7.1: Understanding the Organisation

Haldia Petrochemicals Limited (HPL) is a joint venture organisation, jointly promoted by the West Bengal Industrial Development Corporation (WBIDC), Chaterjee Petrochem (Mauritius), and the Tata Group, with an investment of 1.2 billion dollar. The organisation is a unique public-private partnership (PPP) in a greenfield mega project. HPL has its registered head quarter at Kolkata, factory at Haldia, an Application Research & Product Development Centre (ARDC) at Kolkata (Salt Lake), Regional Offices at Kolkata, New Delhi, Mumbai & Chennai and sales offices all over India. The organisation possesses “one of the youngest and technologically most advanced petrochemicals plants in the country” that includes a naphtha cracker unit and associated plants and is considered to be the “Jewel of the East”. HPL has the state-of-the art complex with the latest technology. The organisation’s vision statement envisions itself to be a “profitable, efficient and customer focused organisation, recognised as a leading supplier of quality products and services...” In line with its vision statement, the organisation has pursued its business strategy in the light of the environmental influences on the organisation. The organisation incorporated as a public limited company in the year 1985, started commercial production in the year 2001 and within a very short span of time the turnover crossed 1 billion US dollars in the year 2004 and it recorded a turnover of 2 billion US dollars in the year 2007. The organisation carries out operation as naphtha-based petrochemical complex with technical assistance from
some internationally recognised organisations like ABB Lummus, Basell, Mitsui, BASF, etc.

In line with Ansoff’s (1968) analysis the organisation’s strategic action orientation has been segregated into logistic and management process. The organisation’s production (logistic) process involves naptha procurement from deep sea which is transported to the naptha cracker unit (NCU) and the inputs are processed thereon. The inputs are processed in polypropylene plant, Linear Density polyethylene plant, High Density Polyethylene plant, C4 Hydro Unit, Butadine Extraction unit, Benzene Extraction unit and Pyrolysis Galeline Hydrogenation unit. HPL is a producer of low and high density polyethylene and polypropylene and other chemicals like benzene, Butadiene, Motor Spirit, Carbon Black Feedstock etc. The organisation has the major downstream facilities comprising LLDPE/HDPE swing unit of 2,60,000 tpa capacity, a dedicated HDPE unit of 3,00,000 tpa and a polypropylene unit of 3,00,000 tpa.

The management process involves the governance structure comprising the Board of Directors (BoD), the management and employees. The unique blend of industrialist and bureaucrats is observed in the composition of the BoD. Presently, it comprises Mr. Tarun Das (Chairman), Dr. Purnendu Chatterjee (Deputy Chairman) and eminent industrialists like Jamshyd N Godrej, Mr. Sushil Muhnot, Mr. Sudesh K. Kapahi etc. On the other hand Industry Secretary, GoWB, Chairman, WBIDC represent the GoWB in the board. The unique blend of industry and government representation at the board highlight the relevance of public private partnership. Moreover, with a view to assist the BoD, a number of committees have
been formed. While the traditional committees like Audit, Share transfer, Compensation Committee, Borrowings and Risk Management Committee, Personnel Committee etc have been formed following the corporate governance principles, the formation of Naphtha Purchase Committee, Project Review Committee, Empowered Committee for Corporate Debt Restructuring (CDR) and HSE Committee highlights the strategic priority areas that shape the business strategy of the organisation. The organisation’s Management Team comprises the Managing Director, Head-Plant, Projects, Head-Legal, CIO and Head-HR, Head Manufacturing, Head-Project Planning, Head-Procurement and Marketing (Chemicals), Head-Procurement, Marketing(Chemicals), Business Development. The professional management team and the team of knowledgeable workforce (with both young and experienced workforce) have shaped the management process involved in running a professional and modern organisation with modern state-of-the art technology and management practices.

