"The road is one of the great fundamental institutions of mankind. Its history dates back to the dawn of recorded history and beyond. Its beginnings are almost instructive with man's first quest in search of food, water, plunder or sheer adventure. It develops with man's advance, it retrogrades with the break-down of a social order. A people without roads would be a people without intercourse with the outside world - without the attributes of civilization. Man - the road builder thus, cannot be separated from man - the builder of civilization."

... ... MILTON.
IMPORTANCE OF ROADS:

Roads have profound economic and social significance in the life of a nation. They are the only arteries along which the benefits of schemes of universal education and public health flow to its vast population. Moreover they are the barometers of its civilization. Civilised administration of India as indicated by roads and streets has been established as a result of archaeological and other discoveries at least 5,000 years old. Roads are mentioned in the epics of Buddhist literature and one of the rocks edicts of the Emperor Ashoka. Virtually speaking roads play so an important part in the modern world that it is inconceivable to imagine a world without roads even for a moment. Industries will close down due to non-availability of raw materials from the distant places, organised markets would collapse on account of non-transportation of goods from distant miles and the whole system of modern commerce and trade would fall crushing thereby our entire system of modern living. Life would disintegrate into the primitive and feudal stages of inefficiency and scarcity. In fact Jeremy Bentham was right when he remarked that, "Roads are the veins and arteries of a country through which channels every improvement circulates."

The importance of roads in an under developed country like India cannot be over estimated. India is on the threshold
of a new era of tremendous industrial development and economic planning. Plans have been made to harness rivers to modernise agriculture, to expand industries, to utilise natural resources and to raise standard of living of the people. But all these plans can hardly make any headway without an efficient system of transport and specially roads. Truely it is said, "Roads are the wires and cables which conduct the current of energy to industrialise the villages or rather the tools which are indispensible to any industrial activity, what fertilizers are to the fields what the blood circulatory system is to the human body and what a well to a garden, so are the roads for the development of a nation building activities in any country." Therefore roads and more roads is the crying need of the hour. As we have to build a new India, we must lay a most efficient network of good roads linking the country with all the towns and villages.

The significance of roads and road transport in a State like Uttar Pradesh is also overwhelming. Ours is an agricultural State of India. It does possess 8 universities besides many big colleges and technical institutes. Moreover our state is the biggest of all the states of India. It has over 10,000 miles of metalled roads and thousands of miles of non-metalled and Kaccha and feeder roads. It has a vast interior and there are still many such areas which are un-connected or are too far from any railway station. All these factors greatly subscribe to the overwhelming importance of Roads.

In short we may say that Roads have much to do with economic, social and political aspect of a country as would be evident from the following paragraphs:
The economic significance of roads cannot be over-emphasised because they help in industrial and agricultural development and bring out and help over all economic development of a country.

(i) ROADS AN AN AID TO AGRICULTURE

India's staple industry is agriculture and 70% of her population are dependent on it. The statement made on Newzealand applies with greater force to India, "amongst the services on which people rely for their daily requirement, road transport is very prominent."* But India is the only country in the world where the most primary occupation of the people is least equipped with its vital necessity—namely good roads.

The development of the roads affects agriculture directly by enlarging the areas under cultivation. Thus there is twofold correlation between road development and increased agricultural production. Firstly intensive cultivation to exploit the resources of land fully is made possible due to easy transport of manures, good seeds and better agricultural equipment. Secondly the possibilities of extensive cultivation are increased with good road system. Fallow and waste lands with immense potentialities for the growing of various crops can be brought under the plough and transformed into arable lands. The Mitchell-Kirkness Committee opined that "about half the area in India is outside the five mile range of railway lines."**

The Indian Road and Transport Development Association has told after due research that an increase of 25% in the agricultural land may be made possible by constructing sufficient number of roads. In this connection the opinion of Norwegian Government

*National Public Works, League of Nations Organisation for Communication and Transport

**Report of Mitchell Kirkness Committee
is worth citing, "in many parts of the country, new and better roads will render agricultural and forestry more profitable." * Many lands below the margin of production would come within the range of commercial production if better roads are provided. It is due to this fact that Norway undertook road works with the certain hope of a more intensive cultivation hitherto less exploited. Similarly Netherlands achieved wonderful results from roads and canal works. All this would be possible in India too.

