CHAPTER II

ROLE AND SIGNIFICANCE OF LORRY TRANSPORT
CHAPTER TWO

ROLE AND SIGNIFICANCE OF LORRY TRANSPORT

Introduction

The role of lorry transport virtually constitutes the nervous system of an economy, carrying raw materials to the production centres, thus energising every economic unit into activity and perpetuating the flow of goods. Lorry transport broadens the market, fosters optimum factor utilisation, promotes greater division of labour and facilitates labour movement towards better and more gainful employment. It breaks geographical barriers and opens up new vistas, and reserves potentialities of production. It gives accessibility to remote regions, provides them with vital links with centres of activity and directs beams of the new light of progress on backward areas.

In economics, transportation is considered a part of production because it creates place utility. Goods must be brought from where nature provides them or man produces them to where they are consumed. The larger the country and more advanced its economy the more expensive its transport sytem
It can be said that "transportation takes us where we want to go and brings us nearly everything we eat, wear and use in daily life." 2

The transformation of an economy from backwardness to prosperity is highly influenced by the lorry transport available in the country. Thus it is true "in a country with the size of India, with such great variations in products due to climatic differences and with raw materials so unevenly distributed, development hinges to an unusual degree on transportation facilities and transport policies." 3

"Lorry transport may cut through geographical relationships, severing residents from their neighbours, children from their play grounds, shops from their clients." 4

Lorry transport is considered "as central to the well-

3. Marvin L. Fair and Earnest W. Williams, Economies of Transportation and Logistics, Business Publications INC (Second Printing) 1976, p.4
being of the community as is either medicine or agriculture and that its provision is equally demanding."5/

For transportation of goods over long distances, railways were the only mode of transport till recently. The rapid construction of more roads and starting of many new automobile industries and the expansion of the existing ones, have increased the relative share of road transport with special reference, to lorry transport. Moreover the construction of parallel roads with railway lines, introduction of bulk-goods-carrying vehicles for long distances and its flexibility are some of the important reasons for the increase in transportation of goods by lorries. There is ample scope for lorry transport, for movement of goods by roads, quickly and efficiently.

"Road delivery in many instances has halved our costs and slashed delivery time. Yet there is also another potent advantage of road over rail delivery and that is the absence of pilferage. No loss, no ill will and no unduly expensive method of packing is involved."6

"Lorry transport is the one single important factor on which hinges the entire industrial activity of the country".  

From the above definition, it is very clear that lorry transport plays a very significant role in the economic development of India. It has been rightly pointed out by K.K. Sharma that lorry transport has superseded the rail-road in urban movements. "Motor transport is considered a short haul medium; it has been established now that long-hauls are also possible through lorry transport. Even in freight traffic, says Dudley F. Pegrum, the motor carrier has superseded the rail-road in urban movements and has made major inroads into the long distance hauls of a great deal of freight."  

"Lorry transport system ensures smooth flow of material inputs and outputs of all economic sectors from origin to destination as required and liable to country's (region's) production and distribution systems to function effectively and efficiently".

---

7. Road Transport in India - A Study-Department of Economics and Market Research - Hindustan Motor Ltd, Calcutta- 
"Transportation is an essential part of today's life. It has been an essential part of most societies not only in the past but also in the future."\textsuperscript{10}

The role and significance of lorry transport can be discussed under the following heads such as Economic Significance, Political Significance and Social and Cultural Significance.

1. \textbf{ECONOMIC SIGNIFICANCE OF LORRY TRANSPORT}

The role of lorry transport in the economic development has been clearly stated by Adam Smith as "the power of exchanging that gives an occasion to the division of labour so that the extent of this division must always be limited by the extent of that power or in other words by the extent of the market."\textsuperscript{11} The lorry transport system contributes to accelerate the socio-economic development of any developing country, particularly India. From the economic point of view, it is one of the pre-requisites for development and from the social point of

\textsuperscript{10} William W. Hay \textit{An Introduction to Transport Engineering - John Wiley & Sons, New York, p.3}

\textsuperscript{11} Smith, Adam \textit{The Wealth of Nations, Dutton, New York, 1965, p.15}
view, it is the "heart beat of civilisation". Lorry transport has been considered as the nerve system of an economy. The importance of it has been realised and emphasized in all economics, whether it is capitalist or socialist, backward or developed. Thus "in any comprehensive plan for national reconstruction, the problem of transport and communication logically deserves priority".

