CHAPTER - VII

SUMMARY, FINDINGS AND SUGGESTIONS

VII. SUMMARY, FINDINGS AND SUGGESTIONS

A perusal of this chapter will give us a bird's eye view of the quintessence of this thesis and this serves as the epilogue that records some of the salient findings and suggestions.

7.1 SUMMARY :

The first chapter deals with various aspects of the Indian Cement Industry. Cement is one of the most versatile construction materials and the growth of the cement industry plays a vital role in the nation's economic structure and growth. The Indian Cement Industry with a significant turnover of Rs.18,000 crores, comprises 59 companies with a galaxy of 117 large cement plants and above 311 mini-cement plants that enjoy the status of being the first industry to be liberalised 17 years ago. The remarkable growth witnessed in the last decade as a result of the first experiment of liberalisation in early eighties continues to unfold in nineties too. The unprecedented growth has brought in a sea change in the system of production, distribution and marketing. The deregulation of the industry, partial decontrol from 1982 and total decontrol from 1989 facilitated competitive environment and thereby the industry was extraordinarily benefited by it. It was modernised and restructured so as to adopt itself to meet the challenges of such an environment and

secured for itself a position among the world leaders in the industry. Thus the healthy development and growth of this industry is of vital importance to our country.

India achieved self-sufficiency in cement in 1989, 75 years after the commissioning of its first plant in 1914. The entire Indian cement industry concentrated mainly in 6 states namely Madhya Pradesh, Andhra Pradesh, Rajasthan, Gujarat, Karnataka and Maharashtra that account for over 75 per cent of the installed capacity and 77 per cent of production. Cement is among the top three commodities in the matter of excise duty collection – iron and steel, cigarettes and cement. Excise duty from the cement industry for the past one and half decades has been continuously increasing and it has reached Rs.2,457.10 crores in 1997-98. India entered the world cement scenario by exporting cement in 1989. From that year onwards, India constantly increases her world market shares with the modest exports from 78,000 tonnes in 1988-89 to the phenomenal rise of 26,41,000 tonnes in 1997-98.

The second chapter presents a vivid picture of some of the aspects such as the objectives, importance, methodology and sampling, scope and limitations etc. of this thesis.

The researcher, therefore, felt the need for providing all the information with organised effort which would help this industry to review its existing plans and

policies to develop more in all walks of life. Considering the vital role played by the cement industry for the development of Andhra Pradesh and its contribution to improve the standard of living of our state's population and in improving the state's exchequer, the present research work intends to study the "Growth and Prospects of Cement Industry in Andhra Pradesh" with the following objectives, methodology and sampling which is mentioned hereunder :

OBJECTIVES OF THE STUDY

The present research work has been undertaken with the following objectives.

1. To analyse the growth activities of the Indian Cement Industry during the years 1985 to 1998.
2. To study the growth trends in the installed capacity, production and consumption of cement in Andhra Pradesh.
3. To study the cost of production and marketing activities of the Andhra Pradesh Cement Industry.
4. To assess the growth trends in exports of cement.
5. To estimate the industry's future prospects in the coming five years i.e., the period from 1998-99 to 2002-03.

6. **Finally, to suggest certain measures for the strengthening of the cement industry and to make appropriate clues regarding prospects of the industry.**

METHODOLOGY AND SAMPLING

The present research study is based on the data collected from both primary and secondary sources.

A) The primary data is collected by

- **Well planned personal interviews with the top executives, managers, middlemen and holding discussions with all the parties concerned.**
- **Personal interviews and holding discussions with the top officials of Cement Manufacturers Association (Major Plants) and Andhra Pradesh Mini-Cement Manufacturers' Association.**

B) The secondary data is collected from

- **Published and unpublished company manuals, records, files, brochures etc.**
- **data published by Economic Times Research Bureau, Kotharis hand book on Indian Industries, various books and journals on the subject along with the number of news paper clippings and journals.**

The views of top executives of the industry as well as cement manufacturers associations were elicited by way of well structured questionnaires. Managers, superiors and other middle level executives, dealers have also been interviewed to elicit information on the basis of non-structured schedules. Though, there were 36 cement plants in operation in Andhra Pradesh, three cement plants from each sector were selected at random for the purpose of study.