Road development also prompts a change in the type of agricultural production by diversion of cultivation from food crops to commercial crops. Specialised production of certain crops in definite regions which are produced for export is made possible. Further road development encourages the production of protective foods of perishable nature such as eggs, fruits, vegetables, milk and other diary products. As these are essential to ensure their availability in the urban markets in fresh and good condition in order to get fetch fair prices. In the U.S.A. e.g. the dairy and fruit industries prosper in California because of efficient road. It has been seen that with the establishment of Government Co-operative Diary at Kanpur milk production in the suburban areas has increased 50% and is still showing increasing tendency. The importance of road development can be realised from the fact that "more than half of the perishable produce in India runs to waste on account of delay in reaching the market consequent upon the limitation of the transport improved roads, which mere faster and longer transport facilities, particularly with the use of Motor Lorries, could convert this waste into wealth."**

Bad roads are responsible for higher cost of transportation which increases the marketing expenses of the culti-

**Based on the information of the Office of Govt. Co-operative Dairy, Kanpur.
vators. All marketing reports are unanimous that transporting cost are high in India because of transport by road is governed to a certain extent by the condition of the roads.

The Royal Commission on Agriculture has stressed the importance of communication. The Commission said, "India is essentially an agricultural country. Bad communication hamper the agriculturist in marketing his produce but also raise the price of his food and purchases from elsewhere. In fact it has been an important in communication generally since middle of the last century that more than any other factor brought about a change from subsistence flourishing to the growing of money crops such as cotton, jute, ground nuts and tabacoo etc. Bad communication impose a constant strain on the stamina of draught animals and seriously reduce their efficiency for the important works of cultivators."

It is a well known fact that the Indian farmers fail to get the full value of their product. A long chain of middleman ate up a lion's share of the value of the crops. According to the report of marketing of West in India, "out of a rupee paid by the customer only 8 annas go to the real producer. He losses in bad times but gains a little in good time." Sufficient and adequate transport facilities would bring to an end to this state of affairs.

Besides the above direct advantages certain indirect advantages also accrue from the roads. Firstly, a good road system breaks up the isolation of villages, helps in spreading education and creates a general sense of knowledge. Secondly, reduces the strain on the health and stamina of draught animals and increases their efficiency. Thirdly industries like dairy farming bee-keeping poultry farming etc., which may provide.

*Report of Royal Commission on Agriculture.
additional income to peasants in their spare time.

Thus efficiency and sufficiency of roads, leading to the development of mechanical road transport, benefit agriculture immensely and render it more profitable. Shri V.V. Ramandhan has rightly remarked, "If it is true that the strength of an army lies in legs, it is more true that the strength of our agriculture lies in our roads."*

(ii) ROADS AS AN AID TO INDUSTRY AND COMMERCE

The effects of roads on industry do not appear so outspoken as on agriculture. But they are real and work themselves up slowly but surely. At the outset, we can observe that roads form part of a favourable background for decentralisation of industry, though we cannot dogmatise that roads led to decentralise industry. Railway commonly favour a few places which develop into gigantic industrial centres. In this process of extreme over concentration many small and scattered centres are likely to be let out. Indian handicrafts to repeat an argument not fully realised by many, decayed partly due to railway extensions which gave transport advantage to imported manufactures and due to the corresponding absence of road building which alone could have given the handicraft centres some transport advantage. Is it not reasonable to hold that roads in rural areas would certainly neutralise the disadvantages of transport and in marketing under which our handicrafts and subsidiary industries fatally suffer?

We may note a few relevant facts about Japan here. Her textile industry is as much a gigantic one as it is on a cottage basis. Its decentralisation has been possible for two

* Road Transport in India by V.V. Ramandhan.
reasons. Firstly, there is plentiful distribution of cheap electric power. Secondly, she has an excellent road system. Her road length per 1,000 square meter is 3,000 meter far higher than in "the most densely motorised country in the world," viz England. It is a logical to suggest that the Japanese roads are a real factor in the prosperity of her small scale industrial units.