The metamorphosis of the materialistic world highly depends upon the reduction of space and time at every stage of its progress. This has been rightly pointed out by W.T. Jackman in his work entitled 'Economic Principles of Transportation' that "in the development of every country the transportation facilities are probably the most vital element of the entire material equipment. Not only in effecting the settlement of the country in the first place, but at every stage of its subsequent progress, the means of communication and conveyance are of paramount importance".

It has been considered the very life and soul of trade which acts as an effective stimulus to both agriculture and industry. In short "transportation touches so many fringes of the economy and just as the human legs have made the human body mobile, so the transportation provides legs to the various economic activities and makes the whole economic mechanism mobile." \(^{15}\)

It is true that enlightened people have begun to grasp the importance to the economy, of cheap and rapid transport of goods from one place to another. "Obviously transportation plays a crucial role in shaping the destiny of a nation." \(^{16}\) In fact the whole structure of industry and commerce depends upon the development of lorry transport.

1. Production Sphere

In modern days, any commodity is produced on a large scale. Large scale production requires large quantity of raw materials, large number of workers, huge capital investment, and wide markets. To provide regular supply of raw materials,

---

workers, wider markets, lorry transport has a special advantage since it can penetrate into interior parts of the country for bringing resources from different places to the production centre. An efficient transport system will help to lower the cost of production and the consequent selling prices, which in turn escalates the demand for the same.

2. Consumption Sphere

The total consumption of both agricultural and industrial products are increasing rapidly on account of phenomenal development of lorry transport. Modern transportation by rendering inexpensive, prompt and safe service, has made the markets worldwide leading to increased demand for and supply of various goods and services. The consumption demand for perishable commodities is highly influenced by the nature of the transport system of an economy. "Of late the dominant factor in the Englishmen's increased capacity to obtain almost every important commodity is one and the same, namely, improved transport, for a main part of what improvements now accomplished is to cheapen transport."\(^17\) Thus, lorry transport helps in the even distribution of commodities among all the countries of the world.

3. Agriculture Sphere

The importance of lorry transport for the development of the agricultural sector need not be over-emphasized, since it plays a vital role before and after harvest. It increases the production and productivity of agriculture by extending facilities for improved seeds, manures and fertilizers, marketing, storing, financing, tools and technical advice. The development of lorry transport influences directly in enlarging the areas under cultivation. The increase of investment on transportation particularly in "rural infrastructure can drastically change the pattern of agricultural production."18 The extensive cultivation has been greatly influenced by the development of speedy transport system. The "westward movement of population" and the agricultural extension in American history have been greatly influenced by the adequate transportation facilities.19 Transportation helps to change the agricultural production by diversion of cultivation from food crops to commercial crops. Specialisation of production of certain crops in certain regions facilitates the export of such goods to far off countries.

18. Economic and Social Survey of Asia and Pacific,1975, United Nations, p.102
The rapid development of agro-industries mainly depends upon the development of transport. Usually transportation and development go hand in hand in all walks of life. Historically one could find that industrial revolution of every nation created the fundamental changes in the transport system and a well-developed transport system was the cause of industrial revolution. "A well knit and co-ordinated system of transport is considered to be the nerve system of any progressive country in the world." The contribution of lorry transport to the national income is realised very much in recent times. According to Reddaway "from the point of view of raising the national income the need to inject large amount of capital into power and transport is an inescapable necessity." 21

