

Role of road transport

Dr. Zahida Akhter
assistant professor

The primary condition of economic development in any country is that the infrastructure should develop at a faster rate. Road transport has a crucial role to play in the economic and social development of a region. In fact, it is a basic infrastructure of economic development. The nation's road transport system is both a major component of the national economy and an important factor in shaping our life style, community development and industrial location patterns. In this paper an attempt has been made to assess role of road transport and examine relationship between road transport and other sectors of the economy.

Introduction

It has been seen throughout the history of development of any nation that a proper, extensive and efficient road transport has played a major role. In various reports and studies brought out by national and international committees of professionals, the importance of having a good, efficient and popular road transport has been duly highlighted as a major contributory factor to the economic development of a region or a country. Even in the eighteenth century Adam Smith had appreciated the important role of transport. In fact, his theory of division of labour mainly rests on the expansion of markets possible by expansion of transport facilities. A state or a nation cannot proceed on the path of economic progress, unless it has a good system of transport which links up its different parts with one another and further different parts of the nation and the world with it.

Objectives of the study.

1. To bring out importance of road transport as an important component of infrastructure.
2. To examine relationship between road transport and other sectors of the economy.

Methodology

The data for the present paper has been collected from the secondary sources. The relevant data have been collected from the published reports of (a) Directorate of Data Management Central Excise and Custom, New Delhi, (b) Offices of State Road Transport Commissioners / UT Administration, (c) Road Transport Year Books, Government of India, Ministry of Road Transport and Highways, Transport Research Wing, New Delhi. (d) State Finances - A Study of Budgets by Reserve Bank of India, (e) Society of Indian Automobile Manufacturers, New Delhi (f) World Road Statistics, 2018 published by International Road Federation Geneva.

To assess the role of road transport data regarding all crucial variables like total number of registered motor vehicles, different types of registered motor vehicles, freight and passenger movement by road transport, percentage share of different modes of transport services in gross value addition, production and sales of motor vehicles, employment in the transport sector through manufacture of motor vehicles and other transport equipment, the revenue realized by the states and centre in India from road transport and total vehicles in use category wise with respective penetration levels in respect of top fifteen countries.

Role of road transport

Transport is an important infrastructure in any country. On the one hand, an efficient transport system is essential for the existence of modern economy and on the other it assumes a significant role in developing countries because a developed transport network facilitates the development in a vast geographical land mass like India. The road transport in India has expanded manifold after independence in terms of spread and capacity to meet mobility demands for both passengers and freight. The number of registered vehicles on road and the volume of passengers and freight traffic handled by road transport has significantly increased over the years (table 1&2). In India among the major modes of transport the road transport remains the dominant mode both in terms of its contribution to Gross Value Added and in terms of its share in passenger and freight transported. As per the National Transport Development Committee, road transport carries about 90 percent of the total passenger traffic and 67 percent freight traffic. It contributes about 3.10 percent of gross value addition as against the total transport sector contribution of 4.63 percent to GVA at national level for the year 2018-19 where the share of railways was at 0.73 percent, air transport at 0.1 percent and water transport at 0.07 percent (table 3). Roads are primary mode of transportation, used daily all around the world to transport people and cargo. The data presented in the table 4 analyses the positioning of India viz-a-viz other countries in terms of total vehicles in q, category wise composition and penetration levels per 1000 for different types of vehicles. India ranks 8th in terms of vehicles in use, 10th in terms of total number of passenger cars, 3rd in terms of total number of buses and motor coaches and 1st in terms of total number of motor cycles and mopeds.