The need for industrial redistribution is already felt in India. The need is in fact greater for the development of village industries, so that the per capita income in rural areas might be brought nearer to the level of urban and industrialised areas. How grossly they vary is reflected in a recent memorandum of the Indian Government. Would it not be right to argue that roads would assist in erasing these differences?

Let us view the economy of roads to small industrial units. Their transport are of small bulk, which railwaymen view with obvious disfavour. Railwaymen legitimately quote lower rates on wagon loads, and illegitimately have many ways of favouring large shippers. The small ones become their step-children and are hard hit with relatively high rates. In recent years, the small shippers have witnessed, with some sense of relief, the phenomenal development in motor transport. A bulk, that is too small for the railways, is more than sufficient for the motorman. It might make a lorry lad and obtain the lowest rate possible on roads. This is how may small men have transferred their business to the lorry and how road services have rescued small men from extinction. It may be said that road vehicles and small shippers have striven to keep each other in prosperous business.

Roads communications are the links between industry
and commerce. Industrial and Commercial development cannot be achieved without road transport in a country. Without some sort of transport in the far areas of the country the investment will be a waste and un-economic.

Provision of good roads immensely affects production expansion which is best described in the report of the Industrial Commission 1961-18.

"Turning in the first place to the rural areas we find an increasing degree of local specialization in particular crops especially in these grown for export. The people have been led to make this change by the cheap railways and steamer transport, and by the construction of roads which while fluctuating the introduction of foreign imports also render availability to farmer in the distant land locked village, a large share of the prices offered by far off nation for article which once merely supplied the needs of Indian rural life." *

(iii) **ROADS AND FOOD PROBLEM:**

India today is faced with a constant and acute problem of food for a ever increasing sap and the clouds of famine looms large all over the country. Thousands of villages are today deprived from the modern amenities of life. Let these villages be connected by the thread of roads and it will not be surprising if problems of food and clothing find an automatic solution in a very short time.

The only salution of the food problem is the manifold production and better distribution. Both production and distribution are in their turn dependent upon road development. It will help us to bring large tracts of fertile land under cultivation.

*Industrial Commission 1916-18*
which will increase the agricultural production. The Indian Road
and Transport Development Association has told after due research
that an increase of 25% in the agricultural land may be made by
constructing sufficient number of roads.

(iv) ROADS AND FAMINES:

Famine stricken areas are the greatest beneficiaries
of roads. Most people die not of poverty but of foodlessness.
And of many recent Indian famines it is true that foodlessness
in an area is not caused so much by total deficiency as by a
regional shortage aggravated by isolation from surplus areas.
Roads would facilitate the flow of food from surplus to deficit
areas and reduce the prices in the latter regions. The regions
of famine could be thus tempered.

(v) ROADS AND EMPLOYMENT

Another one of the most serious current problem of
our country is the unemployment problem. Roads and road trans-
port provide employment to a large number of people. At present
lacs of workers are engaged in road building in India. It has
been estimated that about 62 to 75% of the total cost of public
works is paid in the form of wages to road workers.* During
draught time roads play a vital role by providing them employment.
According to an official estimate the present motor road trans-
port provide employment to about 15 lacs persons against about
10 lacs in railways.**

* S.K. SRIVASTAVA Transport Development In India
**K.P. BHATNAGAR Transport in Modern India.
The economic progress of a country depends upon the knowledge of an ability to utilise most efficiently its natural resources. Means of transportation especially roads help it in the exploitation of these resources which makes the development of a country possible. The great deposits of raw material and fuels often exist far from the industries and centres of consuming population. But through roads they are carried to places of industries and consuming centres where they are turned into useful commodities. Thus without good roads they will remain more or less worthless.

Roads are supplementary and indispensible to other means of transport. The traffic of railways is gathered by the roads both from villages and towns as they take passengers and goods to the railway station. The indespensability of roads as feeder for railways is described by the Royal Commission on Agriculture in the most striking manner, "Without good and sufficient roads no railways can collect for transport enough produce to render its operations profitable, while the best of roads cannot place the producer of crops distines for markets overseas or in distant areas of the subs continent in touch with the consume."*

Similar is the case with Air Transport and Water Transport. They sink the air fields with the populated areas of a country. Inland water transport wholly depends upon roads along which commodities are taken to the canals lakes or river side. In the same way good roads must exist in the dock areas to develop

* Royal Commission on Agriculture, 1950
ocean transport or coastal shipping. Thus a good road system helps other means of transport.

