CHAPTER-IV
CHAPTER IV

PRODUCTIVITY MANAGEMENT OF HIRA AND KONARK CEMENT PLANTS.

4.0 INTRODUCTION:

A brief history of cement industry of Orissa and also that of two major cement plants namely, Hira and Konark are described in this chapter. Hira cement is under the control of Orissa State Government and Konark is under the control of a major industrial house in the private sector. Both the cement plants are managed under the supervision of management professionals.

4.1 CEMENT INDUSTRY IN ORISSA: A BRIEF DESCRIPTION

The history of cement industry in Orissa is not very old. The first cement plant in Orissa was established in the year 1949 i.e. in the post independence era in the name of Orissa cement limited (Konark) with the initiative of Jai Dayal Dalmia. The plant started its production in the year 1950 with a modest start of one cement plant of annual capacity of 167648 tonnes.

The second industry in the state came into existence in the year 1963 and the plant started commercial production in 1968. The initial license capacity was 3.68 lakh metric tonnes per annum. The Industrial Development corporation of Orissa Ltd., under the banner of Hira Cement works started the company to produce both OPC & PSC.

The third cement plant has been started only three years back by Larsen & Toubro Ltd. The company gets its Clinker from
Nagpur Unit and grinding is done in this plant. The plant is basically started to tape the market in Orissa, M.P., Bihar and Assam. It grinds clinkers in a cement mill of capacity 2000 TPD.

Apart from these three big cement industries (Table - 4.1) there are around twenty six mini cement plants and most of these cement plants are situated in the western region of Orissa. The region is richly gifted with limestone and coal, which has led to setup cement industries in this region. Besides the power, water and man power is also quite abundant in this region. Presently Orissa accounts for nearly 3% of the total cement production in the country.

The cement companies of Orissa had no marketing problem till 1989, since then many new plants entered the arena and thus the market scenario changed from Seller's market to buyer's market. This situation made all the companies to rethink about their marketing concept and strategy. The total installed capacity of cement plants in Orissa was 20.64 lakhs tonnes per annum in the year 1993-94 and the consumption was 12.36 lakhs tonnes per annum in the same year. Hence, it is evident that the state is producing more cement than the demand. The companies have recognised the need of promoting the sale and are incurring expenditure on that head. In the year 1994, the Konark cement had a sale of 198.98 crores of rupees and the expenditure on advertising and marketing was 0.74 crores Thus, the percentage of expenditure on sale promotion was 0.372. Hira cement spent 0.06 crores out of total sale of 57.98 crores in the same year and the percentage of expenditure was 0.11.
Apart from selling the cement in Orissa and other states the Konark Cement and Hira cement are exporting their product to Nepal, Bangladesh, Pakistan, Sri Lanka & Bhutan. In the year 1993, Konark cement exported 2% and Hira exported 3% of their total sale volume. Presently, the industries are heading towards modernisation and they are trying to replace the old wet process by dry process which is more efficient, and economical. Konark cement has already started test production in the new plant using dry process and the plant is equipped with most modern machinery to control the process and quality. The Hira Cement is also following the same path and within a year or so this company will switch over to dry process.

**TABLE - 4.1 LIST OF LARGE CEMENT PLANTS IN ORISSA**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Name of the plant</th>
<th>Capacity (TPD)</th>
<th>Location District</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Konark (Orissa Cement Ltd.)</td>
<td>1800</td>
<td>Sundargarh</td>
<td>Oldest under private sector,</td>
</tr>
<tr>
<td>02.</td>
<td>Hira Cement (IDCOL)</td>
<td>2630</td>
<td>Bargarh</td>
<td>A Government of Orissa Undertaking</td>
</tr>
<tr>
<td>03.</td>
<td>Larsen &amp; Toubro Ltd</td>
<td>2000</td>
<td>Jharsuguda</td>
<td>Does not have a rotary kiln</td>
</tr>
<tr>
<td>04.</td>
<td>Snehadhara Cement</td>
<td>600</td>
<td>Malkangiri</td>
<td></td>
</tr>
<tr>
<td>05.</td>
<td>IPI-SP Cement</td>
<td>400</td>
<td>Sundergarh</td>
<td>Smallest</td>
</tr>
<tr>
<td>06.</td>
<td>Chariot Cement</td>
<td>600</td>
<td>Sundergarh (Rourkela)</td>
<td>Does not produce clinker</td>
</tr>
</tbody>
</table>

TPD- Tonnes Per Day.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the plant</th>
<th>Capacity (TPD)</th>
<th>Location District</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Trishul Cement (P) Ltd.</td>
<td>50 (grinding)</td>
<td>Sundergarh</td>
<td>No stack</td>
</tr>
<tr>
<td>02.</td>
<td>Mukund Cement India (P) Ltd.</td>
<td>60</td>
<td>Sundergarh</td>
<td>Kiln capacity is 20 TPD only</td>
</tr>
<tr>
<td>03.</td>
<td>Krishna Cement (P) Ltd.</td>
<td>100</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>04.</td>
<td>Kalinga Cement (P) Ltd.</td>
<td>150</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>05.</td>
<td>Kanak Cement (P) Ltd.</td>
<td>50</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>06.</td>
<td>Neelachal Cement Ltd.</td>
<td>50</td>
<td>Bolangir</td>
<td></td>
</tr>
<tr>
<td>07.</td>
<td>Vedavyas Cement (P) Ltd.</td>
<td>50</td>
<td>Sundargarh</td>
<td></td>
</tr>
<tr>
<td>08.</td>
<td>Jai Jagannath Cement Udyog (P) Ltd.</td>
<td>50 (only grinding unit)</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>09.</td>
<td>Shree Gopal Cement Ltd.</td>
<td>50</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Siva Cement Ltd.</td>
<td>130</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Bighnesh Cement Works (P) Ltd.</td>
<td>30</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Ambika Cement (P) Ltd.</td>
<td>50</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Rock Cement (P) Ltd.</td>
<td>50 (only grinding unit)</td>
<td>-do-</td>
<td>No stack</td>
</tr>
<tr>
<td>14.</td>
<td>Olympic Cement (P) Ltd.</td>
<td>-do-</td>
<td>-do-</td>
<td>-do-</td>
</tr>
<tr>
<td>15.</td>
<td>Sushila Cement (P) Ltd.</td>
<td>50</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Subham India Ltd.</td>
<td>100</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Champion Cement India (P) Ltd.</td>
<td>150</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Shree Sakti Cement Ltd.</td>
<td>30 (grinding)</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Sita Cement Ltd.</td>
<td>50</td>
<td>-do-</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Vimal Cement Ltd.</td>
<td>100</td>
<td>Sundargarh</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>B.S. Cement (P) Ltd.</td>
<td>30</td>
<td>Bolangir</td>
<td>Closed</td>
</tr>
<tr>
<td>22.</td>
<td>Ramphal Cement (P) Ltd.</td>
<td>50</td>
<td>Sundargarh</td>
<td>Closed</td>
</tr>
<tr>
<td>23.</td>
<td>Utkal Cement (P) Ltd.</td>
<td>30</td>
<td>Koraput</td>
<td>Closed</td>
</tr>
<tr>
<td>24.</td>
<td>Hanuman Works (P) Ltd.</td>
<td>30</td>
<td>Koraput</td>
<td>Closed</td>
</tr>
<tr>
<td>25.</td>
<td>Shree Durga Cement (P) Ltd.,</td>
<td>25</td>
<td>Ganjam</td>
<td>-do-</td>
</tr>
<tr>
<td>26.</td>
<td>Kalahandi Cement</td>
<td>30</td>
<td>Kalahandi</td>
<td>-do-</td>
</tr>
</tbody>
</table>
4.2.HIRA CEMENT WORKS:

This is one of the units of Industrial Development Corporations of Orissa Limited (IDCOL), a Government of Orissa undertaking situated in the district of Bargarh. The site is well connected by roads with Mumbai, Calcutta by road (N.H.No.6).