The adequacy of infrastructure helps determine one country's success and another's failure in diversifying production expanding trade, coping with population growth, reducing or improving environmental conditions. Good infrastructure raises productivity and lowers production costs, but it has to expand fast enough to accommodate growth. The precise linkages between infrastructure and development are still open to debate. However infrastructure capacity grows step by step with economic output, a one percent increase in stock of infrastructure is associated with one percent increase in Gross Domestic Product across all countries. Transport is a critical infrastructural input for the overall development of economy. Phenomenal growth in economic activities through increased agricultural production, diversification of the economy, exploitation of natural resources and increase in social travel create higher demand place increasing demand on the transport infrastructure. The transport network has a special role in providing accessibility to hilly, backward and remote areas of the country. Poor infrastructure has been found to account for 40 percent of the cost of transport in the average country and 60 percent in landlocked countries. Road freight transport has a vital role to play in our economy, both in the mobility of goods and in providing employment – direct and indirect.

Road Transport provides a vital umbilical cord for economic development and social integration of the country. It links up towns and villages and joins production and distribution centres. It brings together different socio-economic groups of people. Social and economic development of the hilly and remote areas, in particular, is immensely benefited by a well laid out road and road transport network.

The roads play a very important part in the economic development of the country. It pushes up the rate of economic growth in a number of ways. Absence of adequate road hampers the process of economic development. Road network helps optimize the use of resources within the technical framework. It is also needed for transfer of technology, which in turn further pushes up the rate of economic growth. Road transport industry plays an important role in the economic development of India. Improved transport network facilitates urbanization for it provides mobility to labour to move from rural to urban centers. It enables the workers to take up jobs in trade and industry far away from the place of their residence. Urban mobility helps decentralizing economic activities in metropolitan cities. Road transport encourages urbanization. It permits the growth of urban centers by providing a means of movement to the people. It also encourages dispersed and balanced economic development.

Transport development helps to open up remote regions and resources for production. Regions may have abundant agricultural, forest and mineral resources but they cannot be developed if they continue to be remote and inaccessible. By linking the backward regions with the relatively more advanced, transport development helps in the better and fuller utilization of resources.

Transportation also encourages regional development and competition. Successful regional development ensures utilization of all the nation's resources. Competition fosters technological gains and efficient resource allocations.

Transport is an integral part of the process of production. A good transport system makes large scale production possible. Transport increases the productive capacity and efficiency of the economic system. The development of transport and communication network increases the accessibility to distant natural resources and helps in their extraction and utilization for productive purposes without which these resources will remain dormant and unutilized. Transport facilitates production by moving raw materials, tools, machines etc., to places of production. By bringing in large quantities of these materials at fixed points, it enables production to take place on a large scale. Similarly whatever the distribution of the population, the greater the efficiency of transport the greater will be the volume of demand brought within the reach of the producer, and this enables not only enlargement of production but also the production of a variety of goods and in wide range. Improved means of transportation has made the world a single unit and goods now produced in remote corners of a country reach the farthest part of the same and even the distant foreign markets in no time.

Transportation further influences production by expanding the scope of the division of labour through the expansion of the extent of the market. It influences both the horizontal and the vertical division of labour and considerably affects the territorial division of labour. The larger the market, the larger is the feasibility of the specialization to which division of labour leads, and transport by enlarging the market enhances the scope of specialization. Small areas or towns in different parts of the world specialize in the production of a few items, while some others specialize in the agricultural products. It is through improved means of transport that countries thrive by exchange of commodities and yet they gain on exchange, because of their traits of specialization. This by itself enables the most efficient and the most productive use of a country's available resources.

Transport or transportation carries men and materials from one place to the other and thereby creates place and time utilities. It has very important influence on the productive and service sectors of the economy, and has ultimate effects upon the social organization, habits etc. of the mankind in general. That is “the function of transport is to carry commodities from points where their marginal utility, the significance of a little more or a little less, is relatively low to where it is relatively high”. This movement of men and goods involves consideration of time and place (in the movement or journey in many cases time may be the essence, and with improved techniques of transportation distance is now measured in time) and by performing the movement transportation at once creates time and place utilities.

The transport network connects the different producing and consuming centres. With the liberalized environment in the global era, the demand for freight and passenger traffic is on high rise. Growth of economy, starting from primary sector to the international trade, mostly depends upon the developed transport sector of a country.