HPL is strategically located at Haldia in the eastern region of India, just 125 kms away from Kolkata and is well connected by means of the three modes of transportation namely rail, road and waterway. Its strategic location is effective to cater the emerging market in India in general and the eastern part of the country in particular. The strategic location is considered as one of the important gateways to South East Asia and China and other international markets including the emerging international markets as well. HPL caters to the national and the international market through the distribution network and is an exporter to different European, Middle East and South East countries. The 1052-acre petrochemical manufacturing
site of HPL provides an easy transit for transportation of inputs and finished product through river Haldi, Bay of Bengal and National Highway 41. The organisation possesses a state-of-the-art facility its ARDC at Kolkata for product research, application development and customer support. The centre’s research focus includes product application development, process application, quality enhancement, customer support etc. The organisation possesses a multi-product and fully integrated complex which makes it a unique petrochemical manufacturer in eastern India. These features have facilitated in HPL gaining a distinctive advantage as one of the largest producer of petrochemicals products in India. The organisation has the second position in the industry ahead of IPCL and number one in high-density polyethylene. HPL has the distinction to produce Euro III compliance Motor Spirit as the first petrochemicals organisation, benchmark grade polymers and Auto LPG.

In line with the philosophy of corporate citizenship, HPL has taken steps for facilitating community welfare and environment protection. Some of the programmes involve enhancement of quality of life of displaced people, sustainable skill development, Health & Community Welfare, Educational & Social Causes, etc. HPL proclaims its commitment towards sensible use of energy in the production process and sustainable development by optimising energy resources with an effective energy management system encompassing a devoted Energy Management Group and continuous internal & external audits to pinpoint and implement energy conservation measures. For the financial year 2006-07, the organisation has been able to achieve impressive growth as
exemplified by the figures that indicate production of 1,1416 kilo tones, sales volume of 1373 kilo tonnes resulting in gross sales volume of Rs. 8376 crores and Earnings Before Interest and Tax (EBIT) of Rs 1421 crores. The trend in profitability for the previous period and the strategic action orientation will be discussed in details in the next sub-section. The organisation has bagged awards like Four ‘Star Export House status’ for its export during 2000-01 to 2003-04 under the auspices of the Ministry of Commerce, Govt. of India, Plexicon Award for polymer export for 2003-04, Indian Chemicals Manufacturers Association for Excellence in management of Health, Safety and Environment in 2002-03 etc.

7.2 Understanding the Important Environmental Influences

The different environmental influences have shaped the industry structure in the petrochemicals industry and based on guideline available in existing literature combined with the documents and interaction with the executives of Haldia Petrochemicals a brief but comprehensive analysis has been carried out in this section.

The petrochemicals industry is often considered as the “sunrise” sector in the India economy since it is one of the fastest growing sectors, with CAGR of about 13-15% which is much higher than the growth rate of GDP. According to Nexant, it is estimated that India is going to be the 3rd largest consumer of petrochemicals by the year 2010. Further the Task Force Report on Petrochemicals, April 2003, 1

1Apart from the interactions with the executives and internal documents of the organisation, the other information sources that have been used to write this sub-section include, www.researchandmarkets.com, http://www.cpmai.net/Indian_petroleum_ind/2006.pdf, www.indiamarkets.com, www.pppinindia.com/states_wb_bo.asp, Petrochemicals : Growth & Challenges, India Chem 2006 Conference www.indiamarkets.com/Presentations/Day2/SessiononGrowthStrategies...Petrochemi/MrKGo vindarajan.ppt, available annual reports of the company, literature available with the executives consulted by the researcher during his visits to the plant, etc.
observes that the per capita consumption of petrochemicals in India is much lower than world average and hence there is enormous growth potential for this sector which can be exploited by organisations. Moreover, the global demand for petrochemical products has been increasing at a very high rate and will be marked by the increase in consumption by the developing countries like India and China. It has been observed that during the early stage, developed countries like Japan, USA and the like, were the primary producers of petrochemicals. However as time progressed, developing countries like India and China emerged as important players. Again, countries in the Middle East started producing products due to easy availability of inputs. The top 10 players in the global market that comprise organisations like Shell, Exxon Mobil, BASF, Basell control 75% of the production. It has been reported that Asia would have a share of 52 per cent of the global ethylene capacity in 2010 against 39 per cent in 2005\(^2\), following the shift in petrochemical units from Europe to Asia. It is a normal phenomenon that a major proportion of petrochemicals industry is controlled by a few organisations which is valid for the Indian petrochemicals industry as well. In the technical front it is reported that hydrocarbons produced from crude oil and natural gas are processed to generate petrochemicals. Naptha and gasoline that are produced in oil refineries; ethane and propane produced from natural gas are required in the petrochemicals industry. The industry manufactures plastics, elastomers, chemicals etc. The petrochemicals industry is highly capital and technology intensive on one hand and exceedingly organised with a handful of players many of which are having integrated and huge plants. These have implication for strategic action or orientation