The plant is situated at a distance of nearly 50 Kms from the main lime stone quarry at Dungri. The existing level is about 185 M above MSL. The maximum temperature during summer at times goes up to 50°C. The relative humidity ranges from 25% to 88%.

The present production capacity of the unit is 5.65 lakh tonnes per annum of Portland slag cement using wet process. The commercial production of the plant started in April, 1968. The Licensed capacity after the 1st phase of expansion became 5,65,000 metric tonnes per annum.

The unit has in total 3 cement mills, 2 raw mills, 2 rotary kilns, one slag dryer, two primary crushers, two secondary crushers, two coal mills and two ESP.

The product mix is well distributed with ordinary Portland cement and Portland slag cement as per the market demand.

Over the years, the mill has been expanding with the addition of plant and machinery in different sections of the mill stages. At present the mill has multiplicity of machinery in almost all sections and most of the machinery are old and age critical. The mill, therefore, described that a detail technical audit be carried out in order to assess the performance of individual
section of the mill in term of capacity utilisation, consumption of input materials etc. and also to develop a comprehensive mill development plan.

**GENERAL INFORMATION**

a. Foundation laid on - 19th December, 1963
b. Date of commissioning
   MG Rly. line from Dungri
   Limestone quarry (DLQ) to work - 31 December, 1966
c. Length of the Rly Line
   - MG Rly 43 Kms
   - BG Rly 4.5 Kms
d. Date of first trial run of the plant - 10th May, 1967
e. Date of first dispatch of cement - 3rd, Feb., 1968
f. Date of first commercial production of the plant - 1st April, 1968
g. Date of handing over of DLQ to IDC from OMC (Orissa Mining Corporation)

**Land**

a. Factory and colony - 453.7 Acres
b. Colony at Dungri - 75.16 Acres
c. MG Railway line - 452.08 Acres
d. BG Railway line - 63.02 Acres

**Mining Lease**

a. DLQ - 1241.00 Acres
b. Behera-Banjipali Mine - 752.00 Acres
c. Dampalla Limestone Mine - 104.19 Acres
d. Rahanpadar Limestone Mine - 269.92 Acres
Capital Expenditure

Total capital expenditure 3584.86 lakhs including incurred up to March, 1962 factory, quarry & Rly line

Employment

<table>
<thead>
<tr>
<th></th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employment in Factory</td>
<td>880</td>
<td>601</td>
<td>1481</td>
</tr>
<tr>
<td>Total employment in quarry</td>
<td>218</td>
<td>770</td>
<td>988</td>
</tr>
<tr>
<td>Total factory &amp; quarry</td>
<td>1098</td>
<td>1371</td>
<td>2469</td>
</tr>
</tbody>
</table>

Capacity

a. Original licensed capacity - 96,000 MT per annum of OPC (ordinary Portland cement)
b. Licensed grinding capacity - 5,65,000 MT per annum of cement after addition of Portland slag cement one cement mill.

Marketing (1994-95)

<table>
<thead>
<tr>
<th>State</th>
<th>Quantity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orissa</td>
<td>2,90,000 MT</td>
<td>(58%)</td>
</tr>
<tr>
<td>West Bengal</td>
<td>1,00,000 MT</td>
<td>(20%)</td>
</tr>
<tr>
<td>Assam</td>
<td>00,000 MT</td>
<td>(4%)</td>
</tr>
<tr>
<td>Bihar</td>
<td>76,000 MT</td>
<td>(15%)</td>
</tr>
<tr>
<td>Export</td>
<td>10,000 MT</td>
<td>(3%)</td>
</tr>
<tr>
<td></td>
<td>4,90,000 MT</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

4.2.1 PROBLEMS OF PRODUCTIVITY MANAGEMENT:

The following problems related to management of productivity are identified.
4.2.2 PROBLEMS RELATED TO PRODUCTIVITY MEASUREMENT OF HIRA CEMENT:

The company uses some non standard performance indicators as a part of management information system; which are measured monthly and communicated to relevant personnel in management for review and discussion for corrective action if any. These indicators are listed in Table -4.2.

A close look to these indicators reveal that most of the measures are at best partial productivity measures and some of them are not productivity ratios at all. The absence of performance indicators like manpower productivity ratios or overall productivity ratio etc. are also noted. This creates problems in terms of inaccurate evaluation and giving the managers opportunities to provide some excuses for low productivity in terms of lack of certain inputs for which functional heads themselves are not responsible. Moreover, for critical evaluation a set of 14 indicators is a difficult task and at times during review meetings of functional heads the focus of discussion is not clear or results in focusing at non priority area.

TABLE - 4.2 LIST OF EXISTING PERFORMANCE INDICATORS IN HIRA CEMENT:

1. Net productivity = Net output.
2. Kiln efficiency for kiln 1, 2 & 3.
5. Total production ( in MT).
6. Total sale ( in MT).
7. Percentage of sales production.
10. Slurry production (in MT).
11. Total running hours.
12. Actual production hours.
14. Overall productivity = \[ \frac{\text{Gross output}}{\text{Actual production hours}} \]

4.2.3 PROBLEMS RELATED TO FUNCTIONAL AREAS OF HIRA CEMENT:

(i) The plant and machinery are now above 25 years old and have some maintenance and quality problems. Since the plant is a continuous production system and the machinery are very old, the reliability of the plant is very low and the total down time is bound to be quite high. Moreover, in the continuous production system any breakdown of any of the facilities in the line forces the plant to stop production. The plant uses wet process for production which is technically less efficient than dry process. The company can go for a new plant using dry process but it requires major capital expenditure.

(ii) The process parameter is poor and material yield is also small because of the old machinery and old process control. The quality is unpredictable due to fluctuating process parameters.

(iii) On finance side the company is not very uncomfortable. Working capital and other expenditure is met from the common fund of industrial development corporation of
Orissa since this belongs to the group of industries set by IDCOL.

(iv) The power supply, which is supplied by Orissa State Electricity Board, (OSEB) is generally adequate except in the months of summer namely May, June & July. During this period there is power cut and the plant utilisation drastically goes down. Diesel generating set are used to compensate the inadequacy in supply of power.

(v) The functional role conflicts are many. Sometime the line managers feel that they are under privilege than administrative, marketing & financial managers. The cause of poor performance is not identified due to lack of trust among the different groups of managers and responsibility is shifted and thus the management takes wrong actions. The company in its history has been headed by political leaders and administrative officers deputed by state Government who have stakes what so ever in effectively managing in a professional manner. So the specialists in this plant has a grievance against the top management and they feel neglected.

4.2.4 PROBLEMS GENERIC FROM THE EXTERNAL ENVIRONMENT

(i) The cement has a good market demand both in the state and outside the state. So the company did not have much problem regarding the market demand. Recently the threat has come in terms of mushroom growth of mini cement plants and big projects like L & T cements and other such
new plants being planned in this region with better technical know how and foreign collaboration.

The redeeming future of the company however, is that the market demand is also growing very fast with the introduction of Private House Financing Corporation & Government Assistance for house building. The special assistance of central Government granted to this region of Orissa is also another factors for growing demand of cement.

(ii) The company produces cement using wet process which is not a fuel efficient process and quality wise the cement is not that good too. At present the new industries adopt dry process, so they have a lower cost of unit production and better quality and more competitive in the market. Most of the new plants are automatic and use latest technology thus they have an edge over Hira Cement. Recently the plant started by Larsen & Tubro is using dry process and the plant is fully automatic. So in order to compete with such plants, Hira cement has started a new plant which will be fully automatic and will use dry process. The plant is expected to start production within a year or so.