The places which are situated on the roadside have greater value than those situated far away from the roadside. The rent of those buildings will be higher. The efficient transport system reduces distances and inter-regional variations in rents and returns.

The consumption and standard of living of the people are also related to transport. Transport is also a private and public consumption good. In its private role it enables individuals to travel for private reasons. As a public good, it serves to increase national defense capabilities, social cohesion and political stability. Transportation facilitates consumption of wealth, which in turn generates income in the country. The availability of various commodities for our daily need depends on the transport. Transport brings to our door the commodities we require, both perishables and durables and enables us to move to the door of those whose services are to be availed of only at their places. It helps improving public health by providing the society timely medical aid. It also helps improving environmental sanitation that raises the productivity and efficiency of the people. Transport exercises its profound influence on wants, mode of consumption and the quantity of consumable goods also. Owing to the reduced cost of transport, cost of production also scales down thus reducing the selling price which enables the consumers to enjoy those commodities in diverse varieties which were not produced in their countries.

Road transport helps maintaining price stability. It ensures better marketability and distribution of goods. The most important effect of improved transportation is the reduction in

the cost of goods. The most obvious way in which this is brought about is through the reduction in cost of getting goods from the point of production to the consumer. A second way in which cheap transportation reduces the prices of goods is by reducing the cost of assembling the raw materials needed in the manufacturing process. Manufactured articles often contain raw materials which must be assembled from many sources of supply. These transportation expenses increase the cost of producing the manufactured goods. Thus anything which tends to reduce this cost will tend to reduce the price of the manufactured goods.

Thirdly an adequate and quick transport also reduces the need for maintaining large inventories. Efficient transport enables the manufacturers to keep their inventories at the minimum level and thus reduce their investment in inventories. In this way, cost of production is lowered because capital will not be locked up unnecessarily.

Transport service in an area opens new hopes and aspirations for the entrepreneurs. It opens new avenues of economic activities and ensures effective use of dormant resources. It is indispensable for overall growth of economic, industrial and social development of an area. Road transport facilitates growth of entrepreneurship. It is very ideal for short distance traffic up to 200 kms and also useful for small pay loads. The road transport also requires low capital investment. It is highly suitable to new entrepreneurs. Goods in small quantity can be transported daily through quick means of road transport whereas railway department waits till they book full wagon load of goods.

If agriculture is to respond to the growing demand, it would be necessary to accommodate increased traffic flows in both directions. Inputs moving from urban areas to the farm and output moving from the farm to the city. The task involves very large additions to rural road networks, extensive investment in trucks, the expansion of storage and processing facilities and new institutional arrangements for managing and financing the total system. In the agricultural sector the transport system enables the supply of seed, manure and fertilizers, agricultural implements and labour for growing crops and providing the conveyance for the produced crops as well. Improvement in the transport facilities not only increase agricultural production but makes production and agricultural operations market-oriented. Where transport has been added to the others ingredients of a successful programme for food and agriculture, the results have been rewarding conversely, there are many more examples of how lack of transport has frustrated the effort to produce more food. In many areas, agriculture is extremely limited by poor quality and

high cost of rural mobility. Access roads become impossible for two or three months of the year, costs are high, marketing possibilities are uncertain and incentives to produce are low. It has not been possible to change traditional patterns of production or to alter traditional methods of cultivation except where transport is adequate, thus transport serves as a means of moving ideas and information as well as good. Poor transport has added the effect of preventing farmers from specializing in the crops that offer the best return. The road transport is thus a pivot around which all the farmers and the entire agriculture cluster.