4. Industrial Sphere

Lorry transport helps immensely the industrialisation of the country. Industrial development would not have taken place, had there been no transport system. Therefore, transport undertakings have been set up in all countries of the world to move large quantities of goods. Lorry transport reduces the

burden of maintenance of godown because finished goods in desirable lots can be immediately moved from the factory to the marketing centres. Big undertakings may have their own lorries for movement of goods and for getting raw materials and other requirements of the industry. During a natural calamity such as flood havoc and fire hazard, lorry transport can provide quick relief measures. Any process of industrial development for a progressive advancement can be halted by the relative backwardness of the transport system. "It was becoming clear that considerable increase in the amount of capital invested in an extension of transport facilities was a condition, sine-quo-non for further industrial advance."22 Lorry transport helps to achieve the required development and balanced growth of economy by supplying the needs of the villages. It can be even operated on unsurfaced roads of the under-developed regions of the country, as village uplift, industrial growth and road development are all interlinked with one another. For "industrialisation should proceed with road development."23


23. Govind & Balakrishna Deodikar, A Design for the Layout of Indian Transport and Communication System The Indian Society of Agricultural Economics,1944,p.2
Advancement in transportation and industrial development are practically comprehensive in nature. They have both a positive and reciprocal relationship. Improvement in transportation encourages advancements in technology of Industry at large and vice-versa.

5. Employment Sphere

It provides employment opportunities to millions of people. In Tamil Nadu alone, it provides employment to more than one lakh people, such as drivers, cleaners, lorry brokers, painters, electricians and workers employed in body building and tinkering works, carpenters and the shippers and others involved in the allied activities of lorry transport.

In a planned economy, transportation has become the most significant factor for the achievements of macro economic goals. "In the case of Russia, during the First Five Year Plan one of the priority items was "The war with the Miles" which includes the establishment of an efficient system of transport in order to mobilise "The Flood of Freight" throughout the tremendous territorial expanses of the Soviet Republics. The Chief slogan of the time was Fight for transport, for bread and coal".  

Transport system mobilises the unutilised and under-utilised human resources in different parts of the country and transports them to the work spots where they can be properly and profitably employed. But for the transport system, human resources will be left where they are and this will slow down considerably the growth of a country. This is because the unemployed human beings eat away the national products without contributing anything to the total production. To put it in a nutshell, lorry transport system provides employment opportunities for those who are unemployed and underemployed and saves them from the dangers of poverty and malnutrition.

In addition, road transport has a high employment potential. Quoting from a Planning Commission study, the NCAER points out that "while a unit of investment created 10,400 jobs in road and road transport, it generated only 5200 jobs in agriculture, 5000 in housing, 1900 in railways, 1700 in small and large industries."25 Further the type of employment generated has certain desirable features; "employment is widely distributed spatially, ranging from metropolitan centres to the remotest parts of the country; it offers employment to all categories of skills viz. from labourers to highly skilled clerical,

supervisory, technical and managerial personnel."  

6. Distribution System

Lorry transport ensures a proper, regular and effective distribution system to the people. This service is highly flexible and the shippers can use them economically and conveniently. Since lorry transport is more reliable and safer, goods can be sent by lorries without the fear of theft or pilferage. There is no transhipment delay. Fragile and highly inflammable goods can be safely transported through lorries. It provides a personalised service. The lorry brokers, drivers and cleaners take care of the goods during loading and unloading; they are personally responsible for their safety. Besides, packing charges are reduced considerably. Many kinds of goods are sent by lorries without even packing. For big consignments, lorries are available for hire on the basis of charges from point to point. For small lots, regular services are available in all important urban centres wherefrom the goods can be loaded for any destination. The contribution of lorry transport to the process of economic development can be greatly enhanced by the superior quality of transport system. It reduces the total

distribution costs through reduction in freight charges. A proper transport development exploits natural resources and also ensures proper distribution of available goods for better living. Thus "adequate transport facilities accelerate socio-economic development of the country." 

