "Moreover the markets of the world were open to their produce. Earlier with difficulty Gujranwala wheat was sold in Lahore, 42 miles away and in 1858 a bumper harvest rooted in the godowns in Amritsar. 3 years later, with the opening of first railway in Punjab the change from medieval to modern conditions began. By 1870 goods could be booked to Bombay, Calcutta, and Karachi. Trade increased by keys and bounds." British officials correlated the period of annexation with the transformation in trade as outcome of development of railways which widened the scope for ruled population for enhancing their wealth. This perception of Darling depicted his dedication towards praising rulers for bringing changes in economic set-up of the Punjab. Every time he attempted to praise ruler’s efforts.

The next issue is about the impact of railways on road transportation. Imperial writers agreed on the point that advent of railway adversely affected the road transportation. Roads were neglected both in hilly areas and plains. Anstey Vera wrote, “Whole improved roads and motor car traffic have so far acted primarily as

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618 Ibid, p. 145
619 Darling M. L., The Punjab Peasant in Prosperity and Debt, p. 146
essential adjuncts to the railway stations." She concluded that means of road transportation worked as helpers to develop railways. These sources became competitive instead of becoming complementary. She praised that the government was equally concerned with both means of transportation. Increase in competition between road and railway, compelled the government to take serious steps so as to develop coordination among these means of transportation. The government could not ignore the fact that success of railways depended on the roads. It depicted that feedback after implementation of policy works as a positive tool for amending the policies. H. K. Travaskis also highlighted the policy of neglecting roads after development of railways. The writer analysed, “The perverted political economy of the period regarded through roads as even harmful in as much as they competed with a wealth-producing railways, only such advantages as had a money value being than recognized as wealth.” Travaskis observed that railways being the means of communication with neighbouring districts as well as outside world, the road construction was one of the functions of the local authorities. So it is clear that return through railways were more in comparison to roads. It compelled the rulers to consider railway on preference basis by keeping roads on one side.

On the other side, Darlington W. gave contradictory statements. He analyzed that even after the advent of railways people of Kabirpura preferred the road transportation. His study highlighted the fact that government spent huge funds on railways but negligence, dishonesty of railway staff and delays emerged as causes which were negatively affecting the popularity of railways. Darlington tried to convince the readers that government was serious in implementation of its plans but employees were misusing their powers as a result of that.

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620 Vera Anstey, op. cit, p. 130
621 Vera Anstey, op. cit, p. 130
622 Travaskis H. K., the Punjab of To-Day Volume I, p. 225
dependence of people on road transportation enhanced the cost of railways.\textsuperscript{\textit{623}}

On the issue of industrial development as a result of railways, A. C. Badenoch wrote, “It seems that a greater intimacy of relation between railway and industrial department can reduce many difficulties.”\textsuperscript{\textit{624}} He hoped that railways could work as a basis for industrial development in Punjab. It could provide conditions for advancement in this field. Badenoch discussed the complaint against railways in Punjab on unfair rate of railways, withheld concessions and inequality of treatment from different railways. Writer did not care about these allegations against railways as he said, “It has always been a habit and a tradition in all countries to attack the existing railway authorities on the score of inequality and injustice of railway rates.”\textsuperscript{\textit{625}} He made suggestion for encouraging the intimacy of relations between the railway and industrial department which could smooth many difficulties. His study is a way to realize the government for development of cordial relations between these two so as to exercise control over many difficulties lying in the way of industries.

The next issue under study is water transportation. Sufficient literature is available on position of road and railway transportation in the writings of British writers but they did not cover efficiently the water transportation in their writings. Only three administrators namely David Ross, M. L. Darling, and Paustin Paul discussed briefly about it. Darling stated in his two books; \textit{Rusticus Loquitur} and \textit{Wisdom and Waste in the Punjab Village}, about the use of boats in the rivers. Darling wrote that while crossing the Chenab, the first sight of water was a side stream crossed by a bridge of three boats. He considered lorry as a new age flaunting itself upon old i.e. boats.\textsuperscript{\textit{626}} He further mentioned, “We crossed the Indus near Dera Ghazi Khan here

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\textsuperscript{\textit{623}} Darlington W., \textit{op. cit}, p. 126
\textsuperscript{\textit{624}} Badenoch A. C., \textit{op. cit}, p. 63
\textsuperscript{\textit{625}} Badenoch A. C., \textit{op cit}, p. 59
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only 500 yards wide, by a bridge of 41 boats.\textsuperscript{627} He remarked that means of water transport were in use but these were traditional means of transport. His writing cleared that there was absence of modern means of water transport. The government ignored water transportation system but provided attention to railways which was more beneficial to their rule.