\(^2\) [www.mumbai-central.com/grapevine/msg02628.html]
of organisations in this sector. The role of logistics is vital in this industry and organisations in this industry are located along sea shores so that raw materials and end products can be transported easily and at a lower cost. One of the essential efforts taken by organisations in this sector is to carry out operations at maximum capacity which nonetheless depends upon the ability of organisations to satisfy the demands of the markets. Thus, organisations in this industry try to have full capacity utilisation coupled with the ability to satisfy the market demands. Moreover organisations also tend to enter into new product line through product development and vertical integration strategies for gaining sustainable competitive advantage. Again the downstream industry supports the growth and development of this sector and as a source of employment. One of the important strategies pursued by organisations in the petrochemicals industries is backward integration through which steady and continuous supply of inputs and cost-competitiveness can be achieved. The Reliance Petrochemicals has pursued this type of strategy and is an example of such a carefully designed technology and commercial fit. Profitability variations are observed in the industry and ups and downs tend to have duration of one to one and a half year.

Certain significant changes in business environment have facilitated the growth of petrochemicals industry that comprise growing GDP, huge and ever expanding domestic consumer market, growth and expansion of sectors like retail, consumer and automobile sector, health care, packaging, agriculture, growing middle class households, larger investment in infrastructure, availability of human resource appropriate for this sector, opening up of the sector for investment, increasing

3 http://www.thehindubusinessline.com/2001/01/12/stories/041249ju.htm
emphasis on and availability of information technology relevant to different industrial sectors. Moreover, the demand for products of this industry is "derived" in nature and the importance of this industry has increased over the years with increasing demand for products of other sectors like power, telecom, cables, plastics, textiles etc. In this context it is worth mentioning that there has been a double digit growth in consumer durables and also the escalating use of polypropylene for consumer durables, home appliances and IT components. Moreover, there is enormous potential in packaging sector encompassing woven sacks used for cement, fertilizer, agricultural products etc. The Task Force Report on Petrochemicals, April 2003 avers that the per capita consumption in India is much lower than world average which signifies great the potential for growth of this sector.

Organisations in the petrochemicals industry are exceedingly capital-intensive and the industry necessitates the application of latest technology and due to the very nature of the production process and the products, these organisations tend to organise activities in an integrated manner. The petrochemical industry in India is largely naphtha-based on account of easy availability vis-à-vis natural gas and that it provides enhanced yield of product mix compared to other inputs. Experts believe that the price and availability of naphtha and natural gas will remain as critical factors in the petrochemicals industry. The major players in this industry include Reliance Industries Ltd, Gas Authority of India Limited, Grasim Industries Limited, Indo Rama Synthetics Limited, Indian Petrochemicals Corporation Limited, and of course the present organisation under study namely Haldia Petrochemicals. Among the different actions pursued by these existing players in
this industry the important ones pertain to developing plant size of global standard with appropriate technological support with the objective of enjoying economies of scale, emphasizing on export with the objective of market development in foreign countries etc. In India there is low per capita consumption of petrochemical products and with growth in Indian economy, existing and prospective players can utilise ample opportunities to fill-in the demand-supply gap. In response to this, existing players have pursued strategy to enhance the production capacity and potential entrants (Porter, 1985) have taken steps to enter into this industry in view of expected opportunities. India constitutes nearly 2% of the world capacity of petrochemicals, with USA and Japan being the biggest producers in this industry. In India, the per capita consumption of petrochemical products in the eastern region is lower in comparison to the national average but it is growing at nearly 25 per cent per year, which is almost double that of the entire country (Business Line, December 23, 2001).