7. Price Stabilisation

Lorry transport is a key factor in price stabilisation. It facilitates the free flow of rural produce to consumption centres and agricultural inputs to rural farms. It also helps to get better price to the producer and also slashes down the wastage. Lorry transport is highly suitable for perishable goods like vegetables, fruits, flowers, milk and fish. Other important sectors of the economy like agriculture, industry, mining, energy, forestry and dairy development depend on transport greatly. Such perishable goods are transported fresh from the villages to the town markets through lorries conveniently. Swiftness and punctuality are the important factors in fetching reasonable prices for such goods. Lorry transport helps the producers (both agricultural and industrial) to get reasonable prices for their commodities throughout the year. In the process, consumers also

get these commodities at reasonable prices. Thus lorry transport helps in maintaining inter-related prices of commodities for the benefit of primary producers as well as ultimate consumers.

8. Facilitating Exchange System

Lorry transport, the king-pin of the transport system, in any country plays a dominant role in the exchange of goods and services by widening the market. It acts as the connecting link between the producer and the consumer. It provides feeder services to other modes of transport. It has been playing an important role in the economy of the country by bringing backward areas into the national mainstream of development.

"The economic life and development of nations have been built upon the exchange of commodities, the more satisfactory the system of exchange, the greater the opportunity for accumulation of wealth." 28 Transport breaks the monopolies of areas and saves people from exploitation.

It also helps to achieve the equilibrium between demand for, and supply of, goods and services. Imperfections in the market structure, followed by disparities in prices have their

origin in deficiencies in transport system. The physical and economic isolation of markets and wider competition are the results of ineffective transport facilities. This applies equally to domestic as well as foreign trade.

Effective and efficient transport system eliminates the existence of barter economy in rural areas. This argument has been justified by Myint as "the traditional method of promoting the growth of the market economy has been the provision of better transport and communication." 29

The problems of scarcity and unfair prices are usually uncommon under a well-developed transport system. "The transportation and warehousing facilities have a direct impact on the supply and marketing of goods. Inadequate, unreliable or erratic transportation leads to supply, production and delivery failures for enterprises which can cause failure or bottlenecks involving inter-dependent firms and other parties." 30


Expansion of market, either internal or international, for agricultural or industrial products is highly dependent upon the availability of good transport system. To put in a nutshell "markets grow because of improvements in transport and communication."\(^{31}\) In the initial stages, most of the markets were confined to local and small areas. But historically they have been expanded and enlarged by means of improved transport system. "The linkage of markets by an improvement in transportation by an improvement in a product which makes it lighter and more readily transportable, becomes a part of a development process."\(^{32}\) "The development of an exchange or market economy, one in which goods are transferred from points of production to the points of sale and consumption, depends upon the ability to move goods, that is, on the availability of transportation service."\(^{33}\)

9. Intensifying Competition

Lorry transport system encourages competition and lowers the prices of consumables. Competition is caused due to either


\(^{32}\) Ibid

expanded market or competition among transporters. Since the cost of transport forms an integral part of the cost of production, the reduction in the cost of transport has a direct impact on the selling price of a commodity. When the commodity is brought to the market by cheaper modes of transport, the consumer is able to get the commodity at a lower price specially in the context of perfect competition prevailing in the market.

10. Adequate Land Utilisation

It is experienced in the past that land has been utilised to the maximum advantage of the community due to the availability of long distance cheap lorry transport. The people who are living far away from the market begin to produce due to the availability of cheap lorry transport which is largely utilised in bringing the goods afresh to the market with the result it can fetch better price for that commodity. Thus a rise in the demand for land increases land value. The lands which remain fallow for a long time acquire value due to the availability of transport. The value of land also depends upon the location. Therefore the price of land near a railway station or a bus stand or land situated along the National Highways is many times higher than lands situated far away.
II POLITICAL SIGNIFICANCE

Transport plays a leading role as a unifying factor both at national and international levels. It promotes homogeneity among the people of a country. It has brought individuals and communities living in different regions closer than ever before. When individuals from different countries come closer together, they also bring with them new inventions and ideas which have made civilization possible with the result the modern world has considerably shrunk. The transport has transformed the entire world into a single organisational unit. It is true to state that transports are the veins and arteries of a country. In the words of an old economist Jeremy Bentham, "people without roads would be people without intercourse with the outside world and without attributes of civilization." Lorry transport establishes the concept of 'Unity in Diversity'. It has given two cardinal political advantages namely 'National Unity' and 'National Defence.' It helps the mobilisation of the entire resources of the country in the event of an invasion or war and the same are directed towards military ends for achievement of success.