Road transport is of particular advantage to the farmers and agriculture sector. Availability of necessary inputs and quick transportation of perishable products to markets etc. depends on road transport. There is a considerable body of evidence that demonstrates the links between rural road investment, poverty and growth in India. In an empirical study of 85 randomly drawn districts, it was found that road investment contributed directly to the growth of agricultural output, increased use of fertilizer, and commercial bank expansion. Another recent study using state-level data over two decades on the effectiveness of various government expenditures (such as R&D, irrigation, roads, education, power and health), found that government spending on rural roads had the largest impact on rural poverty as well as a significant impact on productivity growth. The study estimated that for every Rs. one million invested in rural roads, 165 people would be lifted out of poverty. A household survey conducted in the state of Andhra Pradesh indicated that rural road improvements led to substantial reduction in freight charges, increase in household income, more employment opportunities and expansion of cultivated land.

An adequate and efficient transportation network is essential to a nation's economic growth, particularly in a rural dominated economy where the isolation of villages due to lack of road and transport facilities has been one of the important causes of poverty. Road transport brings rural economy within functional life of urban areas. Better road transport provides good and effective means of communication to rural areas. Road transport is more important to the rural areas as railways cannot be constructed to connect all the rural areas on grounds of cost. The development of road transport has special importance in Indian rural economy. Transportation is one of the major factors which influence the location of industry. The site selected for the location of an industry should have an easy access to rail, water, road, air and canal transport services. Such a site would be an ideal one.

Location of an industry is essentially a question of moving various raw materials and inputs from places of their sources and moving finished product to different consumer markets in the country or even to foreign markets. This means transport plays a vital role in determining the location of an industry. Various industries are interlinked as output of one industry becomes the input of some other industry. Similarly, different geographical areas in a country are also closely linked with one another, for example, as suppliers of raw materials and as consumers.

Road transport also helps in the development of small scale industries. The dominating role of transport in the development of small scale and cottage industries cannot be denied. Generally, the small scale industries are established in the rural areas, where the problem of transport is acute, the cheap and quick transportation facilities are not available. The roads are in miserable condition. Due to these transport problems, the cost of production is higher. This cost of production makes the goods costly in the market. Thus the finished goods of cottage industries are costly in comparison to the goods manufactured by the major enterprises. Due to the inadequacy of transport services, the cottage industries cannot afford in large production. Thus, the transport facilities are needed for the development of small scale industries.

Road transport offers a number of advantages such as flexibility, reliability, speed and door-to-door service. Other transport modes too function more effectively when linked to road. Road transport is more flexible than any other mode of transport. It is not tied to a particular track and can change its route subject to the availability of traffic. Road transport represents a technological advance in the transportation field. The road transport services can be often faster and more flexible than the rail operations. Road transport can take over the short distance traffic, small consignments, perishable and high value manufactures that railways transport is inherently ill-equipped to accommodate. Each mode of transport has its own characteristic features and sphere of working. Road transport is the dominant form of transport for people and goods in India. Flexibility of operation and organization is another factor in favour of road transport as compared to railways - the other most important means of transport over land. In road transport the operating units are small and each unit requires a small amount of capital investment. Roads are constructed by the state and hence the operators do not have any capital investment on roads. They merely pay taxes for using the roads. It can be easily organized and operated according to the demand. Road transport provides reliable service to the consumer. The seller of goods has a consignment

under his control until delivered to the buyer. Road transport has greater speed for short lead movement and serves the interior part of an area.

The degree of risk of loss due to thefts and breakage is limited in case of road transport. Road transport provides greater safety to the goods. There is less handling and less chance of pilfering. Intermediate loading and handling is minimized. This provides safety to the consignment.

The single most important benefit is the large employment that it generates. The production and sale (including exports) of different types of motor vehicles in India from 2009-10 to 2019-20 is presented in table number 5 and 6. It has been found that no other economic activity can probably match the quantum of employment which road construction, its maintenance and operation can create. Road transport is a labour intensive industry. Road transport industry also provides adequate potential in employment for operation of vehicles as well as in running government administrative machinery connected to the road transport industry. In transport sector more than 70 of employment has been generated by manufacture of motor vehicles, trailers and semi-trailers. The employment in motor vehicles and other equipment has grown from 10.58 lakhs in 2012-13 to 13.65 lakhs in 2017-18 at the Compound Annual Growth Rate of (CAGR) 4.34 percent which is more than employment growth of 3.17 percent in total industry. The share of automobile sector in industry is about 8.74 percent out of which 6.52 percent is contributed by manufacture of motor vehicles, trailers and semi-trailers and the remaining 2.23 percent by the other equipment transport sector (table 7).

