Chapter VI

PROBLEMS AND PLANNING OF ROAD TRANSPORTATION DEVELOPMENT IN ANANTAPUR DISTRICT.

"Roads play a pivotal role, not only in aiding economic and social development, but also in creating new limps between towns and villages, these by bringing villages into the main stream of economic life (Tamil Nadu Economic Survey, 1971)."
An efficient transportation system in a country enhance the growth and development of agriculture and stimulates commerce and trade. It will create growth pole centres and provide service functions for the native people to take part actively in the regional economy.

The economic structure of the modern century has been built upon cheap transportation. The road is one of the most fundamental institutions of mankind. It is so necessary and so natural apart of human existence that we take it for granted (Finch and others, 1957).

The importance of transportation planning process is to establish an axiomatic system to classify the structure of transportation networks with special reference to the developmental aspects (Kansky, 1963) describes five logical steps involved in introducing an axiomatic system. They are

(i) To determine and define the observational units of research.

(ii) To determine an index of economic activities shape and size of the area and degree of variability in
physical relief at each level.

(iii) To locate the centres of economic activities and assess the greatest variability of physical relief.

(iv) To calculate the numerical value of graph theoretic measures at each level and calculate the values of the graph theory indices from a time series.

(v) To draw probability maps showing network structure by using graph theoretic measures and to locate it in the area by simulation technique.

The above mentioned steps have been used to analyse and planning of road transport network in the district. In Anantapur district, agriculture is the predominant avocation of about 75 per cent of the district's population. Obviously, road transport network significantly contributes to the agricultural development. It is needless to state that a special attention has to be paid for the development of roads in the district since these operate as the main integrative structure. Roads have a decessive influence on the economic life of rural area in terms of growth and location of marketing, storage,
input and out distribution of agricultural production and processing facilities. While planning for augmentation of the road network it is prerequisite to take into account not only the already developed central places of economic, social and administrative activities but also the needs of the other potential areas whose growth is stagnated due to lack of adequate road network system.

PROBLEMS OF ROAD TRANSPORT NETWORK SYSTEM:

The problems of road transport may be summed up as follows:

(i) The region with varied physiography and undulating hilly terrain to some extent hindering the construction and the development of roads to all corners of the district. The construction of road network is difficult as it has to be taken number of diversions and the land has to be graded well.

(ii) The climatic conditions are much influenced on the road network, the high torrential and fluctuating rainfall causes heavy damage to network by gully erosion.
(iii) As it is clear from the analysis of accessibility of road network, many villages in all over the district are inaccessible. Out of 934 inhabited villages in the district, 828 villages are having bus services. The remaining 106 villages are yet to be properly connected by road network and they are the most inaccessible parts of the district in terms of road journey.

(iv) There is a great necessity to construct number of bridges, over bridges, cause ways and culverts, which are in acute shortage for easy movement of passenger and goods.

The old cause ways and culverts which were constructed years before have been creating number of hurdles for passenger and goods traffic particularly during rainy season. During rainy season, the damaged cause ways and culverts are affecting in terms of increase of journey time and more fuel consumption on both private and public transport services. For example the cause way at near Appicherla on Tadipatri to Gooty route, cause way at Ramasagar on Rayadurg to Bellary route, cause way across the river papagni at Balasamudram, the cause way across the Chitravathi near
Mudiguoba on Anantapur to Kadiri route, the cause way at Peravali on Anantapur to Tadipatri road, the cause way across Peddavanka on Uravakonda and Bellary road etc., have been posing serious hurdles for easy road transportation during rainy season.

There are few bridges across the major rivers and streams but they are in bad condition, for example, the bridge across the Kuthaleru near Harpala is almost in deteriorating condition and it is going to be ruined at any point of time. Except few roads, particularly National and State High Ways, the surface condition of major district and other roads in general is not good. Similarly the road width considered suitable to some 50 years back, before the advent of automobiles, is still prevalent. As a result, they are unable to cope with the requirements of the present day motor vehicles. The road maintaining departments viz., N.H. Division, P.W.D. (R & B), Zilla Parishad, and Panchayat Samithies have to take immediate care to the fast moving conveyances.

(vi) It is a common feature of the roads of this country due to lack of specified divisions of roads, for different modes of transportation, they co-exist and natu-
rally create obstruction to the fast moving conveyances.

(vii) The various organisations of road transport viz., P.W.D. looking after the construction and maintenance of roads and bridges, Regional Transport Authorities issuing licences, Zilla Parishad and Panchayat Samithies which look after district roads and village roads are quite detached from each other and no co-ordinated organisation looks after integrated development of road transport as such.

(viii) The direction and distances from place to place are not properly indicated on many roads of the district. It is causing considerable inconvenience to the passenger and goods traffic. At the points of damaged cause ways, culverts and steep gradients there is no strict warning system to avoid road accidents in the district.