The type of transport that a country needs is determined by the geographical location of that particular country. England which is surrounded by water on all sides is always keen on
maintaining its naval superiority over other countries. The transport policies of big countries are at times influenced by the military consideration also. It helps effective maintenance of internal law and order. Internal security against violence, arson and sabotage by anti-social elements could be checked with an effective and efficient transport system.

III SOCIAL SIGNIFICANCE

"Transport plays a significant role in widening the social relations."34 It creates a sense of belonging and oneness among the people. It actually destroys the feeling of isolation among the people. It helps the sectional frictions by broadening the outlook of the people through frequent exchange of views. Transport plays a crucial role in shaping the destiny of a nation.

IV CULTURAL SIGNIFICANCE

Cultural institutions including literature, arts, education, science and political structures depend upon improved transport conditions. "All social institutions are nourished by exchange of goods and ideas which depend on the free movement of

There will be a sporadic spread of civilisation and cultural institutions, if transport and communication facilities remained primitive. "Transportation is the central factor in the formation and progress of social organisations including the size and power attained by nations and independent states." Transport has been instrumental in reducing conservatism. The fear of 'Disasuls' in Indian society restricts the movements on certain days. For instance it is considered inauspicious to move out on Saturday and Monday towards east. But the round-the-clock service of railways and other means of transport even on the unlucky days in every direction has removed the fear of inauspiciousness which the people now regard as superstition. Space travel and landing on the moon have further provided a severe blow to conservative beliefs of mankind about the moon and other planets and stars.

It helps the people with different moods and mores learn to live together. In fact the widening of relations among men and women from far off places get knitted into a family emotionally. It has raised the standard of living of the people by providing consumption goods manufactured and drawn from different parts of

36 ibid
the world. Together with improved marketing, electric power, telephone and radio, it is reducing the urban and rural differentiations and thus, enriching the lives of both city-dwellers and villagers. Besides it has also helped in improving social security and public health by providing quick medical aid even in distant places.

It is thus clear that lorry transport is important on many counts. In the economic sphere, its significance is very much obvious and the investment therein is crucial for development.

GROWTH OF LORRY TRANSPORT

Lorry transport occupies an important place in the transport system in most of the developed countries, though it has no glorious past. The rapid growth of lorry transport is due to its small investment, general flexibility of service, spot collection and delivery, prompt service and the improvement in road standards.

As compared to other countries, the motor transport in India is of recent origin. The first motor vehicle was imported into India in 1898. The real growth of mechanised lorry transport started during and after the First World War. After the Second
World War, lorry transport received a spurt when a large number of war surplus vehicles were sold in the market at the lowest prices. By taking this advantage, some of the enterprising entrepreneurs who had the sagacity and foresight in Tamil Nadu and elsewhere purchased them at throw-away prices to start lorry transport business, despite the fact that these persons did not possess previous experience in lorry operations. Thereafter the business has recorded a steady growth. But this business was not properly guided and regulated till the year 1939 when the Motor Vehicles Act was passed. The Motor Vehicles Act of 1939 was considered an important landmark in the history of motor vehicles. This Act was mainly intended to regulate road transport for protecting and safeguarding the interest of railways.

Later various types of lorries were available for the movement of different kinds of goods. By using them, the enterprising entrepreneurs have improved the quality of service.

Initially lorry transport was found highly suitable for short distances and light hauls. Nowadays even big hauls are transported for long distances. In short lorry transport is used to transport goods to any part of the country. This has gained
momentum after the introduction of inter-state permits and the National Permit scheme. The National Permit scheme facilitates the inter-state movement of vehicles. Permits under this scheme are granted by the authorities appointed by the State governments or the Union Territory administrations. The quota permit of each State is fixed on the basis of its lorry population, with a weightage of 50 permits for hilly regions like Assam, Himachal Pradesh and Jammu and Kashmir since these States do not have adequate rail facilities. The National Permit scheme has become very popular. Under this scheme, all the legal and administrative constraints on the movement of goods by lorries have been eliminated with the result free and smooth flow of goods throughout the country is made possible without any difficulty. With the removal of past constraints, transporters can now operate over fairly extensive areas.