David Ross attempted to appreciate efforts of rulers for providing due care for the development and innovations in the field of water transport. Ross wrote, “The trade of the Indus by means of native craft employed in 1861, about 3000 boats in the up river traffic, but only 1300 in the down river traffic. The steamers must have interfered with this trade, for in 1855-56; the number of boats in the up river traffic appears to have been about 2000 and in the down stream traffic between 5000 and 6000.”\textsuperscript{628} British attempted for innovations in the form of steamers. He commented that cause behind the innovation in the field of water transport was the development of trade which could assist in progress of economy of Punjab. Ross analysed that railway adversely affected steamers. On the other hand he wrote, “Dungah a native boat is available in plenty. The competition for a passenger is great and the fare is only eight annas per person. It is convenient to arrange separate boats for servants.”\textsuperscript{629} He remarked that native boats were used for cargo purpose. There was also transformation in the exchange relationship which was based on monetary system. Fare was very low so as to be within the reach of everyone.\textsuperscript{630} He appreciated this mean of transportation.

Paustin Paul also appreciated efforts of the rulers for developing Karachi as a sea port. He observed that through it wheat could be exported to both England and other countries. His writing depicted that government attempted to develop only those cities which could be helpful in enhancement of both internal and external trade of the

\textsuperscript{627} Darling M. L., \textit{Rusticus Loquitur}, p. 290
\textsuperscript{628} Ross David, \textit{op. cit}, p. 40
\textsuperscript{629} \textit{Ibid}, p. 166
\textsuperscript{630} \textit{Ibid}
province that in turn could provide ultimate benefits to the Britain. He discussed about Karachi seaport from where most of the wheat must be exported from the Punjab as it was nearest to Europe.\footnote{Paul Paustin W., 	extit{op. cit.}, p. 117} He also praised the British rule for innovations in the means of transportation with the introduction of flat bottom boats. He wrote, “it was felt that flat bottomed boats constructed so as to navigate in two feet of water, could successfully ply up and down the canal and thence into the river Ravi and eventually transport the excess produce of the province to the sea for export.”\footnote{Paul Paustin W., 	extit{op. cit.}, p. 29} He further hoped for navigation schemes which were to be developed as a by product of the irrigation projects. Writer observed that rulers wanted to develop export of excess produce through water transportation. His approach was directed to protect the government from criticism on the basis of above context.

The next issue covered by the British writers is in the context of beneficiaries of the development of communication network M. L. Darling, S. S. Thourburn, Darlington W. and H. Calvert discussed in their writings about the above mentioned issue. The study of S. S. Thourburn depicted that ultimate beneficiary of the system was government itself. He in his book \textit{Punjab in Peace and War} highlighted that the government achieved success in suppressing the revolt of 1857 due to the development of communication. He along with Darlington also shared views that merchant class or traders were also getting benefit from it. His study seemed to be an attempt to convince the readers that communication network was not only for ruler’s benefits rather common people were also enjoying benefits out of it.