In West Bengal, certain positive efforts have been taken for the establishment and growth of petrochemicals industry. The state government’s support in terms of attractive incentive package for large investment and project development, forward looking Industrial policy, PPP for infrastructure development have facilitated towards the growth and development of this sector. West Bengal advantage lies with its strategic location, access to ports and mineral wealth, and huge talent pools which cater to the needs of petrochemicals industry and have facilitated towards the growth of petrochemicals units in the state. Prominent players in petrochemicals industry in the state are Mitsubishi Chemicals Corporation, Haldia Petrochemicals Ltd and South Asian Petrochem Ltd etc. The state of West Bengal has a share of 13
per cent of total polymer production of India. There was an impressive growth in the
production of petroleum products and the reason behind this could be the expansion
of petroleum and petrochemicals industry in West Bengal coupled with the
upstream and downstream linkages developed by the oil refining and petrochemical
units located in the state. One of the major projects that have been planned in the
state is the Gas Authority of India's (GAIL) 100,000 MTPA Styrene Butadiene
Rubber (SBR) plant at Haldia. The plant is to be set up with an investment of US$ 120 million.

Among the different industrial centres in West Bengal, Haldia is fast emerging as a strategically important location especially
in the petrochemicals industry. Advantageous ecological conditions, waste
management, infrastructure availability in power, communication infrastructure,
connectivity in port, rail and road, coupled with appropriate social infrastructure
(comprising ITI, Technical colleges in Haldia, IIT-Kharagpur, Bengal Engineering
and Science University and other prominent institutes/universities situated within a
distance of 100 km) supporting supply of manpower in terms of both quality and
cost etc have made Haldia a preferred destination for different industries in general
and petrochemicals in particular.4

In the days ahead it is expected that there will be increasing pressure on polymers to
cater to increasing demand while taking care not to damage the environment.
Alongwith the factors identified above, future international competitiveness, quality
and service, cost reduction, focus on R& D, increased use of information
technology, consolidation in core areas are going to be major issues for
organisations in future. It remains to be seen how the organisation is able to

formulate an appropriate business strategy in the light of the environmental influences. It is obvious that there are opportunities for organisations in this sector to formulate appropriate strategic action orientation in order to utilise the emerging opportunities. How HPL has responded to the imperatives has been discussed at length in the subsequent sub-sections.

7.3 Strategic Action Orientation: Understanding the Business Strategy

The environmental influences coupled with the internal resources and competencies have shaped the strategic action orientation of the Haldia Petrochemicals. It has already been discussed in the previous section that the eastern part of the country is the potential market of HPL. This coupled with the move towards selling the present products into new geographic areas in the national and international market has been one of the important focus areas of the multifarious nature of the business strategy of HPL which will be discussed at length in the subsequent discussions.\(^5\)

One of the important strategic advantages of the organisation is its location in the eastern region to cater to the emerging markets in this part of the country. In the year 2001, the organisation had market share of 22% of the total polymer market in the country and its share was 60% in the eastern region. Further, sales data indicate that the organisation has been able to sell 29% of its products in the western region followed by 25% each in the northern and southern part of the country.\(^6\) The organisation’s share of sales in the domestic market as a percentage of net sales stood at 67%, 75% and 77% during the years 2004-05, 2005-06 and 2006-07


\(^6\) http://www.hindu.com/businessline/2001/01/06/stories/020649e1.htm,
respectively while the rest accounted for export sales corresponding to the same period. Thus, sales in the domestic market increased during the last few years. The organisation has embarked upon product development initiatives by producing Motor Spirit, Auto LPG for domestic oil companies. Thus, with the basic objective of entering into new and unexplored markets and increasing sales in existing markets, the organisation has pursued intensive growth strategy basically through the three modes market development, market penetration and product development (David, 1995). The organisation’s strategic action orientation can best be understood with the help of its Strategy-People-Electronic (Information Technology)-Customer centric (SPEC) Model that identifies the linkage the among business strategy, human resource, IT and customer. The model entails the issue of uninterrupted business process for the organisation which is a necessity for HPL like other organisations in this industry. This approach has been analysed in following sections.