SOCIAL AND CULTURAL SIGNIFICANCE OF ROADS:

Besides the foregoing sterling economic advantages, there are many social and cultural advantages for which roads may rightly be crowned with. Ruskin was right when he remarked that, "All social progress resolves itself into the making of good roads." These advantages are summarised below:

(1) ESSENTIAL FOR EXTENSION OF EDUCATION:

Roads connect the villages with cities and thus break their isolation and "isolation perpetuates ignorance. Good roads promote the free exchange of ideas less than of merchandise.* They serve as a means of education for the villages because along the roads come new ideas replacing ancient prejudices. Every village may have schools, postal system, libraries, travelling cinemas, travelling dispensaries etc. etc. All that makes the villager an active and alert member of the community and contribute to their mental and moral advancement. A large number of students may come every day from villages to study in cities.

Roads have, in fact made a significant contribution in matters of social intercourse in India. They have given to all classess of population and freedom of travel never before known. They are probably the most important single factor responsible for breaking down the caste prejudices in this country. It has been rightly remarked by an author, "The acute conversation and barriers of caste and prejudices were removed and broken down. Social relationship between the persons living widely apart multiplied and parents had no longer much hesitation in marrying

* Royal Commission on Agriculture.
their children at distant places. Many persons began to undertake long journeys particularly in connection with trade pilgrimage and exchange of their views, habits and thoughts brought about a sense of National cohesion and unity. All these are due to the roads."

(ii) **INVALUABLE PROMOTION OF HEALTH**

Another social as well as physical advantage which an organised road transport system can provide to us is that of promotion of health. It promotes the extension of medical services. The sick persons can easily be shifted to hospitals and that within no time. Without better road transport and good roads the services of Doctor and Surgeon become confined to the cities and in the emergencies, it becomes a problem to induce them to come to distant places. It is all possible with quick and reliable means of transport to a considerable extent. Moreover public health scheme cannot make much headway without a developed road transport system. Anti-Malaria drives precautionary measures against spread of epidemics and general sanitation are unthinkable in villages without the existence of efficient road transport system. Infantile mortality which is so rampant in India can definitely be improved by organised and mobile welfare centres. Antenatal and postnatal care of the mother will be more ready available.

(iii) **ROADS AND PROBLEM OF SLUM CLEARANCE**

The cheap road transport increases the mobility of labourers by facilitating their free movement to centres of employment from the place of residence. Cheap workman's tickets are common in industrial centres. With the help of these cheap return tickets of the buses or trains, the workmens' family can

* Royal Commission on Agriculture.*
live in country-side residence and the slums of industrial cities characterised as "veritable dense of epidemics and pestilence" can easily dispensed with. Thus, one of the most clearance can be solved with the cheap road transportation.

(iv) ROADS AND RURAL DEVELOPMENT:

70% of ours population lives in villages. Thus the all round development of the rural areas of the country depends upon the development of villages. But it is regretted that lakhs of villages are untouched by modern roads. Many are not served by any road. "The Indian villages look like scattered human concentrations unconnected with one another. They are like scattered pearls of a national necklace."* Let these pearls be connected with the thread of good and efficient means of roads and allround development of the rural areas of the country would come automatically. It will bring about a change in the old agricultural methods, provide animal husbandry practices, enthuse the spirit of social service among the villagers and re-create the villagers through cinemas shows and other entertainment activities. It will help in the reclamation of waste lands, provide irrigation facilities quality seeds, improved agricultural implements, marketing and credit facilities etc. and will improve the rural massess through training camp and adult literacy camp. Moreover the electrification of rural areas can be done through better kinds of roads. Even the success of community project scheme, Panchayats and co-operative societies which will go a long way to improve the economic condition of the living of millions of Indians is dependent to a great extent upon the provisions of better and efficient road services. It has been rightly remarked, "good roads annihilate distances. Instead of counting by miles we begin to count by time. It is difficult to
describe the effect of this annihilation of distance of the awakening of the rural population." *

(v) **ROADS AND REFUGEE PROBLEM:**

The recent huge influx from East Pakistan and Ceylon has made the road transport more important. The refugees are being sent to their respective rehabilitation camps by motors and other means of road transport. The necessaries of life such as cloth, food etc. are being despatched to them from different places of the country through roads and railways. It is said that this influx of refugee would have been more disastrous, had the road transport not taken its due part.