Road transport induces and increases labour mobility in a backward area. Thus unemployed or underemployed labour will get full and remunerative employment. In this way, land will get rid of surplus labour and the factories in the industrial areas will be assured of an adequate supply of labour so that the wheels of industry can be kept going. An increase in mobility can, for instance, augment a citizen's sense of being a member of a larger group.

Transport facilities have encouraged and influenced travel movement and created an upsurge in the volume of traffic. This is mainly because of safe, economical, reliable and quick means of movement that tourism has become a preferred hobby of a civilized society. Modern means of transport fascinated the people to see the places of historical, religious, commercial, cultural and educational importance. Tourism, both domestic and international, has rapidly won considerable recognition as an activity generating a number of social and economic benefits like promotion of national integration and international understanding, creation of employment

opportunities, removal of regional imbalances, opening – up of new growth centres in the interior of the country, augmentation of foreign exchange earnings, thus redressing the balance of payment situation, etc. It is significant that many of these beneficial aspects of domestic and international tourism have special relevance to the socio-economic scene in India. Tourism also tends to give support to local handicrafts and cultural activities, both in urban and rural areas. Expenditure by tourist has a multiplier effect and also generates considerable tax revenue for government, both in the central and state sectors. It is also relevant that the various multifaceted socio-economic benefits of tourism are achieved with a relatively low level of investment. Tourism also generates a variety of unskilled employment opportunities by providing restaurants, hotels, motels, travel agents, tour operators and professional tourist guides generates high cash flow in relation to the investment promotes national consciousness in developing natural resources and focuses attention to the country's cultural heritage. Though the development of tourism depends largely on the facility of transport, communication, residential fooding, guide as a whole, but all of them transport especially road transport is of paramount importance. Road transport connects important places coming on the rail path. The smaller places which in many cases have tourist attraction usually remain away from rail-link. Road transport alone provides accessibility to such places. Road transport is comparatively quicker, more convenient, more economical and after all more flexible in case of short distance travel. Usually, most of the tourist places such as hill stations, national parks, sanctuaries, temples are found in hilly areas. Where rail-link is difficult to construct, expensive and time-taking. Road link is comparatively easier to construct in such places.

Speed and certainty of delivery time which are essential in the transport and marketing of particular commodities, e. g., fresh fruits, vegetables and other perishables and semi-processed materials etc. are other important considerations in favour of road transport.

Transport helps in maintaining internal law and order. Internal security against anti-social elements, sabotage and violent activities are brought under control by efficient and prompt transport and communication network. It strengthens political stability of the state.

In the context of the defence of the country roads have a significant contribution. For the movement of troops, tankers and armoured cars roads are needed. For instance, the border roads only enable our troops to guard our borders safely.

Diffusion of knowledge is also essential for modern society, which is very much supported by development of transport and communication system. Road transport helps promoting education. A large number of students come from villages to the city schools, colleges for education and technical training. There is the cultural benefit that arises out of contacts among the people. People with different moods, mores, and languages learn to live together. Their emotional make-up undergoes change for the better and becomes broad-based and humane. The getting together of people from different regions/ places results in toning up of the social make-up of the community. It weakens the rigours of such evils as caste, untouchability etc. The investment in roads is self-rewarding since it generates income to the exchequer through collection of duties and taxes from its users. The highways are also sources of revenue for the public exchequer. The good highways attract more traffic, it develops the trade and commerce and pays the road cess, vehicle taxation etc. The road transport industry contributes considerably to the exchequer which is one of the major sources of revenue to the state and central government. The road transport contributes to the central exchequer substantial amount of revenue annually through import and excise duties on motor vehicles and accessories, high speed diesel and motor spirit. (table 8,9).