The secondary information was collected from the company manuals, journals, news paper clippings, cement manufacturers' associations' manuals, office records pertaining to the performance analysis, other technical and non-technical data relating to the project and statistics of the organisations etc.

SAMPLING :

A sample is a small specimen or separate part of the whole population representing its general qualities as far as possible. It is a smaller set selected from the population reflecting its characteristics. The sampling technique is a procedure for the selection of a sample from the given population. The term sampling refers to the investigation of a part of the whole population or universe.

Though there were about 18 major cement plants and 18 mini-cement plants in operation in the state, as it is not possible to cover all the plants, a sample of three cement plants from major sector and three cement plants from

mini sector have been selected for the study on a stratified random sampling. The stratification of the cement plants was done on the basis of their nature of activities, as it is not possible to cover all the plants in the industry. So the researcher selected stratified random sampling. For studying the prospects of cement industry, the researcher used the "LEAST SQUARE METHOD" for forecasting the cement demand in Andhra Pradesh.

The third chapter reveals a clear picture of the select cement plants – both major and mini along with their profiles. Three major and three mini-plants have been chosen to make a random study of the history and other perspectives of the cement industry in Andhra Pradesh.

In the fourth chapter an attempt has been made to study the growth and development of the cement industry in Andhra Pradesh. The Andhra Pradesh cement industry occupied the second slot after Madhya Pradesh in the cement map of India. This state is having all the necessary natural resources to produce large quantities of cement. Andhra Pradesh with one third of the total country's deposits ranks first in the cement grade limestone reserves.

The Andhra Pradesh cement industry dates back to the second quarter of this century. The first attempt to manufacture cement was initiated in 1939 by Associated Cement Company's plant in Guntur District. As on 31st December 1998, there are 20 large scale units and 30 mini cement and grinding units with an

installed capacity of approximate 18 million tonnes producing various types of cement. According to the industry sources, the Andhra Pradesh cement industry's average growth rate is 12 per cent as against the Indian cement industry's 8-9 per cent. Being a surplus production state, Andhra Pradesh is able to meet the entire state's demand with great style and also the demand of the entire Southern states and some other surrounding states. The per capita consumption in Andhra Pradesh has been all along higher than that of our country as a whole. Even though the state is one of the surplus states in the country, it entered the world cement market only in the year 1992-93. The Andhra Pradesh cement industry has contributed valuable foreign exchange to the country's economy through exports to Bangladesh, Sri Lanka, Miyanmar, Indonesia and some other countries in the Gulf. Thus on the export front, it has a great scope to earn valuable foreign exchange to the exchequer.

Further, for a developing country like India, it is not only necessary to increase the cement production and reduce cost of production, but appropriate marketing policy is also needed for tapping the vast Indian and World markets. That's why, in the fifth chapter, an elaborate discussion has been initiated about the various input factors viz., raw materials, coal, power, freight, administration and other costs, capital related costs and duties and taxes to produce cement and also study the select cement plants' cost factors to produce one tonne of cement. And in the second part of the fifth chapter, a thorough discussion on the marketing and its

facets viz., product, price, place, promotion and packaging developments has been taken-up and that of the strategies implemented by the industry as well as select cement plants in both the sectors.

A gallant effort has been made in the sixth chapter to study the various areas of the prospects viz., (a) housing, offices, commercial establishments, schools, hospitals, factories etc.; demand for rehabilitation, rapairs, maintenance and extensions, (b) infrastructure such as irrigation projects/canals, power houses, railways and roads etc. and (c) prospects for export potential. Particularly, in the state of Andhra Pradesh cement industry is having an extraordinary scope to improve the sales in the Ninth Plan period because of the extensive developmental programmes taken-up by the state government under the leadership of Hi-Tec Chief Minister Mr. N. Chandrababu Naidu. In this direction, the state government has taken-up a number of projects and also having some plans to improve the infrastructural facilities in various parts of the state. Moreover, this chapter highlights the demand and sales forecast of Andhra Pradesh cement industry as well as that of the select cement plants both major and mini sectors by using the demand forecast method i.e."Least Square Method" which is mentioned in the Appendix 6.1.