(iii) Hira cement, till recent years was enjoying the Governmental patronage for selling its product. As per the standing rule of the Orissa Government, Hira cement was selling 35 to 40% of its total production to Government. Further, Government was also paying a higher price, about 150 rupees more per tonne to Hira cement than the market price. So there was no problem in marketing at least 40%
of its production was assured to be marketed. In the year 1996 Government of Orissa decided to buy cement from the open market which came as a big blow to the company. However since the company was engaged in selling 60% of its production in the market, the Managing Director felt that the set back in sale will be for a month or two and within that financial year the company would strengthen its hold in the market to sell the other 40% of its production. "A new marketing policy is to be introduced which will be more customer oriented and will yield long term benefit to the company" he added.

(iv) The Environmental Pollution Protection Act of the Government of India and its implementation by the state pollution control board is intended to eliminate pollution of air, water, and land, these regulation have led to an increased awareness by the business community. Hira cement is engaged in mining of lime stone so the company undertakes Social forestry schemes and also control deforestation in the mining areas. Electrostatic precipitators are now used to control air pollution from the plant. These majors although requires capital investment, are essential since these are considered to be key social responsibility of the company.

(v) The company is operating in an area of Orissa which is considered as the undeveloped region by the Government of India. So Hira cement has enormous social responsibilities. The corporate behaviours is to be of such level that it can anticipate and take the lead in future movement beyond current expectation and should avoid
adverse social impacts from company activities. One such example is the willingness of the company to be publicly evaluated for its various activities. Another may be to accept formal and informal inputs from outside groups in decision making.

4.2.5 PROBLEMS RELATED TO PRODUCTION PLANNING IN HIRA CEMENT PLANT:

It is essential that the company should immediately the process of production planning and set targets for better performance because of the existing problems in the plant and also the threats for the future. But the bottle neck is due to the frequent change of Managing Director. The Managing Directors in the past has set the performance targets based mainly on the institutions and they lack the knowledge of new and modern management technologies. While reviewing the situation periodically depending on over achievement or under achievement some explanation is created and presented. The same process repeated over and over again without providing much help for the company in an organised manner nor gave a direction for a right action plans. Sometime in order to impress the Government and to enjoy some benefits the Managing Directors direct the functional heads to temper the data to show profit.

4.2.6 PROBLEMS RELATED TO ORGANISATION STRUCTURE OF HIRA CEMENT PLANT:

The organisation structure is a set of planned relationship between groups of related functions, physical factors and personal requirements to achieve organisational mission.
In this section the organisational structure of Hira Cement has been analysed under the subsections mentioned below. The organisational chart is shown in FIG.- 4.1

i) Real decision makers

ii) Decision making process and delegation of power

iii) Gradation of middle level executives

iv) Span of control

v) Communication

vi) Coordination

vii) Size

(i) **Real Decision Makers**: The real decision makers are those persons who take decisions on behalf of the organisation's prosperity. The analytical approach to organisational structure of Hira cement reveals that the real decision makers for this organisation are Chairman, Board of Directors and Managing Director (MD). This group comprises of The representatives from various financial institutions, two political representatives and bureaucrats. The executive power of this board lies on Chairman and the Managing Director. Hence, it is obvious that the Company is being managed by the political- bureaucratic style. So the company lacks professionalism at the decision making level.

(ii) **Decision making process and delegation of power**: As stated above the decision makers are politicians and bureaucrats. In this system the ultimate aim of the decision makers are to satisfy the people at large and state
Government in particular. Sometimes decisions are taken to grant special favour to a particular section of people or person who matters in the society and Government. People who are posted from state administrative service for a stipulated time period avoid taking risk in decision making since that might adversely affect their career growth. The decision is taken in the board in most instances with consensus method. This method grants equal opportunities and responsibility for a decision taken. So in brief it can be said that the decision making process is not organisational goal oriented.

(iii) There are twelve layers in the organisational structure. Which clearly indicates that layers have been reduced to make effective coordination in a bureaucratic set up. Since the company is a state Government undertaking all the rules and regulation of the state Government are to be implemented first and then comes the organisational need. So it is not clear whether deliberately flat structure is formed or to satisfy the employees more number of posts with same rank has been created.

(iv) Span of Control: An analysis of, the organisational structure reveals that the company has a larger span of control, so it tends to be flat. A flat structure lacks vertical coordination. Hence, the managers spend very less time with each subordinate. But recent cost cutting effort in management science advocates for a larger span of control in order to keep the number of vertical levels in the chain of command to be minimum.
(v) **Communication**: In Hira, the communication process adhere to the bureaucratic model. Usually communication channels are from top to bottom, bottom to top and also horizontal. Breaking in hierarchical order is occasional in this formal organisation. Hence, irrespective of the nature of message, communication is always through proper channel as a result delay occurs in the process of communication.

(vi) **Coordination**: In Hira Cement Work the coordination between different functional heads has emerged through daily and monthly coordination meeting. In daily basis meeting, the functional heads discuss on the opportunities as well as the constraints in achieving the daily target and reasons for the delay and nonperformance of a strategy, if any. The monthly meeting is a review meeting and formulation of action plans for the forthcoming period takes place in such meeting.

In brief, it can be told about Hira Cement that it lacks professionalism in its approach. It is high time now that proper attention is to be given in the areas of decision making, communication process, and proper coordination among the different functional heads.

(vii) **Size**: The company has employed around 2500 people in its mines and factory. This shows that the company has created employment for this region. But it is true that overmening of a company leads to many problems and generally employees dissatisfaction grows. The company being a Government undertaking its general policy is to go
for social upliftment of the region rather than profit making. But care should be taken to see that the company does not become sick due to over employment and other social programmes.
FIG - 4.1 ORGANISATIONAL STRUCTURE OF HIRA CEMENT
4.2.7 PROBLEMS RELATED TO STRATEGIC PLANNING:

A strategy is defined as comprehensive plan or action orientation that sets critical directions and guides the allocation of resources for an organisation. It is a focus for action that represents a "best guess" regarding what must be done to ensure long run prosperity for the organisation or one of its subsystems. Thus, any strategy begins with decision making. Every strategy in turn has the capability to guide the behavior and direction of an organisation in its environment.

The external environment is a dynamic and complex force with which organisations and their managers must contend. Since the companies operate in a dynamic and uncertain environment the managers go for a flexible strategy or, even a set of strategies, each ready for implementation whenever a specific change of circumstances makes its appropriate.

The cement plants in this study have adopted 'GROWTH STRATEGY'. Growth strategy involves expansion of the organisation's current operation. In Hira Cement it is observed that the growth has taken place through a pattern of planned expansion of their existing services, production, physical distribution system, technology and even product diversification. The growth strategy adopted is said to be appropriate by company executives and from discussion with all section of managers the following reasons are enlisted for which growth strategy has been adopted.
1. Growth is necessary for long run survival in competitive and volatile market.

2. Many managers have equated growth as a sign of effectiveness.

3. Some managers believe that society is benefited by growth strategy since production & services are expanded.

4. Growth is a symbol of achievement. So some managers wish to be remembered to leave a monument to themselves in the work place.

5. Growth companies become better known and they be more capable of attracting quality employees as a result.

But many managers feel that a “Combination strategy” should be followed. This means the simultaneous use of more than one of the other strategies. They suggest to earmark the most required areas which needs development and to make a priority list. The company might pursue “Stability” overall but attempt to do so by pursuing “growth” in priority areas and “retrenchment” in other areas.

STRATEGIC PLAN OF HIRA CEMENT

The objectives of Hira’s long term strategic planning are

(i) To produce good quality of cement

(ii) To increase the production
(iii) To explore new market and to increase the sale volume within the present market environment.