(ix) The construction of bus stations and providing facilities are also lagging in the part of road transport system in Anantapur district. There are urban and large rural settlements are lack of proper bus stations and there are many important rural nodes not having even bus shelters.
(x) On the edges of the pacca roads steep gradients and ditches noticed all along the National and State High Ways. These posing severe inconvenience for crossing of heavy load vehicles and leading to accidents.

(xi) It is also commonly observed that there is no plantation development all along the roads in the district. It is due to lack of proper care, initiation and maintenance as well as infavourable climatic conditions.

Problems of Urban Transport:

There are 11 urban settlements in the district. In many cases, roads in the towns are narrow and battle necks are quite common. Limited width, lack of classified roads, co-existence of traffic and arteries and lack of proper organisation looking after the integrated development of roads are severely affecting urban transport in the district. There are few urban settlements not having proper bus stations and other facilities which create very inconvenience to the public. For example, Guntakal, Uravakonda, and Madakasira towns are not having bus stations in the district.
Suggestions for the Development of Road Transport Network in Anantapur District:

Considering the importance of road linkage at different levels for the regional development, the following suggestions are made.

(i) In order to bring uniform development of road transport, road journey facilities are to be provided to each and every village in the district. Out of 934 rural settlements in the district, 828 villages are connected and accessible to the road network with less than 5 Kms. of distance. The remaining 106 villages are inaccessible and far away (more than 5 Kms) from the road network. Those villages are also to be connected by the road network under different schemes of development. It enables to provide various facilities for integrated service functional system.

(ii) After the introduction of Mandal administrative system in the place of Taluk and Block development administrative system by the Government of Andhra Pradesh, the road facilities are to be planned to connect all the settlements both rural and urban at different levels. In the first order, the villages of a mandal are to be well connected only by the
road network with the Mandal headquarters, which helps the people of different villages for easy moving to the mandal head quarter for various purposes namely administrative, economic and other infrastructural facilities. In the second order, all the Mandal headquarters are to be properly connected with near by urban settlements for different higher-order service functions namely, medical, recreation, banking, education, commerce and trade etc., In the third order, all the urban settlements and important growth pole centres are to be connected with the district head quarters and other large urban settlements out side the region for many higher-order services. By this system of road transport network, an integrative functional linkage can be attained and the different potential centres can be brought out for the development of their hinterland. This will also reduce the pressure on road transportation facilities and also will help in the establishment of well dispersed central places or service centres in all over the area of the district and to open up more areas from the chains of backwardness.
(iii) After the introduction of Mandal administrative system, it is a bare minimum to provide transport facility that is plying of buses from Mandal headquarter to all the villages come under the mandal. And at each mandal headquarter small bus station or bus shelter has to be constructed for passengers convenience. Apart from the Mandal headquarter, there are many growth centres serving lower-order services required bus stations or bus shelters with minimum facilities. The bus stations are yet to be constructed in some of the urban settlements like Madakasira, Uravakonda and Guntakal, etc., In all the urban settlements pacca bus stations or bus depots to be constructed as early as possible to provide road journey facilities to long distant places.

(iv) In view of repeated repairs, damages of culverts bridges, causeways; they have to be rectified in a shorter time for free and easy running of road vehicular movement.

(v) All the district roads and important village roads which are unmetalled and in bad conditions have to be brought under good condition with black tops for past vehicular convenience in order to save time and conserve the fuel consumption.
(vi) All the State Highways are the single roads which were constructed in the years before. In view of spectacular increase in the vehicular movement, it is very essential to arrange for doubling the capacity of State Highways, for fulfilling the present requirements.

(vii) It is suggested to grow as many as plants on the road sides under different forest programmes, Grammena Kranthi Pathakam and etc., as it serves many purposes.

(viii) It is also suggested to provide clear road signal system to show the distance, direction, steep gradients, culverts, bridges, causeways, deep curves and condition of road where it is necessary.

(ix) It is very essential to take care of the roads particularly at damaged places immediately by establishing watch and ward setup at few important centres of the district. There should be an integrative organisational system for the proper maintainance of all types of roads in the district for smooth functioning of road transportation system.

(x) All urban centres in the district have to be
connected with the state capital and with the major neighbour­
bouring cities like Madras, Bangalore for rational nodal
linkage between the region and other parts of the state for
higher order services.

(xi) Since this region is well known to other centres of the state and the country because of the abode of
Bhagavan Sri Satya Sai Baba at Puttaparthi, this region
has to be well connected by the road network to as many
as number of centres in and outside the region to reduce
the pressure of flow on other modes of transportation.
And also the roads between Dharmavaram and Puttaparthi;
and Penukonda and Puttaparthi, which are single roads
have to be widened due to heavy vehicular movement du­
ringing peak times. Road is the only possible mean of trans­
port between these places.