CONCLUSIONS AND RECOMMENDATION
CHAPTER - X

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

10.1 Rail Transport has played a very major role in the development of our national economy ever since the first railway line was laid in India in the nineteenth century. However, India is still a developing country and it has scarce financial resources which have to be utilised in the best possible manner for its economic growth by selecting right type of infrastructural projects.

10.2 For selection of a good project the first requisite is the preparation of a good project report in which special care has been taken for realistic projections of project life, cash outflows and cash inflows. Financial appraisal of the project should be done using discounted cash flow technique for working out various indices like Net Present Value, Benefit-Cost Ratio and Internal Rate of Return, etc. Sensitivity analysis should also be done. However, for obvious reasons new railway line projects in backward regions might not fulfil the criterion of financial viability. The
purpose of these projects is not to earn a return on the project cost as per the norm but to give a fillip to the economic development in the region, to act as a change agent in the region. Hence the utility of the project for the economy has to be appraised by using economic analysis/social-cost benefit analysis.

10.3 Economic Analysis/Social Cost Benefit Analysis is used for appraising a project from the point of view of its importance to the economy/society. This is done by using quantifiable monetary costs and benefits of the project to the economy/society for working out the indices.

a) This requires use of shadow prices of inputs and outputs. For some parameters, value of shadow prices would be equally applicable for all projects throughout the country, for others the value of shadow prices will be applicable to specific regions only. These shadow prices should be worked out by a central body like Planning Commission in India and revised from time to time.
b) The indirect costs and benefits should also be included in the economic evaluation.

c) Sensitivity analysis should also be done to find the significant factors to which the economic return on the project is most sensitive. The most probable estimate of this factor should be used to find the expected economic return.

In the traditional economic evaluation procedures only those costs and benefits are included which can be monetized. The following are some of the controversial aspects (issues) of the economic evaluation techniques.

10.4 The economic evaluation procedures involve strict accounting of costs and benefits over the life of each alternative project or policy. They provide the decision-maker with a single numeric value for each option, thereby permitting a rapid unidimensional assessment of each option. Each of the procedure requires the estimation of a set of forecasts of travel volumes and cargo tonnage for assessing cash inflows, operating costs and initial capital costs, together with such data as number of fatal accidents, maintenance costs and policing costs for assessing cash outflows. Given these inputs for
each year of project life, selection of one or more discount rates, a net present worth, benefit/cost ratio or rate of return can be computed. With high speed computers and interactive programming techniques, the decision maker can be provided with a variety of evaluative data points, wherein the assumption for each alternative may be varied over a range of feasible values and the sensitivity of the numeric outputs determined.

Many a time it is not possible to monetise the outputs especially in transportation projects. In such cases it becomes necessary to use cost-effectiveness analysis. It attempts to circumvent the strong quantitative orientation of the economic evaluation and allows the consideration of a much broader set of consequences of the projects and policies. It allows consideration and appraisal of the consequences to both users and non-users. The technique is grounded in the systems-analytic framework. The definition of goals and objectives permits the development of a concept of effectiveness. The cost effectiveness procedure is thus a framework within which the
decision maker can assess the various levels of achievements of objectives that may be obtained at various levels of costs.

10.6 Impact analysis may also be considered as an element of cost effectiveness approach. It represents the enumeration of measures of effectiveness. Environmental impact statements can be prepared and suitable values or weights given on the basis of some scientific criteria, such as levels of public reaction to the various anticipated outcomes.

10.7 The appraisal system for the new railway line projects in the backward regions of India has to be done in a different manner. The population and area combined together make India comparable with China only. But India does not have a homogeneous population and if it is decided to go in for development of the backward regions, the situation in this country becomes entirely different from all other countries. Hence India has to have a unique development strategy. If it is decided to concentrate the population in a few cities along the trunk routes, perhaps commercial operation of the railways could become possible. But in a developing economy of India's size, having true
spirit of a welfare state it will not be possible to allow the vital sector of railways to become entirely commercial. A profit yielding railroad system will be most welcome; indeed, in course of time, most of the routes would become profitable but profit can never be the guiding factor for the India railways.

10.8 The western countries as well as the socialist block have reached the age of high mass consumption. Their population have sufficient purchasing power and the basic infrastructure is well developed. In such a situation any expansion is primarily meant to keep up the growth process. Secondly such expansion of the railways is an addition to the existing facilities and as such falls into the category of national luxury. This is why in these countries any such expansion must yield a minimum financial rate of return, e.g. 12% in USSR.

10.9 But India is yet to develop the basic infrastructure for sustained growth. Thus any investment in the infrastructural sector need not be justified on grounds of financial return to that particular sector. Secondly India does
not have and need not have a western pattern of urbanisation. In the age of a permanent nuclear threat her scattered population is a great strength. Hence within the frame of a decentralised population the growth strategy is to be worked out on the basis of balanced regional growth.

10.10 India's proclaimed national objectives are to remove regional disparities and to develop tribal/backward regions. Many of these backward regions are rich in natural resources. Rail Transport is the cheapest mode of mass/bulk transport which can act as a catalyst for the economic development of these backward regions. Hence while appraising the new railway line projects through these regions due weightage should be given for their role of development stimulator so that such projects could be chosen for the economic development of these regions.