**Key trends:**

Cement demand is increasing due to the following reasons:

(i) People are now interested to build houses using cement instead of conventional mud and other binding material.

(ii) Increase in population has increased the demand for new houses and house building materials.

(iii) Due to rapid industrialisation and development in the society the demand for cement has increased.

(iv) Cement pipes, rings and other such new items have replaced cast iron, and other such materials. Thus the demand for cement has increased.

In other words, people can not think of building a house without cement. Since the per capita consumption of cement is increasing in Orissa the cement plants can think of increasing the production to meet the demand.

**Basic Strategy:**

To increase production of better quality of cement, and to increase the efficiency of present physical distribution system.
Operating plans:

The company plans to switch over to dry process from wet process. The reason for switching over to dry process are:

(i) Quality of cement is better than wet process.
(ii) Energy required to produce a tonne of cement in dry process is less.
(iii) Less pollution than wet process.

The unit cost of production will be less in dry process. The company also plans to increase the sale volume by

(i) Appointing more sales or marketing supervisors,
(ii) Appointing more dealers and relocating the dealers,
(iii) Efficient customer service,
(iv) Implementing reward schemes for dealers and marketing supervisors,
(v) Making Hira Cement a common household name by increased Public relation and participating in social activities.

While discussing with the managers of Hira Cement it was learnt that the failure of strategic planning is a normal issue for the company. From the discussion the pitfalls for strategic planning failure in Hira Cement can be enlisted as follows:
(i) Inadequate attention to the major planning elements. Either the elements were neglected or improper conclusions were drawn.

(ii) The company being a state government enterprise, the state administration has a very big role in the success or failure of the strategic planning.

(iii) Senior Administrative officers are appointed for a very brief period as Managing Director and sometimes even political people are also appointed as MD. This is the reason for which their commitment for the implementation and follow through suffers and leads to failure of strategic planning. Many appointed through politics as M.D. lacks with required skill and technical knowledge to head an organisation.

(iv) Top management delegates too much to the planning cell which results in over centralisation of planning in the planning cell.

(v) The organisational objective is not clear and implementation of the strategy is not done in a coordinated manner.

4.2.8 CAPITAL STRUCTURE OF HIRA CEMENT PLANT:

The Capital structure of a business consists of long term funds which are not repayable in the short run and short term funds are those funds which are repayable in the short run. Here the term short run means a period of one year or so, where as long term funds are share holder's fund and loan funds excluding cash credit, bank overdraft and other such funds. Capital
structure of a business consists of the three following elements namely:

1. Share holder's fund
2. Long term loan fund

In this section, the four capital structure ratios namely, debt-equity ratio, proprietary ratio, total liabilities to net worth ratio and capital gearing ratio are discussed.

**Debt - equity ratio**: It is popularly used as capital structure ratio, it is also called leverage ratio and expressed as

\[
\text{Debt-equity ratio} = \frac{\text{Debt}}{\text{Equity}}
\]

Debt means long term loan funds and equity means share holder's fund. This is also termed as net worth.

Debt-equity ratio indicates long term solvency position of the business. Higher the debt fund, greater is the financial risk. Debt-equity ratio is also called leverage ratio. This lever operates favourably if rate of interest is lower than return on capital employed.

**Proprietary Ratio**: Proprietary ratio is calculated to judge the owner's contribution to total fund applications.

\[
\text{Proprietary ratio} = \frac{\text{Proprietary Fund}}{\text{Total assets}}
\]

This ratio indicates share of proprietary fund against each rupee of investment.
Total liabilities to net worth ratio:

The term net worth is synonymous to proprietary fund. Total liabilities are the sum of secured loans, unsecured loans, current liabilities and provisions.

**Total liabilities to net worth ratio** = \( \frac{\text{Total liabilities}}{\text{Net worth}} \)

Higher the ratio, better is the long term solvency position of the business. Lower the ratio, poorer is its long term solvency position.

Capital gearing ratio:

Capital gearing ratio gives the proportion of interest being fund to non-interest bearing fund. The gearing is inversely proportional. Low equity base means high gearing and vice-versa.

**Capital gearing ratio** = \( \frac{\text{preference share Capital} + \text{Debt}}{\text{Equity preference share capital}} \)

### TABLE - 4.3 CAPITAL STRUCTURE RATIOS OF HIRA CEMENT

<table>
<thead>
<tr>
<th>Capital structure ratio</th>
<th>84</th>
<th>85</th>
<th>86</th>
<th>87</th>
<th>88</th>
<th>89</th>
<th>90</th>
<th>91</th>
<th>92</th>
<th>93</th>
<th>94</th>
<th>95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt-equity ratio</td>
<td>-</td>
<td>0.24:1</td>
<td>0.22:1</td>
<td>0.15:1</td>
<td>0.10:1</td>
<td>0.15:1</td>
<td>0.13:1</td>
<td>0.09:1</td>
<td>0.27:1</td>
<td>-</td>
<td>1.28:1</td>
<td>-</td>
</tr>
<tr>
<td>Proprietary Ratio</td>
<td>55.93</td>
<td>56.90</td>
<td>64.14</td>
<td>66.64</td>
<td>64.87</td>
<td>65.18</td>
<td>46.62</td>
<td>65.45</td>
<td>-</td>
<td>39.55</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Total liabilities to Net worth ratio</td>
<td>0.79</td>
<td>0.73</td>
<td>0.56</td>
<td>0.50</td>
<td>0.54</td>
<td>0.54</td>
<td>0.74</td>
<td>0.56</td>
<td>-</td>
<td>1.55</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Capital Gearing ratio</td>
<td>0.237</td>
<td>.2239</td>
<td>.1459</td>
<td>.0958</td>
<td>.1451</td>
<td>.1308</td>
<td>.0890</td>
<td>.2734</td>
<td>-</td>
<td>1.284</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

From the Table-4.3, it is noticed that Debt-equity ratio is smallest (0.09) and highest (1.28) in year 1991 and 1994.
respectively. Year 1994 is the only year to show a high debt-equity ratio so the risk of Hira Cement is small. Again proprietary ratio are higher and it is highest in the year 1988 (66.64) and the total liabilities to Net worth ratio are less except in the year 1994 (1.55). Financial strength of Hira Cement seems to be good as indicated from low liabilities to Net worth ratio and lower capital gearing ratio. So an overall assessment of Hira cement projects a good financial standing of the company.

SHORT-TERM FINANCIAL POSITION (WORKING CAPITAL MANAGEMENT)

The term liquidity and short term solvency are used synonymously. Liquidity means ability of the business to pay off its short term liabilities. Inability to pay short term liability affect the credibility of the business. It also lowers its credit rating.

The two important liquidity ratios are current ratio and quick ratio. Current ratio is given by current assets divided by current liabilities.

Current assets = Inventories + sundry debtors + cash and bank balance + loan and advances + non-trade marketable securities.

Current liabilities = Cash credit, bank overdraft and other short term borrowings + creditors for goods and services + proposed dividends + unclaimed dividends + provision for taxes.

Quick ratio or Acid test ratio is the ultimate test of liquidity which is expressed as.
Quick ratio = Quick Assets
Quick liabilities

Quick assets = current assets - inventories - other liquid portions of current assets.

Quick liabilities = Current liabilities - cash credit, bank borrowing and other short term borrowing.

The current ratio and quick ratio for Hira cement are calculated from the data obtained from the balance sheets and financial statements published by the company. The Table 4.4 shows the ratio for Hira Cement.