Conclusion

Road transport facilitates and promotes growth by increasing productive capacity and efficiency of economic system. It influences production by expanding the scope of division of labour, by creating place and time utilities, by facilitating exchanges between production and consumption centres and by narrowing time and space gaps. Road transport is also important not only in the context of production but also in the context of consumption as the standard of living of the people is also influenced by the transport facilities available to them. Road transport is also important in the context of capital formation as it opens up new avenues of economic activities and ensures effective use of dormant resources. It also facilitates growth of entrepreneurship. Road transport is more flexible, more reliable and provides door to door service. In the context of agricultural development road transport assumes special significance as it enables the supply of agricultural inputs at the right time and also ensures speedy disposal of surplus production. In the context of industrial development also road transport offers unparalleled flexibility and custom tailored schedules. It also facilitates growth of small scale industries and ensures their dispersal in the rural as well as urban areas. Further road transport is capital light

and labour intensive and thereby suits the development of areas which are backward and facing problem of unemployment and underemployment in rural as well as urban areas. It also reduces unemployment by increasing labour mobility. Besides economic significance road transport is important for promoting national unity, maintaining internal law and order for promoting cultural exchanges and for boosting competitive activities in the country. Thus transport plays a significant role in the economic and social transformation of a society. Road transport has a special role to play in this context.

References

01. Agarwal, A .N. (1994), Indian Economy, Wishwa Prakashan 4835/24 Ansari Road Daryaganj, New Delhi -110002, 20th Edt.1994, pp.130-138
02. Akhter, Z.,Economic Appraisal of the Working of SRTC, Ph. D. Thesis Submitted to the University of Kashmir , 2009.
03. Ahmed , N. (1989) , Problems and Management of Small Scale and Cottage Industries , Deep and Deep publications New Delhi-110027 ,1989 , pp.46,202.
04. Ahmed , S . B. () , An Economic Study of Jammu and Kashmir State, City Book Centre , Srinagar . p. 34.
05. Arthur ,T . Hadley (1885), Railroad Transportation , New York :Putnam's 1885, pp. 25 .
06. Balasubramanian, K. (1987), "Tamil Nadu Road Transport Industry Hit by Lack of Funds" Commerce, May 16- 22, 1987, p.29- 30.
- 07.Bano , Tasleema(2006) , Analytical Study of Sales – Profit Relationship in Public Sector Undertakings in Jammu and Kashmir , Unpublished Ph. D. Thesis Submitted to the University of Kashmir , pp. 41- 43 .
08. Bhat , K . A . (1998) , Rehabilitation of Sick Small Scale Industries in Jammu and: Some Policy Decisions , The Business Review , Journal of the Faculty of Commerce and Management Studies , TheUniversity of Kashmir , Srinagar , 190006 , Vol . 4 , No . 1&2 , 1998 pp.174 .
09. Bhat, Z. A. (2003) , " Public verses Private Bus Operation – An Evaluation of Quality Service The case of Passenger Road Transport in Kashmir , Indian Journal of Transport Management , Volume 27, Number 2 , April - June 2003 .
10. Bihar's Finance Annual , 1944, pp. 34 .
11. Binswanger , H .& Khandker , S ., & Rosenzweigh , M . (1993), "How Infrastructure and Financial Institutions Affect Agricultural Output and Investment in India" , Journal of Development Economics , Vol .41 ,1993, pp. 337 - 366 .
12. Choudhury, S . K . (1967),Lectures on Transport, Kaushalya Devi- Lyall Book Depot - publication Division , Ludiana, 1967, p.5-7, 17-19, 22, 97.
13. Datt , R . & S , K . P.M .,(2001) Indian Economy, S. Chand and Company Ltd . Ram Nagar -110055, 2001 , pp. 128 .
14. Dewan, K . K . & Mustafa, M.(2004), Management of Modern CityTransportation system , Deep and Deep publications Pvt. Ltd .,Rajouri Garden , New Delhi - 110027, 2004 , p. 3, 12-14, 46-49.
15. Dewett , K .K . & Varma , J . D. (1982) , Indian Economics 1982-83 , ShyamLal Charitable Trust , New Delhi - 11005 , 33 Edt. , 1982 , p. 349 .