Thorburn remarked, “The extension of telegraph system to the Punjab is especially noteworthy, as through its agency the authorities were forwarders of the seizure of Delhi by the Meerut Mutineers and enabled to take timely measures to disarm sepoy regiments before their plans were ripe for execution.”\footnote{Thourburn S. S., \textit{The Punjab in Peace and War}, pp. 186-187} He further stated, “In India, under our system, the chief beneficiaries from the improved
communication has previously been—besides the government—the moneylenders and grain-dealers, who as creditors and mortgagors were already adsorbing the margin of profit in excess of the cost of production.\textsuperscript{634} Travaskis’s study concentrated on the cultivating class, who also enjoyed better condition under the British rule. He observed, “The development of communication gave the cultivators access to wider markets thereby bringing new land into cultivation.”\textsuperscript{635}

F. L. Brayne followed suggestive approach to develop villages through better means of communication. So in turn it would result in providing sound basis to the Imperial rule. Punjab was predominantly an agricultural province so British bureaucrats opined that development process should begin from the villages. In this way people could become aware of new techniques of agriculture, village upliftment and development of education. Communication methods could help in achieving aims of government and inculcation of good social habits among its subjects.

Apart from this, Brayne emerged as only writer, who laid stress on other means of communication like wireless broadcasting, cinema newspapers, books, dramas, coloured posters and models. He stated that publicity is necessary for making people aware as regarding best seeds, vaccination, etc. Efficiently organized publicity would make every thing easy. It was a technical subject so the personnel should be properly trained about its methods. Special attention should be given to the women. Yet they were obviously more important than the men for everything concerning the home.\textsuperscript{636} Writer desired to uplift standard of living of the villagers, so he stressed that more and more means should be deployed to get desirable results.

The examination of perspectives on communication during imperial period could better be understood by a comparative analysis of both pre and post independence writers.

\textsuperscript{634} Ibid, p. 298
\textsuperscript{635} Travaskis H. K., \textit{The Punjab of To-Day Volume- I}, p. 311
\textsuperscript{636} Brayne F. L., \textit{op. cit}, pp. 204-207, 209, 211, 216, 218, 220
Coming to recent researchers the first issue highlighted by them in their writings, is the objectives and aims of development of communication network in the province. S. S. Sohal and Navtej Singh wrote about this exploration in their books, ‘The Making of the Middle Classes in the Punjab’ and ‘Starvation and Colonialism’ respectively. Sohal wrote, “The priority of the Raj required the means of communication and its various institutions needed buildings to house themselves in. Therefore, construction of roads, railways and numerous other structures started with the inauguration of the British rule.”

He viewed that introduction of the public works department was a step of the rulers for providing more communication immediately after the annexation of the Punjab. Navtej Singh also commented about necessity of development of communication network. He stated, “Modern means of transportation and communication were lacking in the pre-British Punjab because roads had been neglected after the death of Ranjit Singh and railways had not arrived yet. Political, military and commercial considerations forced the British to develop a network of roads, railways, navigation and telegraphic facilities on urgent basis.”

His study critically pointed out that requirement of British rule resulted in innovations in the field of communication network. Himadari Banerjee also agreed with the views of above mentioned writers. His study depicted that improvement in general communication system thus stimulated the process of commercialization of agriculture in the Punjab. The British wanted to solve the very purpose of colonialism, it in turn resulted in the implementation of those policies and plans which could be helpful in this concern. He wrote, “Introduction of telegraphic communications between England and India made possible a more accurate and quicker study of the demand and supply position and of other phenomenon.”

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638 Singh Navtej, *Starvation and Colonialism*, p. 21
639 Banerjee Himadari, *op. cit.*, p. 221
communication brought from west and contributed much to the rapid increase of the external trade.

G. S. Chabbra stated, “A great change had taken place in the means of transport and communication by that time and still more by the year 1901. An excellent cheaper postal service had been evolved; a telegraphic service had been introduced although the efficiency was hindered by high costs.”\textsuperscript{640} He criticized telegraphic service that it was out of reach of common people. It depicted that introduction of means of communication were for the British and not for the masses.