**TABLE - 4.4 SHORT TERM FINANCIAL POSITION OF HIRA CEMENT**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>CURRENT RATIO</th>
<th>QUICK RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1985</td>
<td>1.23:1</td>
<td>0.29:1</td>
</tr>
<tr>
<td>1986</td>
<td>1.33:1</td>
<td>0.27:1</td>
</tr>
<tr>
<td>1987</td>
<td>1.49:1</td>
<td>0.23:1</td>
</tr>
<tr>
<td>1988</td>
<td>1.53:1</td>
<td>0.48:1</td>
</tr>
<tr>
<td>1989</td>
<td>2.31:1</td>
<td>0.77:1</td>
</tr>
<tr>
<td>1990</td>
<td>1.94:1</td>
<td>0.95:1</td>
</tr>
<tr>
<td>1991</td>
<td>1.38:1</td>
<td>0.71:1</td>
</tr>
<tr>
<td>1992</td>
<td>1.91:1</td>
<td>0.67:1</td>
</tr>
<tr>
<td>1993</td>
<td>0.96:1</td>
<td>0.43:1</td>
</tr>
<tr>
<td>1994</td>
<td>2.05:1</td>
<td>1.33:1</td>
</tr>
<tr>
<td>1995</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Standard norm = 2:1 1:1

It is seen from the Table - 4.4 that quick ratio is much smaller than current ratio. So it can be inferred that the company has
The quick ratios are also much below the prescribed norm of 1:1. If we examine the current ratio, the company meets the current ratio norms suggested by Chore committee. The committee prescribed 1.33:1 as current ratio norm. So from this it can be established that the company has a better liquidity position.

The long term financial analysis and short term financial analysis indicate that Hira cement has a good financial position. The capital structure of the company is quite encouraging and competitive.

4.2.9 PROBLEMS RELATED TO MARKETING:

The decision regarding the partial decontrol in 1982 was received with great enthusiasm by the cement industry. The rate of growth after 1982 is remarkable both in capacity and production. In the year 1989 all controls over the price fixation and distribution was lifted by the Government which resulted in an exponential growth in production of cement in the country. At present all cement factories have their own distribution network and price fixation policy.

The following paragraphs focus on some of the problems faced by Hira in marketing cement.
SOME OF THE PROBLEMS FACED BY HIRA CEMENT IN MARKETING:

(i) Hira sales cement directly to the consumer, who purchases in bulk (10 tonnes or more). But the consumer is not extended any cash incentives on this. The price is also a little more than what the stockiest pays. So direct sale to plant should go for better incentives like cash incentives and delivery at the door step to increase the sale volume in the local market.

(ii) Stockiest serve as a major factor in distribution network of Hira Cement. They account for 28 to 35% of the total sale. But due to non-availability of high margin of profit and credit facilities the stockiest do not promote the product whole heartedly. Further, the Stockiest are not allowed to appoint sub-dealers directly which is also a cause for set back in the business. The incentives to dealers, and the appointment policy of dealers are to be amended for a better growth in the market. At present there are 519 Stockiest of Hira Cement.

(iii) The pricing policy of the company is to be made more competitive since many parts of Orissa market are captured by cement industries from neighbouring states. Company like ACC, Madras Cement, Coromandal Cement are having a good market share in the state. New companies like L&T has also started production in the state. So pricing policy will now decide the growth of sale. So additional incentives
to the stockiest, and consumer are to be given in addition to what Hira normally gives to its dealers.

(iv) Sales representatives are salary paid workers of Hira cement. No commission is paid to them over the sale volume. So to motivate the sales representative some incentive scheme is badly needed for the company.

(v) Earlier, the state Government was the largest customer of Hira cement as 55% of the total annual requirement of the Government was purchased from Hira. This was about 33 to 48% of the total sale of the company. Since this facility has been withdrawn from the company, the industry had to go for an expansion in other areas. The protected market created for the company was due to the fact that the plant was a state Government owned company but this has lead the company to trouble since no effort was made earlier to increase the sale in other directions as the management was happy with the assured sale to the government. Now the marketing policy is required to be drastically changed to compensate this loss in sale volume.

(vi) All the big projects in the state has reached completion and due to lack of any more big projects to start in near future the company is suffering from sale through tenders. The sale through tender attended peak value of 23.78% in the year 1990-91 and then there is a decreasing trend.

(vii) After a gap of four years Hira cement has started exporting cement from May 1994. Export is mainly to Bangladesh. The company has rejoined the CAPEXIL group during first
quarter of 1994. It has exported 1662 tonnes to Bangladesh during May 1994 as against the total export to 20462 tonnes by India to Bangladesh.

Further much attention is to be given for increasing the export and more countries are to added to list of export. The countries like Nepal, Bhutan, Malaysia, Sri Lanka are to be explored for promoting export by Hira cement.

(viii) At present the company has seven dumps. The number of dumps are to be increased and more dumps are to be opened at neighbouring states such as Madhya Pradesh, Bihar, West Bengal, Assam and Andra Pradesh.

It is quite true that being a state Government controlled organisation Hira is not able to take the risk of allowing handling agents to act as dump in-charge and also have limitation to ship in bulk to them. So it is concluded that the company has to be more realistic in business and has to develop a strategic policy to grab more market share in long term basis and the policy is to be customer oriented in order to survive in this business.
4.3 KONARK CEMENT:

Konark cement is the product of Orissa Cement Ltd., which is a public limited company and was established in the Year 1949. The commencement of business was done in the year 1950 with an annual capacity of 1,67,648 tonnes with only one cement plant. In the year 1957, the second cement plant was added and the capacity increased to 3,71,000 tonnes per year. Further, the capacity was increased to 4,01,000 tonnes annually in the year 1965. The plant produces ordinary Portland and pozzolana cement. It also produces slag cement using granulated slag from Rourkela Steel Plant which is situated at a distance of about 50 kms from the plant site. The company abandoned the pozzolana cement production from the year 1973. Further it has its own lime stone quarries at Langiberna about 15 kms from the plant site. The plant is situated at Rajgangpur which is well connected by rail and road to cites like Calcutta and Jamshedpur. State
highway No.10 passed through Rajgangpur and it is linked to National highway No.5 at Sambalpur. The Railway line is quite nearer to the plant site and that connects Rajgangpur directly to Calcutta which is about 500 Kms. away from the plant site and big cities like Bombay, Madras, Delhi are around 1700 Kms. away from the plant. The maximum temperature during summer goes up to 50°C and the rainfall is also fairly good. The plant has its own water supply system and even during summer it has no water problem. The relative humidity ranges from 20 to 80%.

The plant has a good financial support and faces no problem in working capital and has a support from a business house like Dalmia group of industries.

Hirakud Dam, a giant multipurpose project on the river Mahanadi was supplied with the entire quantity of cement for its construction by this plant. During the second plan period it had the unique opportunity to provide the entire cement requirement for building of million tonne Steel Plant at Rourkela and its township. The plant has also contributed to the construction of Haldia port in West Bengal and Paradip Port in Orissa. Defence installation and almost all the major constructions in Orissa and neighbouring states were being supplied with the cement produced in this plant.

**GENERAL INFORMATION :**

a) Foundation laid on : 11th October, 1948  
b) Date of first commercial production : 10th February, 1950  
c) Length of railway line : 15 Kms. N.G.Railway.
d) Type of Company: Public Limited Company

LAND:

a) Factory and colony: 500 Acres (approx.)
b) Colony at Langiberna: 80 Acres (approx.)
c) N.G. Railway Line: 180 Acres (approx.)