16. Directorate of Data Management Central Excise and Customs, New Delhi.
17. Economic and Political Review(1998) , Nov . 27, 1998, Vol. 33 , No. 45-51 ,pp. 3040-3042 .
18. Economic Review of Jammu and Kashmir 2001-02 , Directorate of Economics and Statistics, Planning and Development Department Government of Jammu and Kashmir , pp. 27-28,45 .
19. Fan , S . & Hazell, P.P. & Thorat , S. (1999), “ Linkages Between Government Spending , Growth and Poverty in Rural India” , International Food Policy Research Institute , 1999 .
20. Fromm, G. (1965), Transport Investment and Economic Development, Transport Research Program, The Brookings Institution , Washington D . C . , 1965, pp. 5, 67.
21. Gilbert, R.U. (1965), The Works Programme in East Pakistan , Development Digest , Vol. III No., National Planning Association , July 1965, pp.19-30 .
- 22 . Hood , W. C. , & Scott , A . (1957), Output and , Labour and Capital in the Canadian Economy : A Study for the Royal Commission on Canada’s Economic Prospects , Ottawa February 1957 .
- 23 . Hawkins E . K. (1962), Roads and Road Transport in an underdeveloped country, London Colonial Office , 1962 , pp. 26 .
24. India Infrastructure Report - 2002 , Governance Issues for Commercialization , 3i Network , Infrastructure Development Finance Company Indian Institute of Management Ahmedabad , Indian Institute of Technology , Kanpur Oxford University Press , YMCA – Library Building , Jai Singh Road , New Delhi - 110001 , 2002 , pp.192-193 .
25. India’s Transport Sector : The Challenges Ahead Vol . 2 : Background Papers May 10, 2002 , Energy and Infrastructure Sector Unit , South Asia Region , The World Bank, pp.28.
26. Jain , P.C. (1962), Problems in Indian Economics, Chaitanya publishing House 5-A, University Road Allahabad -2, 1962 , 7th Edt. , pp.402.
27. Kaur , K . (1983) , Structure of Industries in India , Deep and Deep publications D - 1/24, Rajouri Garden New Delhi -110027 , 1983 , pp. 97 .
28. Khan, R. R. (1980), Transport Management, Himalaya Publishing House, Ramdoot, Dr. Bhalerao Marg Girgaon Bombay 400004, 1980, pp.13
29. Khan,R. R.(1987)., Transport systems, School of Management Studies Dr. D.N. Road, Fine Mansion, 4th Floor Fort Bombay – 400001, 1987, pp.49-51, 97-98, 109-110.
30. Kulkarni, S. D. (), “Funding of Public Passenger Transport in Developing Countries – A Case Study of India”, www.its.usyd.edu.au/conferences/thredbo/ thredbo/ thredbo6/ Kulkarni, pp. 2, 22
31. Kumar, R. & Ali , M(1984)., The Indian Economic Association Agra , 1984 , pp.48-50 .
32. Mathur, B. L. (2001), Economic Policy and Performance, Discovery Publishing House New Delhi - 110002, 2001, pp. 413-414.
33. Mathur, S. K. (), “Franchise – A Live and Let Live Option for Public Transport Undertakings”, www.its.usyd.edu.au/conferences/thredbo/ thredbo/ thredbo6/mathur , pp. 1- 2.
34. Ministry of Road Transport and Highways, Transport Research Wing, Review of the Performance of State Road Transport Undertakings (SRTUs) Passenger Services for Quarter Ending June, pp.x, xi, xiv.
35. Mishra , R . S. (2005) , “Development of Indian Transport Sector in the Economic Reforms Period ” ,Sinha , A .K . (ED .) , India Towards Economic Super Power – A Journey of Economic Reforms, Deep and Deep publications Pvt. Ltd ., F-159 Rajouri Garden New Delhi -110027 , 2005 , pp.36,429-435, 446-453.