On the issue of purpose of development of roads, Chabbra, Bhattacharya, Sohal and Navtej Singh expressed their views. These writers criticized British rulers for giving importance to their own security instead of social and economic development of the province. G. S. Chabbra wrote, “All the roads in Punjab except those like the bridged and metal roads from Kushalgarh via Kohat to Bannu and from the Bannu to the Indus at Dera Ismail Khan, which was sanctioned in 1884-85 by the supreme government to improve the frontier communication with reference to the excepted policy of frontier defense were maintained from provincial or district funds.”\textsuperscript{641} Second writer namely Himadari stated, “Prior to the annexation, their does not appear a mile of metal road in existence and the country had only rough earthen tracks, connecting some important trading centers like; Amritsar, Lahore and Multan. The introduction of macadamized roads in the Punjab, facilitating quicker movements, was first introduced shortly after the annexation. The early metal roads were devised mainly to serve military purposes. Subsequently, however, with their increasing mileage, they came to serve regular economic ends of the province.”\textsuperscript{642} Navtej Singh commented, “Soon after annexation macadamized roads were introduced for the first time in the Punjab. The early metal roads were laid down, mainly to serve military purposes. Subsequently, however, the increasing mileage

\textsuperscript{640} Chabbra G. S., \textit{op. cit}, p. 244
\textsuperscript{641} \textit{Ibid}, p. 245
\textsuperscript{642} Banerjee Himadari, \textit{op. cit.}, p. 222
converted these roads into the great channels for the import and export trade of the province.”\textsuperscript{643} Hence above mentioned perspectives of contemporary writers clearly stress that development of roads in Punjab were for the security of the British rule rather than development of the economy of the province, in beginning years of British rule. Later it helped in the progress of British economic activity of the Punjab.

Another component of communication highlighted by G. S. Chabbra, Neeladri Bhattacharya and Navtej Singh is on the dominance of traditional means of transport. Chabbra mentioned, “The bullock-carts remained the chief means of transportation of goods by roads. Camel was the cheap means of transport in the salt range, Sindh Sagar Doab. In the mountainous areas, goods were carried on mules or by bearers. Apart from that \textit{ekka, tonga, tum-tum} was used as means of transport.”\textsuperscript{644} Bhattacharya also discussed that the produce was brought on carts, donkeys, camel to \textit{artia} shops.\textsuperscript{645} Navtej Singh also indicated that modern means were used by British, while local people still preferred local means of transport. He wrote, “The produce to the mandi was generally brought with the help of bullock carts, donkeys and camels. While in Montgomery and Lyallpur districts, the \textit{abadkars} mostly employed bullock-carts, the \textit{junglees} used donkeys and camel.”\textsuperscript{646} So it is clear from the above analysis that use of means of transport varied from place to place, although there was dominance of traditional means of road transport.

The next issue is regarding the position of roads during the British period. Neeladri Bhattacharya and G. S. Chabbra highlighted about this in their studies. They discussed the condition of roads in the context of markets of the province. Neeladri wrote, “The whole process of marketing was troublesome. Roads to the mandis were bad

\textsuperscript{643} Singh Navtej, \textit{Starvation and colonialism}, p. 21
\textsuperscript{644} Chabbra G. S., \textit{op. cit}, p. 245
\textsuperscript{645} Bhattacharya Neeladri, \textit{op. cit}, p. 279
\textsuperscript{646} Singh Navtej, \textit{Some Aspects of Food Grain Trade in Canal Colonies of The Punjab 1885-1940}, p. 250
and distance long."647 On the other hand, Chabbra criticized the rulers for their failure to provide enough funds required for the maintenance of roads. He stated, “The number of miles of metal roads in 1873-74 was 1036 and of un-metal roads was 19762 miles. By 1878 the metal roads had increased to 1255 miles and the un-metal to 20030 miles. Yet according to the Punjab government, the provincial work generally suffered from the want of funds. So many projects had to be put in abeyance owing to the poverty of the finance in the province.”648 In this sense shortage of funds emerged as a hurdle in the way of road transportation as a result of it roads were in half finished state.