MINING LEASE:

a) Llangiberna mines: 2476 Acres

EMPLOYMENT:

<table>
<thead>
<tr>
<th></th>
<th>Executives</th>
<th>Non Executives</th>
<th>Workers</th>
<th>Casual Labours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total employment in factory</td>
<td>139</td>
<td>352</td>
<td>380</td>
<td></td>
</tr>
<tr>
<td>Total employment in quarry</td>
<td>13</td>
<td>56</td>
<td>324</td>
<td>49</td>
</tr>
<tr>
<td>Total factory &amp; Quarry</td>
<td>152</td>
<td>732</td>
<td>324</td>
<td>429</td>
</tr>
</tbody>
</table>

CAPACITY:

a) Original licensed capacity - 1,67,648 tonnes per annum
b) After installation second - 3,71,000 tonnes/Annum plant in 1957
c) License grinding capacity - 4,01,000 tonnes / Annum of cement after 1965.

MARKETING

Assam -
Bihar 0.82%
North East Estate 54%
Orissa 2%
Sikkim 29.83%
W.B. 1.6%
Export to (Bhutan, Nepal, Bangladesh) 2%

**Total** 90.25%

The list is subject to change over the year. But this reflects the marketing of cement in domestic and foreign level approximately. The marketing is done through dealers. About 500 dealers are there in Orissa and 400 dealers in West Bengal. There are some consignment agents in Assam and Bihar. The company generally meets around 30% of Orissa's demand, 5 to 6% of West Bengal and some is exported to countries like Bangladesh, Nepal, Bhutan etc.

**4.3.1 PROBLEMS OF PRODUCTIVITY MANAGEMENT:**

Konark Cement has a good record of capacity utilisation and it is approximately 103% in the last six years. This result immediately gives an idea that the Konark Cement is heading towards total capacity management. The reason for full strength production in case of Konark cement was discussed with various functional heads and analysis of some past records were done. The executives of Konark Cement has been putting efforts to improve the situation and have achieved significant improvement during the last few years.
4.3.2 PROBLEMS OF PRODUCTIVITY MEASUREMENT IN KONARK CEMENT:

The company uses many non-standard and standard performance indicators. Some of them are measured monthly and some measured annually. The indicators are listed in Table-4.5.

The list reveals the fact that some of the indicators are partial productivity measures and some can not be termed as productivity measures. As for example, Clinker production, (in MT) and Slurry production, (in MT) are only a measure of the quantity of slurry or clinker produced in a month and so these can not be termed as productivity ratios. Although the company measures many of the parameters to find out the efficiency of the plant, the parameters are so specific that it creates problem to understand the sense of the measure. For example, one can find out the inventory productivity using the expenditure incurred due to spare parts and other inventory items together and hence it is needless to find out the spare part productivity alone. The list also indicates that the company uses many physical productivity measures in assessing the performance. But there are no measures likes overall productivity, manpower productivity, material productivity and so on expressed in terms of financial ratios.

TABLE - 4.5 LIST OF EXISTING PERFORMANCE INDICATORS IN KONARK CEMENT

1. Net productivity = Net output in (MT)
2. Kiln efficiency for kiln 1 and 2
3. Net profit in Rs.
4. Net output in (MT)
4.3.3 PROBLEMS RELATED TO FUNCTIONAL AREAS OF KONARK CEMENT

(i) The plant is very old and uses wet process to produce cement. But as the maintenance crew take care of the plant very effectively so, the capacity utilisation is always more than 100%. But the Management faces a lot of problems due to unreliability of the plant machinery. The plant is shutdown for maintenance programme during change of lining of kilns. The executives holds meeting daily for one hour to analyse the problems and achievements of production. The plant also adopts breakdown maintenance and preventive maintenance policies for smooth running. But it is true that the management takes a lot of pain to achieve the target and puts alround effort to decrease idle time.
(ii) The plant faces problems in quality control because of the poor quality of limestone available in the captive limestone quarry. However, the plant blends the limestone available from its own quarry with better quality of limestone to maintain quality. Further, due to poor quality of limestone the plant faces the problem of achieving desired burnability of the mixture and also the quality of product.

(iii) It is also observed that the quality of coal is deteriorating in the last years. So the company is bound to buy good quality of coal from Bengal and Bihar and blend it with the coal available in Orissa to reduce the silica percentage.

(iv) The company gets power from OSEB and faces no major problem in power supply. The daily need of 14 MW of electricity is supplied to plant by state Government but at times there is power shortage. So the company has its own diesel power generating sets of 29 MW to meet the emergency.

(v) The company being a unit of Dalmia group of industries it has a strong financial background and faces no difficulty in financial side.

(vi) The promotion policy of the company is not very much appreciated by executives. The performance of the individual is sometime not given due weightage and persons of some specific caste or group is given better promotion. This type of erratic policy causes psychological pressure on the executives. Very often it is observed that people leaves
the organisation and joins some other organisation for such policy of the management. Although the wages given are not small but sometime the employees feel that they are not drawing the same amount as given by similar type of organisations in national level.

(vii) There is no much functional role conflicts but the managers feel that while fixing the target, due weightage should be given to all level of managers. The top executives in consultation with other departmental heads fix the target, which the managers working in the lower level are sometime forced to accept the decision of the top management.

4.3.4 PROBLEMS GENERIC FROM THE EXTERNAL ENVIRONMENT:

(i) The cement industry needs high capital investment, so a mushroom growth of big cement industries can not take place. But recently L & T has set an unit in this area. The L&T gets the clinkers from Maharashtra and they have only a packing unit here. But this has caused problem in fixing the price as well as it has emerged as a good competitor for Konark Cement in the market.

(ii) The company has gone with an agreement with the state Government to supply 30% of the state requirement. So although the company is assured of some Government supply but it faces problem sometime due to the fact that they could have supplied that quantity to some other market to generate more finance. But the company has no major problem in marketing cement in this region and also in other
part of India as the product is comparatively good and acceptable to the users.

(iii) The technology of the Konark Cement is quite old. It uses wet process to produce cement. But due to high competition and demand for better quality of cement the Konark cement has constructed a new plant with dry process technology. The capital investment is quite large to set up such a project but company feels that to have long term benefit and market share new technology has to be implemented.

(iv) Rajgangpur is a highly air polluted area as notified by the State Pollution Control Board. But with the adoption of dry process technology for manufacturing cement the company is hopeful to reduce the load of air pollution. In the old plant as well as new plant electro-static precipitator has been fitted to reduce the air pollution.

(v) Rajgangpur being a tribal dominated area the company has enormous social responsiveness. Social programmes to uplift the social life of the tribal is a must in this area to build up an environment for successful business.

4.3.5 PROBLEMS RELATED TO PRODUCTION PLANNING:

In recent times, the company has recognised the need of production planning and also takes care in quality control. Total quality management concept has been adopted and some senior managers are conducting in-house training programme to train the managers in TQM. The management is now seriously thinking to
square the areas where cost minimisation can be done and has fixed the target to reduce the stoppage and also is trying to minimise cost in maintenance. They are now in the belief that the elimination of the root cause is a better process to eradicate frequent plant stoppage. New management concept is now gaining ground in this company. As for example, Kaizen is now introduced and the management is encouraging quality circles in the plant. While fixing the target the top management now analyse the production and maintenance data and due production planning and maintenance planning is done before setting the target level. Daily production meeting is conducted to analyse the stoppage and other problems with respect to daily working. Once in a month a meeting is convened to analyse the inventory, maintenance and quality status of the plant.

At present the main problem faced by the plant is to attract talent, train the existing work force and to retain them. So the management has to be more clear in some of its policies like promotion, bonus and HRD.

Generally it can be stated that the company has a good work culture and good productivity level.

4.3.6 PROBLEMS RELATED TO ORGANISATIONAL STRUCTURE OF KONARK CEMENT:

The organisational structure is the formal system of working relationship that both divide and coordinate the tasks of multiple people and groups to serve a common purpose. High productivity depends on both resources and structure appropriate to the task
at hand. Structure help the human resources of organisations work together in productive task combination.

