# ABSTRACT

Increasing complexities of techno-socio-economic environmental factors like scarcity of important resources, fast technological innovations, competition in domestic and overseas markets, governmental deregulations in the wake of liberalisation and globalisation have made strategic planning inevitable. The objective of the study is to gain insight into the dynamics of the various factors affecting the Indian Copper Industry to devise a suitable methodology for strategic planning for it. The study has attempted to integrate demand, market share, installed Capacity, capacity acquisition, source of fund, Price, Profits, etc. The study examines the various policy options to arrive at appropriate ones. A major contribution of the present study is the development of a comprehensive system dynamics model, as a basic methodology for effective strategic planning taking into account important dynamics involved. The study demonstrated the utility of system dynamics in developing integrated model through an application to the Copper Sector. This thesis is divided into four phases spread over seven chapters. The first phase refers to the problem identification, main issues and specifying the objective of the research. Literature on corporate planning models are reviewed. In the second phase, historical perspective of the industry, demand-supply gap and problem faced were studied using available literature, reports of R & D organisation etc.

The third phase invovled identification of key variables relating to the industry and establishing causal relations between them based on interactions with executives of the organisation at various cross-section and published data.

System dynamics model comprising of three sectors (i) Marketing & Production, (ii) Fund

acquisition and (iii) Revenue and expense were developed. Qualitative and quantitative validation was carried out. Policy experimentations were carried out with validated models. These were analysed and long term strategies were identified. Also, sensitive parameters / variables were identified for the purpose of monitoring and control.

In the fourth and last phase, a linear programming model was developed to evolve short range plan. In the last phase of the thesis, major findings and significant contribution of the research followed by a set of recommendations were brought out. The thesis, finally, ends with limitation of the study and suggestions for further research in this area.