The organisation commissioned its naphtha-based petrochemicals complex at Haldia in the year 2000, with 20,000 tonne per annum ethylene capacity. In 2003, the Corporate Debt Restructuring (CDR) initiatives have been initiated and the organisation earned positive net profit in the next year alongwith the turnover exceeding 1 billion US dollars. The organisation has been successful in achieving more than 90 percent capacity utilisation within the first two years of operation of this unit. The capacity utilisation crossed 100 percent in 2003-2004 and since then, capacity utilisation has exceeded 100% which in fact, is a strategic requirement for organisations in this industry as already narrated in the previous section.
Data relating to turnover and net profit substantiate the positive effects of growth strategy especially through intensive growth i.e. increasing the sales of the existing products (Glueck, 1980). In the year 2008, the sales figure stood at Rs. 8499 crores. The sales figures for the period 2003-2007 indicate a positive growth at an increasing rate as shown in table 7.1. During this period, the organisation has successfully increased its networth and decreased the debt equity ratio from Rs. 365 crores to Rs. 2565 crores and from 3.74 to 1.14 respectively. Moreover, Reserves and Surplus that were negative during the period 2003-2005 got reversed in the year 2006 and subsequently got multiplied nearly 5 times in the year 2007 and stands at Rs.1013 in the year 2008. The organisation has restructured its debt portfolio and earned net profit for the first time in the year 2003-04 to the tune of more than Rs 100 crores. Prior to this period, the organisation was able to earn positive gross profit in the year 2000 as the organisation’s financial performance improved in the backdrop of significant increase in global petrochemicals margin and the price of naptha (Business line, 2001). The basic reason that can be ascribed to this is the rapid decline in the price of naptha (Business line, January 6, 2001). The net profit of the organisation for the year 2008 stood at Rs. 279 crores. The profitability data relating to the organisation for the period 2002-07 are shown in Table 7.2:

| Table 7.1: Revenue Trends of Haldia Petrochemicals Ltd during 2003-07 (Rs. Crores) |
|---------------------------------|-----|-----|-----|-----|-----|
| Year   | 2003 | 2004 | 2005 | 2006 | 2007 |
| Revenue | 2892 | 4193 | 5932 | 6641 | 8200 |

| Table 7.2: Profitability trends of Haldia Petrochemicals Ltd during 2003-07 (Rs crores) |
|---------------------------------|-----|-----|-----|-----|-----|
| Year | 2003 | 2004 | 2005 | 2006 | 2007 |
| Net Profit (Rs. crores) | -518 | 134 | 452 | 300 | 581 |

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The organisation was able to reverse the negative profit trend in the year 2004 and net profit has continued to grow in the subsequent years barring the year 2006. The improvement can be ascribed to improved performance, CDR package and upswing in the international petrochemicals market. In the year 2008, the net profit margin stood at 279 crores due to increase in naptha price.

The organisation has utilised its strength in feedstock procurement, polymer business, competitively advantageous position in terms of regional market share, technology adoption, adaptation and innovation, business development through the augmented capacity in downstream processing, new application and downstream in pursuing the growth strategy. As part of its growth strategy, the organisation decided to invest Rs 800 crores aimed at expansion of capacity by 25% and it increased the production of fuel gas (RFG) by 25% in the year 2007. Increasing additional storage facility, improved product mix, enhanced yield pattern, better utilisation of energy are some of the thrust areas to this end. As part of its growth strategy, the organisation has envisaged 30% capacity expansion through which the organisation has planned to enhance the ethylene capacity from 5.2 kilo tonnes per annum (ktpa) to 6.7ktpa through the project “Supermax” with an initial estimated project cost of Rs 770 crores. However the project got delayed due to dearth of designers, lack of availability of fabrication and other materials required for construction. For smooth implementation of the project, the management has decided to close down the plant for 75 days in order to commission the project. The project entails linkage between the old and the new machineries. Moreover, with

7 http://search.indopia.in/begin.php?txtsearch=Supermax&newsCatId=2
rapid changes in the global petrochemicals industry the organisation has decided to make a “strategic shift to value addition” by manufacturing products which did not require much naphtha. However, the path followed towards the achievement of growth strategy has not been very successful. The project “Supermax” has been delayed by more than 2 years on account of Working capital constraints/ non-realisation of expected profit and the delay entails a “cost overrun” of over Rs. 350 crore as against the initial project cost of Rs. 625 crore.