Another observation related to communication network perception is about the railways. Post-independence writers namely G. S. Chabbra, Himadari Banerjee, Master Hari Singh, Sukhdev Singh Sohal and Navtej Singh analysed about this. They all agreed on the fact that expansion of railways resulted in development of trade of the province. Chabbra wrote, “The commercial value of the railways in the Punjab lay mainly in the export of cotton, grains (especially wheat), and oil-seeds to Karachi. With canals the railways were playing a great part in economic life of the country, the former was inducting the production of wheat on a vast scale and the later placing it on the world market.”649 It depicts that development both in the field of irrigation in the form of canals and railways assisted the rulers to achieve the goals of imperialism. Himadari Banerjee remarked, “The growth of railway communication helped in the development of Karachi as the most important part of the province. In 1860s the total value of the export trade carried to Karachi was mainly 28 times higher than that of 1857-58. Railways were extended through the Punjab, which strengthened the basis of this flourishing export trade.”650 He expressed that development of trade center, Karachi

647 Bhattacharya Neeladri, op. cit. p. 318
648 Chabbra G. S., op. cit. P. 246
649 Ibid. p. 249
650 Banerjee Himadari, op. cit., p. 225
helped the British to fulfill British interest which was basis of the
economic policy of the rulers.

Master Hari Singh also supported views of Himadari. His study
also moved around establishment of trade centers as a result of
construction of canals and railways. He wrote, “British government
spent money for the construction of canals and to develop railway
communication. By 1929-30 six thousand miles of railway lines had
been laid in the province linking the capital city of Lahore with the
port cities of Calcutta, Bombay and Karachi districts and tehsil
headquarters, military cantonments and market town throughout the
province.”651 Sukhdev Singh Sohal shared similar views as held by
Master Hari Singh and Himadari. He mentioned, “The British rule
created and consolidated infrastructure which precipitated the
process of commercialization, improved communication linked
regional markets with global market. The railways helped the growth
of trading towns or mandis and speeded up the transport of surplus
produce.”652

Lastly, Navtej Singh had mixed views about development of
railways in changed conditions. On one hand, he observed it as a tool
of transformation in rural economy of Punjab but on the other hand,
he criticized rulers for the negative role of railways during famine
conditions. He wrote, “The opening of railways brought about a
significant transformation in the rural economy of the Punjab. It
stimulated the commercialization of agriculture and encouraged the
cultivation of a number of valuable crops such as wheat, sugarcane
and cotton.”653 He further stated, “The railways which facilitated the
expansion of grain trade also helped in supplying the food grains to
the deficient areas and almost equalized their prices in different parts
of the country. Ironically, during the periods of famine, these very
means of communication played a negative role on account of the

651 Master Hari Singh, op. cit, p. 109
652 Sohal S. S., Consequences of Commercialization of Agriculture in the Colonial
Punjab (1849 1901), Punjab History Conference Proceedings, March 1987, p. 218
653 Singh Navtej, op. cit, p. 23
laissé-fair policy of the government and thus extended the calamity."\textsuperscript{654} Contrary to this Chabbra remarked that railways had lessened the possibility of the people being overtaken by droughts or the famines. He also appreciated its role in enhancing social contacts.\textsuperscript{655}

The next observation in communication network of British Punjab is about the water transportation. Himadari Banerjee and Navtej Singh mentioned about this in their studies. Both these writers shared similar views. Advent of roads and railways on an extensive scale resulted in decline of river traffic of the province. Banerjee observed, “Boat traffic did not last long. Particularly after 1880, when government decided to build cheaper means like railways and roads, this made the river born trade to decline.”\textsuperscript{656} Navtej Singh also stated, “The country boats plied on all the major rivers of the Punjab and afforded to traders an easy means of communication from one part of the province to another. But this country boat traffic did not last long and steadily declined, particularly after 1880, when the government decided to build roads and railways on an extensive scale.”\textsuperscript{657} Himadri Banerjee also praised the country boats which were helpful in trade while criticized the steamers, introduced by rulers which were useless for the purpose of the Punjab commerce due to its high rates.\textsuperscript{658}

\textsuperscript{654} Singh Navtej, op. cit., p. 23
\textsuperscript{655} Chabbra G. S., op. cit, p. 249
\textsuperscript{656} Banerjee Himadari, op. cit., p. 223
\textsuperscript{657} Singh Navtej, Starvation and Colonialism, p. 21
\textsuperscript{658} Banerjee Himadari, op. cit., p. 222