Since the structure support the performance efforts of individuals and groups in organisation it is necessary to analyse the existing organisational structure of Konark Cement to improve the odds and remove the impediments to success. The analysis has been carried out under the following subtitles. The FIG. 4.3 shows the organisational structure of Konark cement.

Real decision Makers:

The collective mental programming of the individual in belief, values and attitude influence the organisational prospective. So the real decision makers influence the organisational decision and prospective.

Konark cement is managed by the Dalmia group a family based industrial group. Members of the Board of Directors are induced or withdrawn at the perusal of the business interest as well as family interest. As a result the real decision makers are not the members of the Board of Directors but are the concern family members.

Decision making process and delegation of power:

In Konark Cement the prime objective is to optimise profit and prosperity of the organisation. This philosophy is reflected in almost all activities of the company. Managers are free to suggest the solution to the problems encountered but ultimate decision makers are the owners of the company. Although power
of authority is being delegated to top management, the decisions taken by top management is influenced by the philosophy of Dalmia group. In reality the owner of the company i.e. Dalmia group is the supreme authority of this organisation.

Shape:

The number of layers exist in organisational structure of the Konark Cement is twenty five. So the structure is quite tall. The tall structure may be due to the reason that the company wants to retain its people with limited financial expenditure. So in order to satisfy the people, number of gradations have been created and thus the people get satisfied with the difference made in their status and hierarchical order. Sometimes it is also observed that to satisfy a particular group of people gradations have been created. This has led to dissatisfaction among other group.

Span of control:

Span of control and the number of levels in an organisations hierarchy of authority are interrelated. Konark has a tall structure, hence has a small span of control. So we find many levels of management in the structure. Whenever span of control are reduced, the likelihood is that new management personnel will be added. Before making such a change, therefore, serious thought should always be given to both the cost of the added supervision and the potential consequences of having more levels in the chain of command.
Size:

The total number of employees including workers and managers are within 1200. So the company has a smaller size. Smaller size of the plant is always beneficial in many ways. The worker management relationship is quite cordial. Over-mening problem is not there.

Communication:

In Konark Cement the communication channel is very much flexible. The problems relating to production and other bottlenecks arising out of the daily routine work can be communicated in any direction. Hierarchy creates no problem for communication of such problems. But problems relating to major areas of planning and policy decisions are centralised. Top managers in consultation with members of the Board of Directors takes the decision and is passed from top to bottom. The flexibility in communicating the problems relating to routine work and production has resulted in taking timely decision and thus the company enjoys more than 100% capacity utilisation.

Coordination:

Coordination meeting of the functional heads are held on weekly basis as well as monthly basis. The purpose of such meeting are to take the feed back and to plan accordingly for the forthcoming period. In such meeting the responsibility and targets are fixed on the executives so shifting of responsibility is least in this organisation.

It is noticed from the above discussion that Konark Cement is a professionally managed company and the executives are well experienced. Since the targets and responsibility are clearly
defined for each executives so shifting of responsibility is least. Communication process is quite flexible. Delegation of power is not much but whatever power is delegated to the executives it is on the individual level. Further as the span of control is small the responsibility and accountability are easily fixed. So on the whole this organisation has a good work culture and perhaps this is the reason for which the capacity utilisation is 103% in average.
4.3.7 Strategic Plan of Konark Cement

The objectives of Konark Cement's strategic planning are

(i) To maintain the quality and good will of the product.
(ii) To explore opportunities within the expected market environment.
(iii) Enhancement of capacity from 6.5 lakh tonnes per annum to 8.0 lakh tonnes per annum is under implementation.

Key Trend:

A good monsoon, improved economic situation of the country, increased construction activities and better off take by the Government can have positive impact on the demand.
Basic Strategy:

Emphasise marketing directly to the consumer through agents and promote initiatives taken to increase exports and to create new export markets.

Operating Plans:

(i) Complete energy audit covering areas of electrical and thermal energy has been completed and the company is planning to take steps for the following recommendations.

(a) Use of efficient drives to reduce transmission losses

(b) Cover large areas under low power high lumen luminaries for illumination and rationalisation of illumination system.

(c) Elimination of oversize motors and maximum demand control are being examined for implementation.

(d) Regular monitoring of combustion process to ensure efficient combustion of fuel and efficient heat balance.

(ii) Effort for further improvement of the process will continue by encouraging Research and Development (R&D).

(iii) The company will strive to maintain the consumer's image as the 'building material specialist'.

(iv) Existing agents will be continuously evaluated in terms of the need to remodel, relocate or remechanise.

(v) Plan is also to expand market penetration all over India.
(vi) Personnel training program will be intensified to enhance customer service, better R & D and to create a highly specialised management group.

(vii) In-house training programs of short durations will be encouraged and personnel of all level will be trained in phases.

Since Konark Cement is having a strongly motivated work force it has achieved good results from strategic planning, the discussion with the employees of the Konark Cement leads to the following reasons why the strategic planning is a success in Konark Cement.

(i) The top management takes care to implement the strategy in a coordinated manner.

(ii) Organisational objective is made very clear to all employees.

(iii) The top management is responsible for implementation, follow through and evaluation of the strategic planning.

(iv) While making the planning, care is taken not to avoid right persons and even too much dependency on planning cell.

(v) The management of Konark Cement has succeeded only because the top management is accountable for the failure of the strategic plan.
Konark Cement being a private limited company has a more serious and result oriented management, so the company has achieved good results from the strategic planning.

4.3.8 CAPITAL STRUCTURE OF KONARK CEMENT:

In section 4.2.8, we have defined the different capital structure ratios. Debt-equity ratio, proprietary ratio, total liabilities to Net worth ratios and capital gearing ratios are calculated for Konark Cement and are presented in Table 4.6. The ratios have been calculated from the published data in the balance sheet.

In India many financial institutions prescribe a norm of 2:1 ratio for financing to private sectors i.e. debt : equity = 2:1. From the Table 4-6 we can observe that debt for Konark Cement is always less than 2, hence the risk is less. Proprietary ratio is also quite high i.e. 62.85 in the year 1985 and 29.31 is the minimum in the year 1989. This indicates that proprietors have sufficient fund. The financial position of Konark cement is quite strong in long term basis which is indicated from the proprietary ratio. Total liabilities are 2.3 times the Net worth in the year 1989. This 2.3 is maximum and 0.59 is minimum in the year 1985. Higher the ratio, better is the long term solvency position of the business. So long term solvency position of the company is quite good.
TABLE - 4.6 CAPITAL STRUCTURE RATIOS OF KONARK CEMENT

<table>
<thead>
<tr>
<th>Capital Structure Ratio</th>
<th>85</th>
<th>86</th>
<th>87</th>
<th>88</th>
<th>89</th>
<th>90</th>
<th>91</th>
<th>92</th>
<th>93</th>
<th>94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt -equity ratio</td>
<td>0.28</td>
<td>0.62</td>
<td>1.05</td>
<td>-</td>
<td>1.75</td>
<td>1.57</td>
<td>1.19</td>
<td>1.01</td>
<td>1.05</td>
<td>0.93</td>
</tr>
<tr>
<td>Proprietary Ratio</td>
<td>62.85</td>
<td>49.96</td>
<td>40.30</td>
<td>-</td>
<td>29.31</td>
<td>32.04</td>
<td>37.48</td>
<td>38.17</td>
<td>40.11</td>
<td>42.45</td>
</tr>
<tr>
<td>Total liabilities to Net worth Ratio</td>
<td>0.59</td>
<td>1.002</td>
<td>1.482</td>
<td>-</td>
<td>2.30</td>
<td>2.12</td>
<td>1.67</td>
<td>1.62</td>
<td>1.49</td>
<td>1.36</td>
</tr>
<tr>
<td>Capital Gearing Ratio</td>
<td>0.282</td>
<td>0.618</td>
<td>1.048</td>
<td>-</td>
<td>1.745</td>
<td>1.564</td>
<td>1.191</td>
<td>1.005</td>
<td>1.054</td>
<td>0.933</td>
</tr>
</tbody>
</table>

Capital gearing ratio gives the proposition of interest bearing fund to non-interest, bearing fund. It is seen from the table 4.6 that, interest bearing fund is 1.745 times, the non-interest bearing fund in the year 1989 and in the year 1985 it is minimum i.e. 0.282 times, the non-interest bearing fund. The high gearing ratio indicates low equity base of the company. This also indicates that fixed interest liability of the company is more.