The organisation has developed a strategic alliance with GAIL India Ltd for joint marketing of products in markets that are near the respective operational units with the view to support their respective intensive growth strategy, besides the move to reduce the dominance of Reliance Industries Limited. The multifarious nature of business strategy of HPL highlights among other things, the issue of cost reduction. With this end in view, the organisation planned to invest Rs. 70 crores in power plant in order to reduce power consumption expenditure by minimising the use of high-cost naptha with fuel gas and increasing the application of a number of inputs involving low cost by-products. Moreover production of new product mix has been envisaged that will help reduce naptha consumption. In line with this, issues relating to labour cost reduction initiatives have been discussed in the next section.

With a view to augment efficiency of energy generation and utilisation, HPL has acquired Larsen & Toubro’s 51% stake in HPL Cogeneration (HPLCL), at a cost of Rs. 180 crores, thereby making the acquired organisation a 100% subsidiary of

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HPL\textsuperscript{10}. The organisation's strategic action orientation has been aimed towards serving specific customers through 'customised product' approach. Accordingly, effort has been taken towards the development of an effective monitoring system, quality control system, customer survey, internal work audit in order to pursue its basic strategic action orientation. The top management believes that the organisation has acquired and developed necessary competencies to respond to "market shifts" arising out of factors like product efficiency, price-based competition etc (Business Line, December 23, 2001).

Handling of exceedingly hazardous materials in the organisation's production process is an area of importance for HPL which arises due to the basic nature of petrochemicals industry. Thus in order to minimise human vulnerability and in order to meet operational bench marks in business and also to enhance efficiency out of the resources deployed, Haldia Petrochemicals has emphasised upon two pronged approach namely automation and safety since its inception. In the context of automation, HPL has developed its information systems by implementing SAP package and connected to the different regions through a Wide Area Network (WAN) in order to facilitate organisation-wide integration of information processes\textsuperscript{11}. In the opinion of the top management, the organisation's in-plant networking is among the largest of its type. The organisation "realized early that without deploying IT, growth would merely remain a dream". Thus, IT has been considered as a strategic imperative. IT application has been made in the production process, encompassing attendance recording systems to plant control,

\textsuperscript{10} Information available from http://www.articlearchives.com/energy-utilities/utilities-industry-electric-power/1718118-1.html.

safety system etc. The organisation has developed Knowledge Management Processes, Laboratory Information Management Systems and Terminal Automation System for liquid loading monitoring. As part of these strategic initiatives, the organisation has bagged ‘CIO recognition for excellence in Strategic IT Deployment’. Besides carrying out knowledge management processes online, HPL also addresses customers’ complaints. The IT infrastructure of the organisation has been so designed to integrate all organisation-wide information processes. The IT infrastructure facilitates the knowledge management processes online, addresses customers complaints online through Lotus Notes, supports the Laboratory Information Management Systems (LIMS) Terminal Automation System (TAS) for liquid loading monitoring. The Truck Tracking System (TTS) introduced earlier for monitoring has been withdrawn. An amount of nearly Rs 150 crore on developing IT infrastructure has been envisaged that would be spent on developing a data center, Domino and Security infrastructure; Ethernet-based campus LAN covering the entire plant and at 16 locations.