36. Mustafa, M., Comparative Profitability of Agricultural and Non – a gricultural Operations in Kashmir Agriculture- A Case Study of District Budgam, Ph.D.Thesis Submitted to the University of Kashmir , pp. 71,283-285 .
37. Owen ,W. (1966) , Transport and National Goals , Article, Transport andFood 1966, pp.37 .
38. Owen ,W. (1966) , Transport and National Goals , Article, Transport andFood 1966 , pp.86 .
39. Pakistan Academy for Rural Development (1963), Fourth Annual Report , June 1962 , May 1963 , Comilla East Pakistan 1963.
40. Pan American Union(1963), General Problems of Transport in Latin America Washington 1963, pp. 31 .
41. Patankar , P. G. (1987), “State Road Transport Corporations : Burden of Unremunerative Fares”, Commerce, April 13, Vol. 150, Nos. 3848 – 49, 51-3857 , 1985, 1987 pp. 656, 661.
42. Rekhi , T. S. (1993) , Socio – Economic Justice in Jammu and Kashmir , Ideal Publications Delhi 1993 , Ist Edt. , pp. 152-154 .
43. (a) Road Transport Year Book 2017-18 to 2018-19 (b)Rostow ,W. W. (1960) , The Stages of Economic Growth , Cambridge University Press , 1960 , pp.25- 26 , 55 .
44. Satyanarayana, J. (1985), “ The Working of Andhra Pradesh State Road Transport Corporation”, Naurang Rai Concept publishing Company H- 13, Bali Nagar New Delhi -110015 (India) 1985, pp. 1, 150.
45. Singh , J. (1998) ,The Economy of Jammu and Kashmir , Radha Krishan Anand and Co. Jammu Tawi , Ist. Edt. , 1998 , pp. 77,107.
46. Singh ,R. K. (1988) , Road Transport and Economic Development, Deep and Deep publications D – 1/24, Rajouri Garden New Delhi -110027 , 1988 , p.20-24, 35-37,116, 167-200
47. Srivastava , S. K. & Nigam , R. S . (1967) , Industrial Economics , Bishamber Sahai , Mrityunjy Banerjee , S . Chand & Co . Delhi 1967 , pp. 2-16 . State Finances - A Study_ Budgets of 2018-19 & 2019-20, by Reserve Bank of India
48. Sunnny, K. P. (1997), “Performance of State Road Transport Undertakings in India”, Dimensions of Economic Development – Spatial and Sectoral Perspectives”, C. Radhakrishnan Commemoration Volume , Edited by Nair, P. R. G., Nair, K. N. S., Jose, T., Velayudhan, K.V., Common wealth publishers 483 1/24 , Prahlad Street, Ansari Road Darya Gunj. 1 , New Delhi -110002 (India), 1997, pp. 147.
49. Tandon , B . B . & Tandon , K . K . (), Indian Economy, pp.644- 665 .
50. Techno – Economic Survey of Kerala (1962), National Council of Applied Economic Research , New Delhi , Dec. 1962 , pp. 47.
51. Transport Department, Policy Note 2006-07, www.tn.gov.in/policynotes/transport.
52. Varughese , K .V. (1993), Indian Economy : Problems and Prospects , Ashish Publishing House, 8/81 Punjabi Bagh, New Delhi - 110026, 1993.p p.580-581.
53. World Development Report 2005, A Better Investment Climate for Everyone, A Co Publication of the World Bank and Oxford UniversityPress 198, Madison Avenue ,New York, NY10016, 2005, Manager of Publications Delhi , 1953
54. World Road Statistics, 2018 published by International Road Federation Geneva.