CHAPTER VI

SUMMARY AND CONCLUSIONS
It is realised that transport is indispensable for the development of trade and industry of a country. Transport may be railway transport, road transport, inland water transport etc. The rail transport includes the passenger transport that covers suburban and non-suburban sections and freight transport that makes a quick delivery of all kinds of heavy and bulky articles over long distances.

Before Independence railways were utilised to transport war troops and war materials. Later, railway services were demanded for civilian purposes also and therefore railways were expanded in the twentieth century considerably.

Since 1950-51 the passenger traffic in suburban and non-suburban sections and the freight traffic increased considerably. The transport of bulk commodities like coal, steel and fertilisers accounted for nearly 77 per cent of the total freight traffic.

It is recognised that railways, as public utility service caters to the needs of the people in the country. Hence, the maintenance of railways is considered a 'State responsibility'.
Further, large capital investments required, the purpose of national defence, provision of better amenities to passengers and welfare measures to promote the welfare of labourers, charging fair price on transport and other social considerations forced the state to assume the responsibility of regulating railway sector.

For the repairing and maintenance of locomotives the establishment of workshops and locomotives is found necessary. Railway workshops are mainly concerned with the production, repairs and maintenance of passenger coaches and goods wagons while the locomotives ensure trouble-free service to the engines. Further, locomotives overhaul the engines and act as fuel filling stations.

There are 4 categories of locomotives namely
(a) Broad Gauge Diesel Locomotives, (b) Metre Gauge Diesel Locomotives, (c) Steam Locomotives and (d) Electric Locomotives.

The number of workshops and locomotives are increasing over a period of time and attracting enhanced financial outlays for their maintenance. This indicates the need for and utility of railway workshops and locomotives whose performance has to be examined and analysed.
A review of railway workshop development programmes in India reveals that before Independence railway sheds and workshops were maintained and managed by the private managements. The regulation of railways in India began only in 1863.

To start with, there were only Steam Locosheds attending the repair works of steam locomotives. Later, priority was given to the establishment of Central Workshops for the manufacture of passenger coaches.

During the first plan period metre gauge locosheds were converted into broad gauge locosheds, additional locos were allotted and the maintenance capacity of the sheds was raised.

An amount of ₹1.40 crores was allotted while ₹1.432.07 crores was spent during the first plan period. Nearly 60 per cent of this expenditure was incurred on the rolling stock which showed a remarkable increase. The production of locomotives exceeded the target by a significant margin.

In the second plan period 6 new workshops were established and several existing workshops and running sheds were expanded and remodelled. The production of passenger
Coaches went up by 50 per cent while that of wagons doubled during the plan period.

During the Third Five Year Plan the production requirements of Broad Guage Steam Locomotives were satisfied and therefore, emphasis was changed to the production of electric locomotives. Further, railways attempted to extend satisfactory service to their users by providing maximum possible amenities to customers and the railway staff.

More than 1,00 lakh wagons - two thirds were new wagons and the remaining replaced ones - were added in the fourth plan period. The high density routes under mixed traction were electrified and the manufacturing capacity of diesel locomotive works at Varanasi was expanded.

Rolling stock accounted for one half of the expenditure on railway development programme while 7 per cent of it was allotted to the workshops during the Fifth Five Year Plan. The loco production at Chittaranjan was increased to 80 locos per annum and as a result a total of 400 electric locos were added in the plan period.

A workshop modernisation programme was undertaken during the Sixth Five Year Plan. An outlay of
Rs. 5,180 crores was allotted while the expenditure exceeded by an amount of Rs. 1,473 crores.

During the Seventh Five Year Plan period maintenance practices were reoriented and uni-activity workshops were introduced in the place of multi-activity units. An outlay of Rs. 12,344.30 crores was earmarked for the railway plan of which one third was on rolling stock.

It is noticed that the outlay on rolling stock showed a gradual increase during the successive five year plans. This indicates the increasing attention bestowed on the repairs and maintenance works of the locomotives by the railway authorities.

Gooty is a mandal headquarters town with a major Gram Panchayat. The population of the town is 28,29,260 and the density of population is 216 per sq. kilometre. The main broad gauge railway lines that link Madras-Bombay and Bangalore-Hyderabad pass through the town. The spurt in the transport of iron ore placed a heavy demand for goods services.

To meet the repair and maintenance requirements of the locos a Steam Locomotive was established at Gooty in 1924 with a capacity to handle 60 locos. In 1963 the steam
Locomotive was converted into a diesel locomotive planned to home 40 diesel locomotives. At present, there are 111 diesel locos allotted to the Gooty shed of which 31 are meant for passenger traffic and the remaining for freight traffic.

It is realised that an economic analysis of an undertaking depends upon the structure of finances. It is not always possible for an undertaking to earn profits which are aimed at serving the society. Diesel Locomotive at Gooty offers a classic example of such service-oriented establishment.

The diesel locomotive earns revenue for the services of its locomotives in other zonal areas. On an average, the Gooty-based locos fetched a revenue more than Rs. 18,000/- per day during 1986-87 and Rs. 20,000/- per day during 1984-87.

The expenditure incurred on the locomotive at Gooty may broadly be divided into (a) Expenditure on Maintenance, (b) Operational Expenses, (c) Expenditure on Repairs and (d) Expenditure on Contingencies.
During 1980-87 salaries accounted for more than 40 per cent, dearness allowance for 30 per cent of the expenditure on maintenance. It is revealed that the expenditure increased at an annual rate of Rs. 13.42 lakhs during 1980-87.

During the period under review an expenditure of Rs. 1,323.73 lakhs was spent on rolling stock, i.e. on the purchase of locomotives, wagons and coaches. This expenditure accounted for 47 per cent while the expenditure on the purchase of plant and equipment accounted for 40 per cent of the total operational expenses during 1980-87. This operational expenditure increased at a rate of Rs. 19.52 lakhs per annum during the period under study.