(vi) **ROADS AS AN INDEX OF PROGRESS:**

Moreover, roads are an index to country's progress. If a country is primitive and stagnant, the inadequacy of roads will indicate the fact economically and industrially advanced country shall necessarily progress an efficient and excellent road system. "If you wish to know " rightly says a well-known American writer and thinker " Whether society is stagnant you may learn/thing by going into universities and libraries, something also by the work that is going out in Cathedrals and Churches, but quite as much as looking at the roads. For if there is any motion in the society, the road which is the symbol of motion will indicate the fact. When there is activity and enlargement or a liberlising spirit of any kind, then there is intercourse and travel, and these require roads. So, if there is any kind of advancement going on, if new ideas are abroad and new hopes rising, then you will see by the roads that are being built. Nothing makes an unroad without making a road. All creative actions whether in government, industry, thought or religion creates roads.*

* **ROAD ECONOMICS** by R.D. TEWARI
** **ECONOMICS OF ROAD TRANSPORT** by K.G. FENELON.
The other advantages which the road transport accrues are the development of inter-community life, spirit of tolerance, expansion of co-operative societies, development of banking facilities, improvement of standard of living too.

POLITICAL SIGNIFICANCE OF ROADS:

As a matter of fact the political significance of road transport is twofold. The first significance is that it promotes national unity. A country possessing vast area and huge population can be held together only by an effective system of road transport. In making different regions of country economically inter dependent, roads transport makes national unity essential. The second significance is the strengthening of National Defence. During war times the importance of roads and quick vehicles moving on it is much increased. Due to lack of road transport facilities in Kashmir we have to suffer a good deal and it was after the construction of Jammu-Pathankot road that our army could stabilise itself against Pakistan and tribal invaders. In the recent Chinese belatant aggression our army afraid badly one due to lack of good roads. We could not supply food stuffs to our soldiers and they have to face a lot of troubles in moving forward. One can think of wars being conducted without Airways and railways but not without roadways because operational plans of the military forces and freedom of manoeuvre depends upon the number, quality, location and direction of roads. It is said about the road that "they are peace time investment that pay wartime dividends."*

Thus roads act as carriers of ideas. It is this cultural and social aspects of the roads which is in no way less important than an economic aspect.

* ROAD ECONOMICS by R.D. TEWARI.
Milton has rightly observed, "The roads is in every truth one of the fundamental institutions of mankind. Its history dates back to the dawn of recorded history and beyond its beginnings are almost instructive man's first quest in search of water, plunder or sheer adventure. People without roads will be people without intercourse with the outside world without attributes of civilisation. Man the road builder cannot be separated from the builder of civilization."

Late Dr. Rajendra Prasad, First President of the Indian Union, while inaugurating the 22nd session of Indian Road Congress at Delhi in 1958 remarked, "our nation is inspired by the ideals of equal opportunities by all and if special development of backward areas so that they catch up with the more developed areas..............This is the problem for the saluton of which the development of road system is very essential."

While opening the Central Road Research Institute at Delhi the late Prime Minister rightly remarked, "TOP PRIORITY SHOULD BE GIVEN TO THE BUILDING OF ROADS. IT IS MORE URGENT THAN SELF-SUFFICIENCY IN FOOD. INDIA NEEDS ROADS OF MANY KIND THAT WILL OPEN UP VAST AREAS WHICH ARE CLOSED TODAY."

The part played by the road transport in the economic, industrial and social and cultural development of a country requires a very detail and thorough study, which is not possible here otherwise the whole of the THESIS would become itself a topic on the importance of road transport. However, it was necessary for the author to give a brief account of the important role played by road transport in order to facilitate a thorough and sturdy study on the topic. The author sums up this chapter by quoting, "Amongst the services on which the people rely for their daily requirements, road transport is very prominent
and therefore, the provisions of reasonable roads and main highways has a relation to the activities of the people."

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* NATIONAL PUBLIC WORK.