An attempt has been made in this final chapter to bring out the brief discussion about this thesis and also serves the some of salient findings and suggestions.

7.2 FINDINGS :

1. **It is found that the average capacity utilisation of the Andhra Pradesh cement industry is higher than that of the Indian cement industry and it is expected to be upto 85 per cent.**
2. **Cement consumption in Andhra Pradesh is low when compared to the developed states like Maharashtra, Punjab, Delhi, Tamil Nadu etc.**
3. **Being a surplus state, Andhra Pradesh has been supplying approximately about 50 per cent of the total production to the surrounding states and to the world market.**
4. **In Andhra Pradesh, 12 mini-cement plants out of 30 were closed down because of inadequate working capital, heavy competition from larger units and non-availability of skilled labour in rural areas.**
5. **The capacity utilisation of the mini-cement plants in Andhra Pradesh is around 70-75 per cent and this is lower than that of the major units and the Indian cement industry.**
6. **The Andhra Pradesh cement industry's export have been in decreasing trend since 1994-95.**
7. **The per capita consumption of the cement in Andhra Pradesh is around 112 kgs. whereas that of the Indian consumption is only 82 kgs. in the year 1998.**

8. It is found that, the Andhra Pradesh cement industry is facing problems to procure sufficient quantity and quality of coal from Singareni Coal Fields.

9. The Andhra Pradesh cement industry has been experiencing severe power-cuts and abnormal hike in power tariff i.e. 891 per cent during the last 17 years from the State Electricity Board.

10. The duties and taxes paid by the industry are upto 30 per cent in the total cost of cement production.

11. In the last 8 years, i.e. from 1990-91 to 1997-98 the increase in the cost of inputs jumped considerably by Rs.1615 per tonne i.e. on an average of about Rs.202 per tonne per annum. The increase was maximum in the year 1991-92 which amounted to Rs.400 per tonne.

12. One of the crucial cost elements, railway freight on coal and cement also increase by Rs.265 per tonne in the last two years which severely affected the cost of production of cement.

13. Because of various governmental policies, the Indian cement market smartly changed its nature from "Sellers Market" to "Buyers market" in this decade.

14. The mini-cement plants in Andhra Pradesh are forced to fix their cement prices lower than those of the major counterparts even though the quality of cement is the same.

15. Cement Manufacturers' Associations (major and mini) efforts are not in a proper way to request the various state and central governments for clearing the various new infrastructural projects and large constructions.
16. As per the estimates of VIII Five Year Plan, the housing shortage will hit 40.8 million units in the rural and urban areas in the year 2001 and this shows better prospects for this industry.
17. Demand for the infrastructure also increases abnormally in the country and this forced various governments to improve the facilities. This type of change also leads to improve the situation of the cement industry.

7.3 SUGGESTIONS :

1. INCREASING CAPACITY UTILISATON :

An important problem associated with financial problems of cement industry is decline in capacity utilisation. A sizeable section of cement industry is exhibiting symptoms of incipient sickness mainly due to low capacity utilisation. The dominant factor responsible for this phenomenon is the shortage of power. Generation of more power in the country in both public and private sectors in coming years will solve this problem. The Andhra Pradesh cement industry have intensified their efforts to utilise their installed capacity in a maximum manner by avoiding various bottlenecks like power shortages, labour problems and other technical problems.

2. MODERNISATION :

The crucial problem facing the cement industry is the problem of out dated worn-out and obsolete machinery and methods. Unless the industry is modernised and the new technology is brought in the increase in the profitability of the industry is not possible. Therefore, there is an urgent need for undertaking modernisation programmes of the industry. This may be done by closing down uneconomic units and converting the others to completely dry process which results in saving energy energy consumption.