Lorry transport is the most economical means of transport for small and medium scale producers. Even the big concerns are using lorries as an important means of transportation.

Lorry transport has a special significance in Tamil Nadu. This is because of certain defects and deficiencies in the development of the railways in the region. First of all Tamil Nadu being a terminal State, the rail transport intended for movement of goods and passengers to their final destinations was
not evenly developed in this region.

Secondly there is inconvenient mixture of metre gauge and broad gauge sections at many important points involving considerable amount of delay in transhipment. Thirdly Tamil Nadu has a good network of roadways even before the advent of the railway transport system. Today the roads have been developed in Tamil Nadu both in the rural and urban areas to a large extent. Hence, lorry transport plays a vital role in the development of rural areas because of the inability of the railways to serve the interior villages. This has resulted in the laying of the roads parallel to the existing rail tracks. "In the year 1933, the Mitchell Kirkness Committee noted that in the then Madras Province, 61 percent of the railways are covered by parallel metal roads."\(^{37}\) The above-said factors have acted as the main hindrance in the growth and development of rail transport on proper lines in Tamil Nadu. At the same time, these factors have also contributed a great deal to the rapid development of road transport indirectly. Even after the changes brought about through three decades of planning, road transport continues to play a vital role in Tamil Nadu.

---

37. Mitchell Kirkness Committee Report, Government of India, New Delhi, 1933, p.14
Lorry transport has made tremendous strides in the recent years regarding goods transport especially at the cost of railways. During the first twenty five years of planned development, the share of road transport increased from 11.7 percent to 36 percent in total inland goods traffic. On the other hand, the share of railways declined from 88.3 percent to 64 percent. Besides this, lorry transport plays a vital and dominant role in bringing agricultural commodities from villages to the remotest urban centres. It also transports industrial goods from the production centres to the needy consumers very quickly at the doorsteps. It not only meets the existing demand but also creates new demand. Thus the growth and development of any industry is directly dependent upon road transport and this trend is likely to continue in future also. This invariably calls for a concerted effort on the part of the concerned towards strengthening the road transport organisations in meeting the ever growing challenges. But unfortunately the attention of the authorities has not yet turned towards the hurdles which stand in the way of its development. This is so, in spite of many serious recommendations of various committees which have gone into the question of reforming and re-organising the road transport system. Even now the industry is highly disorganised and an invisible instability persists in its impressive growth.
"An enquiry into the type of traffic carried by lorries made by the NCAER in various district headquarters of Madras State revealed that lorries are utilised to transport,

1. Nearly 10 percent of the produce of the tea and coffee estates in Coimbatore and the Nilgiris districts.
2. About 30 percent of yarn and 66 percent of Mill cloth from the cotton mills in Madurai.
3. Most of the sago and glass products of Salem
4. All hosiery products of Tirupur
5. A substantial proportion of matches and crackers manufactured in Sivakasi
6. Lime stones in Ariyalur, Trichy district
7. Structural goods in Mettur and Neyveli. ³⁸

It is only quite reasonable to expect lorry transport to usurp a lion's share in the country's transport in the years to come. The intrinsic advantages of lorry transport and the shortage of railway capacity together have contributed to the healthy development of the former.

Tamil Nadu, situated at the South-Eastern extremity of the Indian peninsula, has a geographical area of 30058 sq.km. representing about 5 percent of India's geographical area. Topographically there are several distinct deviations in the State parallel to the coast and gradually rising away from it is a broad strip of plain country. The climate is tropical, but more equal than in North India. According to the 1991 census, "Tamil Nadu has emerged as the seventh most populous state in the country." It has a provisional population estimate of 5,56,38,318 in the 13th census that has just been completed. "Tamil Nadu is the eleventh largest state in India." The density of population here is 428 per sq.km. against the national average of 267 per sq.km. The sex ratio is 972 women per 1000 men, compared to the figure of 929 per thousand for the country. The literacy rate in Tamil Nadu is 63.72 percent with a higher 74.88 percent among men and a lower 52.29 percent among women.