The cost of materials used from the available stock of the shed's store has been the major item of expenditure that accounted for 73 per cent of the expenditure on repairs. The cost of other items that are purchased directly from the local shops constituted more than a quarter of the repairs expenditure. The increase in it might be due to price rise to a large extent. This expenditure increased at an annual rate of Rs. 20.92 lakh during 1980-87.
Expenditure on contingences refers to the cost of High Speed Diesel Oil and other fuels consumed. The consumption of High Speed Diesel Oil has been the major component that accounted for two thirds of the expenditure on contingencies. On an average, this expenditure increased at an annual rate of Rs.24.53 lakhs during 1980-87.

The expenditure on maintenance, operational expenses, repairs and contingencies together form the total expenditure. The share of these components were 11.17, 37.96, 19.88 and 30.99 per cent respectively to the total expenditure during the period under review.

It is noticed that the specific fuel consumption levels of Gooty-based locos has been less than the target fixed by the Railway Board till 1982-83 and for the goods locos it was less than the target throughout the period under review. From this it can be said that the performance of Gooty shed is satisfactory.

The estimated engine kilometres earned per day per loco for passenger services are 636.86. This is less than the EKms. earned by the locos of Guntakal shed (740 EKms.) and Erode shed (750 EKms.).
During 1980-87 the rate of loco turnout in Gooty Diesel Locomoshed ranged between 60 and 70 per cent. On an average, 83 locos were refitted and released for service. Similarly 14 locos were overhauled per annum during 1980-87. For completing these repairs 80 to 95 per cent of the repaired spare parts were used by the shed at Gooty.

The target for passenger traffic was fixed at 35 per cent by the Railway Board. Therefore, the variation in engine outage is possible in for goods traffic. The target for it was fixed at 35 per cent. The percentage of engine outage was less than the target till 1978-79 and exceeded it afterwards.

The ineffective percentage target was fixed at 12.5 by the Railway Board. It was higher till 1978-79 and declined afterwards in Gooty Diesel Locoshed.

It is noted that the mechanical repairs effected in the shed were higher than the electrical repairs. The loss of Kms. due to loco failures is estimated at 1,074.72 lakhs during the 13 year period. More than one half of this loss was recorded in 1975-76 only.
It is revealed that 3 supervisors and 38 other unskilled worker positions have been vacant in the shed. In view of the satisfactory performance of the diesel loco shed at Gooty, it is concluded that the performance of the shed can further be improved if the vacant staff positions are filled.

The diesel loco shed was located 4 kilometres away from the town and a small township came up in 1963. Since then there has been a spurt in the construction activity in that area. With the increase in population, houses and other establishments a separate Gram Panchayat was started in 1979 with its headquarters in Gooty Railway Station area.

There has been a demand for the Gooty-based locos for the transport of iron-ore from the Bellary-Hospet belt to Madras and 23 locos were earmarked for this purpose. Besides, 32 locos are meant for goods traffic. It is estimated that, on an average, the wagon loading of iron-ore stood at 670 per day. The daily earnings from the transport of iron-ore were ₹30.00 lakhs. The other goods transported are polished slabs, mosaic chips, barytes lime stone etc.
It is estimated that 110 lakh passengers travel daily, on an average, in Guntakal Division to which Gooty based locos are supplied. Further, there has been an increase in the number of passenger trains passing through the town.

The increased transport facilities are catering to the needs of employees to attend their duties in the near by towns. Students pursuing College Education travel by these trains to towns like Guntakal, Anantapur and Tadpatri. It facilitated the businessmen to establish trade contacts with traders in Bombay, Madras, Bangalore and Hyderabad. The producers and industrialists are encouraged to transport groundnut, groundnut oil, lime stone, barytes, etc...

Nearly 100 workers found employment in the oil refinery factory and several others were involved in beedi and match works. 35 pretty trading units and 20 hotels have come up near the station.

Roads linking Gooty town and Basinepally village on Adoni road and other main and sub-lanes in the Railway Station area were black topped. Nearly 60 per cent of the houses were electrified and 33 borewells were sunk to meet the water requirements of the area.
To cater to the needs of the locality 4 private convents, 10 elementary schools, a High School were started. Andhra Bank, Police out-post, Post office, Cine theatre, 3 Temples, 2 Mosques and 2 Churches were constructed to meet the allround requirements of the residents.

The local people got employment in most of the lower cadre positions in Railway Department such as Khalasis, Khalasi helpers, Porters, Peons etc... Further, on an average, nearly 120 workers are employed on daily wage rate basis in track repair works. Another 100 workers are engaged in loading of the goods transported to other places.

The indirect employment generated can be estimated from other ancillary works taken up by locals. There are 23 Jatka riders earning Rs.50/- to Rs.70/- per a day each daily. 10 vegetable vendors find their livelihood making a profit of Rs.20/- to Rs.30/- per a day. Many others also earn their incomes from small business and petty trade activities.

The railway employees pay profession tax to Chetnapally Panchayat which accounts for a fifth of the total Panchayat revenues. Nearly Rs.0.80 lakhs has been raised through the tax on stalls and shops. Thus, for
its sound financial resources the Panchayat could provide the basic amenities to its residents. The Chetnapally Gram Panchayat won the "Best Gram Panchayat award in 1984-85" in the State.

The rapid growth of township around Gooty Diesel Locomotive and Railway Station area, the formation and efficient functioning of the Panchayat that earned the recognition of the Government of Andhra Pradesh are the important indicators that reveal the impact or effect of the establishment of Diesel Locomotive on Gooty town.