SHORT TERM FINANCIAL POSITION (WORKING CAPITAL MANAGEMENT)

We will discuss in this section the short term financial position of Konark cement by calculating the liquidity ratio as described in section-4.2.8 earlier. Here the current ratio and quick ratio are calculated from the data available in the balance sheet which is presented in the Table 4.7.
From the table it is quite clear that since the quick ratios are less than current ratios, so the company has high proportion of non liquid assets and quick liabilities.

The current ratio norms prescribed to private companies is 1.33 : 1. The current ratios are much more than 1.33. So liquidity position of the company is quite good. Further, quick ratios also attains the prescribed 1 : 1 ratios so the short term financial position of the company is quite good.

Thus it can be concluded that overall financial position of Konark is more than satisfactory.

**TABLE - 4.7**

<table>
<thead>
<tr>
<th>Year</th>
<th>Current Ratio</th>
<th>Quick Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>1.952 : 1</td>
<td>0.865 : 1</td>
</tr>
<tr>
<td>86</td>
<td>2.394 : 1</td>
<td>1.086 : 1</td>
</tr>
<tr>
<td>87</td>
<td>2.326 : 1</td>
<td>0.989 : 1</td>
</tr>
<tr>
<td>88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>2.659 : 1</td>
<td>1.175 : 1</td>
</tr>
<tr>
<td>90</td>
<td>2.433 : 1</td>
<td>0.978 : 1</td>
</tr>
<tr>
<td>91</td>
<td>2.492 : 1</td>
<td>0.989 : 1</td>
</tr>
<tr>
<td>92</td>
<td>2.162 : 1</td>
<td>0.906 : 1</td>
</tr>
<tr>
<td>93</td>
<td>3.026 : 1</td>
<td>1.375 : 1</td>
</tr>
<tr>
<td>94</td>
<td>2.806 : 1</td>
<td>1.215 : 1</td>
</tr>
</tbody>
</table>

Standard = 1.33 : 1 1 : 1

**4.3.9 PROBLEMS RELATED TO MARKETING:**

The following problems in marketing are identified for Konark Cement.

(i) At present there are 500 stockiest and sub-dealers of Konark Cement and some of them are operating in West
Bengal, Assam, North East states and M.P. More number of stockiest are to be appointed and appointment of stockiest should be made easier. For example, security deposit should be less and better incentive schemes should be introduced to compete with other brands. More share should be issued in the name of dealers to make them partner.

(ii) The marketing of cement should be customer oriented not dealer oriented. Incentive schemes to promote sale should be given proper care.

(iii) Credit facilities to the dealer should be for a period of one month. This will encourage the dealers and will promote the product of Konark.

(iv) Market survey should be done more scientifically, so that demand can be predicted in a more realistic manner.

(v) Sale to Government is only 10 to 15% of total sale volume. Persons with better link with Government departments should be kept in pay-roll to increase this sale volume.

(vi) Global tenders and other tenders should be attended with a more competitive price. The newly started L&T company has a construction wing which utilises the L&T cements for the construction. The construction wing takes large contracts so the company has generated a new front for selling its product. Similarly Dalmia group may think of setting up a construction wing or should go for more product diversification. At present the company produces ordinary
Portland cement and slag cement. The range of the product should be extended to have better market share.

(vii) Exporters should be given proper care. At present only 2% of the total production is exported to countries like, Bhutan, Bangladesh, Nepal & Sri Lanka.

(viii) Steps be taken to export clinkers rather than cement to the countries where they do not have cement plants. This will only need a grinding and packing unit in the country importing cement. This will help in generating some employment in the importer's country and the contract will last long.

(ix) More dumps should be opened. At present only six dumps at Raigangpur, Sambalpur, Cuttack, Berhampur (Orissa), Calcutta (West Bengal) and Raipur (MP) exists. Dumps at different emerging business centers will increase market share. The dump incharge should be given a target and incentives should be planned for high rate of sales.

The Konark Cement is the oldest unit of Orissa producing cement in Orissa. It has a good market share for its consistent quality and supply. Advantages should be taken to exploit the good-will of the company to increase the market share. Advertisement and promotion of product should be given priority. The company being a private sector has the advantages of flexible pricing policy so price should be more competitive with other brand of cement available in the market.
FIG. 4.4  PHYSICAL DISTRIBUTION NETWORK OF KONARK CEMENT PLANT
FIG. 4.5 MARKET SHARE IN ORISSA DURING THE YEAR 1996

Notations:

AP - Andhra Pradesh
MP - Madhya Pradesh
MHR - Maharashtra
WB - West Bengal
BHR - Bihar

Source:

4.3.10 COMPARATIVE STUDY OF HIRA AND KONARK CEMENT PLANTS

In this section we present a comparative study of Hira and Konark cement plants in a tabular form as a ready reckoner to understand the different aspects of productivity management practices prevailing at present in both the cement plants.

<table>
<thead>
<tr>
<th></th>
<th>HIRA CEMENT</th>
<th>KONARK CEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Public sector</td>
<td>Private sector</td>
<td></td>
</tr>
<tr>
<td>2. Wet-process</td>
<td>Wet-process</td>
<td></td>
</tr>
<tr>
<td>3. Productivity measurement indicators not clear.</td>
<td>Productivity measurement indicators are not sufficient</td>
<td></td>
</tr>
<tr>
<td>5. Promotion according to seniority</td>
<td>Promotion policy not good.</td>
<td></td>
</tr>
<tr>
<td>6. Production planning not sufficient</td>
<td>Production planning is good.</td>
<td></td>
</tr>
<tr>
<td>7. Organisational structure Flat, large span of control, communication channel is bureaucratic, size is large and overmening.</td>
<td>Organisation structure Tall, span of control are reduced. Small size, flexible communication channel. No overmening problem.</td>
<td></td>
</tr>
<tr>
<td>8. Good financial standing</td>
<td>Overall financial position is satisfactory.</td>
<td></td>
</tr>
<tr>
<td>9. 21% market share in Orissa. (Fig 4.5)</td>
<td>38% market share in Orissa. (Fig 4.5)</td>
<td></td>
</tr>
</tbody>
</table>
4.4 CONCLUSION

In the present chapter we have given an overall profile of Hira cement and Konark cement, the firms chosen for our case study. The influence of different aspects of productivity management such as productivity measurement, functional areas, external environment, production planning, organisational structure, strategic planning, capital structure and marketing are discussed. Productivity can be initiated in many areas. Productivity management implies a commitment to the productivity process at the highest level of corporate management. This process must be organised and controlled by a management philosophy that runs from top management down to the lowest operator level. This is easier said than done, but the success of a productivity management process depends upon a high degree of involvement and participation by all level of management and employees.

Therefore it is imperative to analyse different aspects of productivity management of the firms.

To manage productivity in a true sense of the term, the first step is to measure the productivity level of an organisation. So in the next chapter we conduct a comparative study of productivity measurement of the firms chosen for our case study.