40. The Hindu, dated 27.3.1991, p.1
41. Manorama Year Book, 1990, p.607
According to the provisional figures released, South Arcot is the most populous district with 48,70,871 people accounting for 8.75 percent of the State's population. The Nilgiris remain the least populated district with 7,04,827 people making for 1.27 percent of the State's population. Salem district has a population of 39,14,239 of which 20,25,652 are men and 18,88,587 women. It has 7.03 percent of the State's population. The density of population in this district is 283 per sq.km. as against the national average of 267 per sq.km. It is situated at a place in Tamil Nadu where the humidity is the lowest. The low moisture content of the air is conducive for lorry body building industry, with the result Salem district occupies a unique position in lorry body building in South India. It has been estimated that 75 percent of lorry body building is done in this district and the remaining 25 percent at Coimbatore, Madurai, Tirunelveli, Vellore, Karur and Nagercoil in Tamil Nadu.

Location

Tamil Nadu is bounded on the East by the Bay of Bengal, in the South by the Indian Ocean, in the West by the Arabian Sea and the State of Kerala and Karnataka, and in the North by Karnataka and Andhra Pradesh.
Physiography

The land mass of the State can be divided into two natural divisions, (i) the Eastern coastal plain and (ii) the hilly region along the North and the West. The coastal plain is usually sub-divided into (a) the Coromandal plain comprising the districts of Chengalpattu, South Arcot and North Arcot, (b) the alluvial plain of the Cauvery delta extending over Thanjavur and part of Tiruchirapalli districts and (c) the dry Southern plains in Madurai, Ramanathapuram, Kamarajar, Anna, Kanyakumari, Pon Muthuramalingam and Tirunelveli districts.

Along the whole length of the western part, at a distance from the sea varying from 80 to 160 km. runs the range of the Western Ghats, a steep and rugged mass averaging 1220 metres above the sea level and rising to 2440 metres at the highest point. The Palghat Gap about 25 km. in width is the only marked break in the great mountain wall. To the south of this gap, the range is known as Anamalai (Elephant Hills).

On the east are the Palani Hills on which is situated the famous hill station Kodaikanal. The slopes of the Western Ghats are covered with heavy evergreen forests. These slopes are the sources of the rivers Cauvery, Vaigai and Tamaraparani. The Nigiris and the Anamalais are the hill groups with the maximum height.
In the famous Ootacumund area of the Nilgiris district, is the highest peak Doddabetta, 2640 metres above the sea level. The so-called Eastern Ghats begin in Orissa and pass through Ganjam district of Orissa and run south west through all the districts lying between Ganjam and the Nilgiris plateau.

The rivers of the state flow eastward from the Western Ghats and are entirely rain-fed. The perennial rivers are: Palar, Cheyyar, Pennaiyar, Cauvery, Bhavani, Amaravathi, Vaigai, Chittar and Tamaraparani. The non-perennial rivers are the Vellar, Nooyal, Suruliar, Gundar, Valparai and Varshall. The 760-Km. long Cauvery is the great river of the State rising on Brahmagiri, a hill in Coorg in the Western Ghats, almost near the Arabian Sea. It travels the entire breadth of the peninsula and forms a large delta at its mouth in the Thanjavur district before merging into the Bay of Bengal.

History

The first trading establishment made by the British in the Madras State was at Peddapalli (now Nizampatnam) in 1611 and then at Masulipatnam. In 1639 the English were permitted to make a settlement at the place which is now Madras and Fort St. George was founded. By 1801 the whole of the territory from the
Northern Circars to Cape Comorin (with the exception of certain French and Danish settlements) had been brought under British rule.

