CHAPTER - 15

CONCLUSION AND RECOMMENDATIONS

15.1 GENERAL

Government of Kerala (GOK) vide their Go No. 1107/2010/ID dated 02.08.2010, engaged Delhi Metro Rail Corporation for conducting pre-feasibility study for High Speed Rail corridor between Thiruvananthapuram and Kasargod in view of heavy congestion of traffic on the roads and also being economical to the public as compared to Air travel up to the distance of 900 Kms. However, in this report the recommendations are given only for Thiruvananthapuram- Ernakulam section as Stage- I of the study.

The study has been done following the under mentioned steps

(i) collection of data from field and the authorities involved in the passenger transport;
(ii) Analysis of data collected
(iii) Preparation of Logit model for traffic forecast
(iv) project the ridership
(v) Preparation of base map with the help of Carto-set and Quick Bird images.
(vi) Design of alignment keeping in view the technical specifications of High Speed Rail
(vii) Costing and financial analysis.

15.2 CONCLUSIONS

i) The traffic survey indicated that there is willingness to shift to the High Speed rail corridor if available. There is need of providing more efficient rail system which will attract the road and air traffic and reduce the load and congestion on the roads and also be comfortable and quick transport system.

ii) The road traffic has been growing at a rate of 10 to 12%. The same trend is seen in the growth of vehicles during 03 to 07 which is at 12%. While the growth of Road length has been negligible. This has resulted in great increase in Road congestion.
Pre-Feasibility Report of Thiruvananthapuram to Ernakulam

iii) Study revealed that there is no efficient and fast rail transport system in the State.

iv) For the success of High Speed Rail, in influence area of residential / commercial / institutional localities, planned integrated operation of the system with provision of KSRTC/feeder bus services from / to various may be required.

v) The Study was started with the marking of route alignment on Topo Sheets of Survey of India and finally the base map was prepared making use of Carto-set and QuickBird Images. The base map so prepared was used for designing the route alignment.

vi) On review of High Speed technology worldwide available, it was found that Shinkansen technology is the best and adopted by number of countries like Taiwan, U.K., China, Brazil and Vietnam.

vii) To complete this study, Experts from Japan were engaged for reviewing the technology worldwide and give their recommendations for various items to be implemented as part of Kerala High Speed Rail.

viii) High Speed Rail is now a tried and tested technology with deliverables really transport benefits and can dominate market against road and Airline transport.

ix) The cost of Shinkansen High Speed Rail was used for costing of Kerala High Speed Rail.

x) As Stage-I of Feasibility study of Thiruvananthapuram-Kasargod High Speed rail, the costing for Thiruvananthapuram to Ernakulam Section has first been done and it comes to Rs. 29113 Crores at May, 2011 price level.

xi) The traffic projections have been done based on the candidate for trips along Thiruvannathapuram to Ernakulam Section and using the logistic model In 2020, the expected date of commissioning of this line, it is estimated that 42359 passengers will use High Speed Rail.

xii) It has been assumed that 95% of the passengers can afford to pay only business Class fare which is Rs.4.35 per KM on date and 5% of the passengers will be in position to afford 1st class with the fare of Rs.8.70 per KM.
xiii) 50 Hectares of the Government land for P.D. has been considered for making the Project viable.

xiv) Financial Internal Rate of Return of Thiruvananthapuram-Ernakulam High Speed Corridor comes to 2.21% with Property Development land of 50 Hectares.

xv) The Viability Gap for any private party to take this project on BOT (with 14% return) comes to Rs.33105 Crores (including the cost of land), which is 80% of the total cost of this Project and hence not recommended.

xvi) It is recommended that this Project should be done by an SPV owned by State Govt. and Govt. of India.