Preface

The inherent ability of Indian Railways to move people and material providing inter-state linkages besides being the single biggest employer of the country along with the colossal quantum of capital invested makes it pivotal to the Indian economy. Tracing its history way back to 1853, Indian Railways continue to influence almost all sectors of the economy.

Over the last sixty years passenger traffic has seen 496 per cent rise against 896 per cent increase in freight traffic whereas Railways increased just about 20 per cent route length and 47 per cent track length. The major setback force in this regard is the huge quantum of capital investment required. However one area where Railways can make visible transformation is in the mode of traction. Unstable global prices of crude, the ever deepening uncertainty in the Middle East and the current heavy dependence of diesel traction suggest active pursuit of electrification. Such a state of affairs provides the background for this research.

Since Railways remain one of the most studied Government entities of the country, a number of studies and reports on almost all aspect of IR are available. While the research considers clean slate savings approach to evaluate the need to change the traction mix, earnings approach is employed for evaluating a new line proposal.

The impact of the depleting global crude reserves, rapid rise in global crude consumption, the complex relationship between economy and energy, questions on energy security and the china factor in the global energy scenario needs to be built into while strategizing the shift and pace of transformation. However, the economics associated with the proposal would be the decisive factor in affirming the shift in traction policy or the nature of traction mix.