Under the provisions of the States Reorganisation Act, 1956, the Malabar district (excluding the islands of Laccadive and Minicoy) and the Kasargad taluk of South Kanara district were transferred to the new state of Kerala, the South Kanara district (excluding Kasargad taluk and the Amindivi Islands) and the Kollegal taluk of Coimbatore district were transferred to the new State of Mysore, and the Laccadive, Amindivi and Minicoy Islands were constituted as a separate Union Territory. Four taluks of the Trivandrum district and the Shencottah taluk of Quilon district and the Shencottah were transferred from Travancore-Cochin to the new Madras State. On April 1, 1960, 1,049 sq. Km. (405 sq. miles) from Chittoor district of Andhra Pradesh were transferred to Madras in exchange for 845 sq. Km (326 sq. miles) from the Chingleput and Salem districts. In August 1968, the state was renamed as Tamil Nadu.

Agriculture

"About 47.9 percent of the total cultivated area is under irrigation". The principal food crops are rice, maize, jowar,
bajra, ragi and pulses. The main commercial crops are sugarcane, oilseeds, cotton, chillies, coffee, tea and rubber. Forests cover about 17 percent of State’s area. "Tamil Nadu's sugarcane yield of 100 tonnes per acre is a world record". About 3.5 lakhs acres have sugarcane grown on them. Tamil Nadu accounts for nearly one fourth of the spinning capacity in India.

Industry

Some of the minerals found in the State are limestone, magnesite, mica, quartz, felspar, salt, bauxite, lignite and gypsum. The major industries of the State are cotton textiles, chemical fertilisers, paper and paper products printing and allied industries such as diesel engines, automobiles and parts, cement, sugar, iron and steel and railway wagons and coaches. The main public sector undertakings are Neyveli Lignite complex, the integral Coach Factory, the Hindustan Teleprinters, Hindustan Photo Films, the Madras Refineries, the Madras Fertilisers and the Heavy Vehicles Factory. Tamil Nadu is an important exporter of tanned skin and hides and leather goods, cotton piece-goods, tea, coffee, spices and tobacco.

42. Manorama Year Book, 1990, p.609
Irrigation

The Lower Bhavani, the Amaravathi, the Vaigai, the Parambikulam Aliyar, the Krishnagiri, the Sattanur, the Pullambadi-Kattalai high level canal, the Gomukhi Nandhi, Chittoor Pattannamkal and Ponnaniar are the important irrigation schemes implemented since Independence.

Power Projects

There are 18 hydro-electric stations and three thermal stations in the State. The atomic power station at Kalpakkam in Chengleputt district was commissioned in 1983.

Universities and Colleges

There are 16 Universities, 33 Engineering Colleges and more than 250 colleges in Tamil Nadu.

Administration

With the bifurcation of the Thanjavur district in October 1991, the total number of districts has increased to 22 in Tamil Nadu.
Tourist Centres

Tamil Nadu Tourism Development Corporation runs a chain of 17 hotels, 1 Beach Resort and 10 Youth Hostels. It has also constructed Boat houses at Muthukkadu, Ooty, Pichavaram and Yercaud.

Hill Stations : Uthagamandalam (Ooty), Kodaikanal and Yercaud.

Religious Places : Suchindram, Rameswaram, Tiruchendur, Madurai, Palani, Tiruchirapalli, Srirangam, Thanjavur, Kumbakonam, Nagore, Velankanni, Vaitheeswaran Koil, Chidambaram are the important pilgrimage centres.

Tourist Centres : Mamallapuram, Poompuhar, Pichawaram, Point Calimere, Courtallam, Hogenakkal, Anamalai Sanctuary, Mudumalai Sanctuary, Vedanthangal Bird Sanctuary are the main tourist spots in the State.

At Madras, Fort St. George, Fort Museum Marina Beach, Snake Park, Guindy Park, Guindy Deer Sanctuary and Children's Park, Egmore Museum, Valluvarkottam, Crocodile and Vandaloor Zoo, Muthukkadu Boat House are the major picnic spots of Madras.