3. PROTECTION TO MINI-CEMENT PLANTS :

The mini-cement plants in Andhra Pradesh are facing a lot of problems like power, coal supply, marketing and other financial problems. Apart from the above, taxes and duties are also increasing the cement cost of production per tonne. There is a great necessity to sort out the problems faced by the mini-cement plants sector by the state and the central government. The central government had better to reduce the existing excise duty i.e. Rs.300 per tonne and in the same time, the Andhra Pradesh state government also should necessarily give the sales tax concessions to this sector. Apart from the tax and

duty concessions, both the governments should also think about various other benefits required to give a support to the mini plants sector i.e., concessions in power tariff, freight benefits and other financial support.

4. EXPORT CELL :

In serving the Andhra Pradesh cement industry as well as the cause of overseas clients, the Cement Manufacturers' Association should setup a separate "Export Cell" to receive cement import enquiries from different countries and disseminate the information to its members. In order to increase the export of cement, an export cell exclusively for the Andhra Pradesh cement industry in Hyderabad should be opened. Because at present only approximate 0.09 per cent of the cement manufactured in Andhra Pradesh are exported to surrounding countries like Bangladesh, Sri Lanka, Miyanmar etc. There is a good export potential in different parts of the world. For tapping the export market more effectively, steps should be taken to establish a separate coordination body operating from Andhra Pradesh. And at the same time, frequent visits of joint high-level business deligations of government and industry to all potential countries will strengthen the relations and eliminate non-tariff barriers and promote trade with India. Exports could be increased provided the industry could cut its costs so as to compete in the world market. To boost up the export, the following measures could be considered.

- **Supply of cement to Indian construction companies working abroad.**
- **Cement to be included as one of the commodities while giving aid to other countries.**
- **While going in for large import to include cement as one of the items to be exported from India as counter trade.**

To set-up exports and reach out to more countries across the globe, cement units may find it necessary to establish captive port facilities, as indeed some major plants in Gujarat coast have done. Similar facilities on the East coast will help cement surplus states Andhra Pradesh, particularly the plants close to the coast.

5. NEED FOR REDUCING COSTS :

The industry must make attempts to reduce cost in every field. Any small reduction in cost will decrease the cost of production which causes higher demand and eventually higher production. In nineties, cost of cement production has gone up Rs.1615 per tonne i.e. on an average of about Rs.202 per tonne per annum. So attempts for cost reduction are imperative. The Andhra Pradesh cement industry's average cement cost of production per tonne being Rs.2500 in terms of raw materials, power, coal, freight, administrative costs, capital related costs and duties and taxes. The Andhra Pradesh cement industry have intensified their efforts to avoid various unnecessary costs in administration and production areas. Apart from

the attempt by the industry, the government may reduce various taxes and duties. More than 65 per cent input costs are governed by government such as coal, power, railway freight, royalty on limestone, excise and sales taxes etc. So to safe guard the interest of various parties concerned the government may provide subsidies or concessions. Particularly, mini-cement plants in Andhra Pradesh have to reduce the various capital related costs which lead to cut down the cost of production. The responsibility for controlling the raise in business costs is to be shared by management, employees and government. Professional and highly competent managers must be recruited who try for cost control and efficient way of making and marketing products. So the entire Andhra Pradesh cement industry is required to put up their best efforts to reduce the cement cost of production.

6. POWER POLICY OF THE STATE GOVERNMENT :

The Andhra Pradesh cement industry is facing a lot of problems with the State government power policy. The industry is experiencing severe power-cuts and abnormal hike in power tariff i.e. 891 per cent in the last 17 years. The state government have to intensify their efforts to produce enough power and at the same time reconsider their power tariff policy. Whenever, the state government changes its power policy, it should give an extraordinary fillip to the industry to reduce the cost of production.

7. MARKETING OF CEMENT :

For the continuous growth of any commercial sector, a strong dynamic and efficient marketing strategy has to be formulated and followed vigorously. Such measures avoid high inventory and help quicker turnover. Many of the problems like working capital, poor financial position are the result of ill designed marketing system. The cement plants in Andhra Pradesh particularly mini plants are to change their existing marketing policies. They concentrate more on their packaging, prompt delivery, pricing, distribution, advertising and sales promotional activities etc. to increase their market shares in the markets, which they serve. The Mini Cement Manufacturers' Association has intensified its efforts to develop a uniform pricing policy to avoid cut-throat competition with major cement plants. Apart from the above, the cement plants in Andhra Pradesh expand their existing channels to give a prompt service to the wide-spread customers throughout the state. The Andhra Pradesh cement industry is required to start the modernising of the distribution system to ensure higher quality of service to the customers. Ready Mixed Concrete (RMC) is the foremost in this regard, which accounts for 80 to 90 per cent of the cement produced in the advanced countries. And at the same time, the industry also had better to use the superior, cost effective packaging material viz., paper/HDPE/Polypropylene etc. of the customer's choice of colour and design for easy identification to get the competitive edge over their competitors.

8. SPECIAL ATTENTION TO RURAL MARKETS :

The Indian rural market is 300 times larger than the urban market. The Andhra Pradesh rural market is also having that type of potential because of their extensive agricultural activity. The Andhra Pradesh cement industry is also developing a separate marketing plan for tapping the small wide-spread rural market. There is a need to develop a separate price, distribution and promotional policy for this market. So for tapping the vast rural market, the Andhra Pradesh cement industry doubled their effort to make a way into this rural market. This will include promoting sustainable technologies for better housing, e.g. micro concrete housing elements like purlins, tiles, soil cement bricks, fly ash-cement bricks etc. This would help exploit the huge untapped potential of rural applications.

9. WORKSHOPS / SEMINARS / ADVISORY SERVICES :

In order to create newer cement applications and construction technologies to the consumer, the cement companies in Andhra Pradesh have to organise the workshops/seminars on topical subjects such as cement concrete roads, concrete canal lining, ready mixed concrete, housing, infrastructure, modernisation, pollution etc. from time to time. Apart from the above, there is a need to arrange dealer / stockist, mason and technician meetings to give a clear picture about the

changes occurred in the cement product, storage and other technical developments in the industry. And at the same time, free technical advice is also necessary to contractors/engineers, masons from the individual cement companies. Moreover, in view of the varieties and grades of cement now being manufactured and several end uses, advisory services on proper use of cement and its products would be most beneficial to the consumer and build confidence.

10. GOVERNMENT POLICY :

Approximately 65 per cent of the factors of production to produce cement is controlled by the state and central governments. Taken into consideration of the contributions to the state and central exchequer from this highly taxed cement industry, both the governments are going to review their duties and tax policies in a positive manner. The central government had better to give permissions for duty free import of furnace oil and coal against export of one tonne of cement and clinker and the railway ministry has to review its freight rates for providing special concessions to the cement plants for movement of raw materials and cement. The central government provides special central excise duty exemptions and permitting tax holiday etc. for encouraging the Ready Mixed Concrete and RMC should be specified in all government tenders for their projects. Apart from the above, excise duty and sales tax on cement used for large construction projects like concrete roads, canal linings, dams etc. should be exempted.

11. SPEEDY PROJECT CLEARANCE :

The state and central governments are taking long time to give clearances for implementing the large construction projects. These governments have to come out from severe red-tapism and clear permissions for the large projects which give some significant boost-up to the cement industry. The cement industry has to request the various governments for speedy clearance of large construction projects in various parts of the country. The governments from their part have to recognise the importance of promoting housing, construction of roads and buildings, dams, drainage canals, canal lining etc. to kick start the economy which gives an extraordinary increase in the cement consumption. So, the Manufacturers' Associations of this industry have to intensify their efforts to get various large construction project clearances from various state and central governments.

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