Another core area supporting the business strategy of HPL is safety. Safety being a strategic priority as identified in the research can be exemplified in terms of a number of strategic initiatives taken by the organisation. These have resulted in HPL bagging a number of awards like British Safety Council five star rating & “Sword of Honour” in 2001, ISO 14001 & OHSAS 18001 Certification in 2003, CII(ER) Safety Award in 2001-02 & 2003-04, Environment excellence award in 2003 & 2004, ICMA award in HSE Management in 2003 and ISO 9001 in 2006. In the context of governance structure relating to safety, a number of committees that encompass Board HSE Committee, Central HSE Committee, Plant Management
HSE Committee, Contractor HSE Committee and Team Safety committee have been formed. Further, a comprehensive audit system comprising Monthly Plant Safety Inspection, Cross Functional Audit, IMS internal Audit, 3rd Party Safety Audit and Specialised Audit is in force.

The organisation has realised that in the light of the environmental influences comprising issues like globalisation, intense competition, demanding customer, regulatory changes and technology changes, there is need to adopt internationally recognised and proven quality management system to stay in business and thrive to be flexible, adaptive and innovative. The organisation's dedicated Customer Services group is committed to polymer business activities. This group provides support and carries out functions aimed at continuous enhancement of customer satisfaction through product development and customisation pursuing quality augmenting approaches, extending support to customers, providing testing and analytical support on raw materials and finished products, tracking customer feedback and optimisation of product design, developing quality management systems to measure, monitor and augment quality. Usage of statistical quality control tools, external and internal customer surveys, auditing and self assessments are observed for ensuring conformance to customers requirement. In the light of this, the organisation has adopted a number of actions for strategic priorities and based on the inputs collected from the interaction with executives, it has been observed that quality is an important area of strategic action orientation. Accordingly the organisation has formulated a policy “QUARTZ” connoting Quality Understanding and Application Resulting Towards Zero Defects. This approach, as a universally adaptable change management process, can be applied to
quality initiatives like TQM, TPM and 6 Sigma where the basic thrust is on understanding internal and external customer's requirement and taking action aimed at meeting these requirements. The process is actually implemented across departments by involving data-driven decision making with the critical thrust upon making quality a collective responsibility, clarifying the concept and generating interest at the management level. Moreover, the process involves employees in improvement activities. On the basis of inputs collected from the members of the management team, the programme comprises three broad areas of TQM, ISO 9001:2000, ISO 14001:2004, OHSAS 18001:1999, TPM (5 'S' ) that have been integrated together since 2005. The quality policy of HPL states that "the organisation is "committed to total customer satisfaction by delivering quality products and services through continuous improvement of knowledge, skills, processes and involvement of all employees and business associates". Customer service groups have been aligned with Integrated Management Systems in line with ISO 9001 standards. The TQM practice is based on involvement of all stakeholders like employees, shareholders, customers, suppliers, associate employees, contractor employees, etc. Quality education imparted to all employees, associate employees and contracted employees. As part of TQM, Eureka and Small Improvement Projects (SIP) registration system has been launched and nearly 700 SIPs have been registered, majority of which have been implemented. In all 12 KIPs have been identified of which 6 KIPs have been implemented by the organisation. These initiatives through TQM have resulted in a saving by means of improvement projects of more than Rs. 10 crores. The road map for the future includes expansion
of the domain of SIPs, introduction of equipment specific quality improvement, all aimed towards increasing the amount of saving through improvement projects.

The organisation has integrated the existing management systems i.e. ISO 9001:2000 with ISO 14001:2004 and OHSAS 18001:1999 by having a common apex manual, objectives, procedures and single audit (internal / external) is conducted for all three systems. The advantages of such a step, in the opinion of the management, are manifold like, providing a framework for continual improvement, lessening of rework & scrap non-value added activities resulting in cost saving, systematic working resulting in consistency and reliability of operation, delivery of product / services as per customers' requirement, enhanced communication with supplier etc.

The basic objective of following 5-S principles is to have a clean workplace that would help in productivity and quality enhancement, timely delivery, and cost reduction. The management believes that with the adoption of 5S, the workplace has become clean, better organised, disciplined and there have been conspicuous results and generation of new ideas.

In a snapshot it is observed that the organisation's business strategy entails intensive growth strategy through market penetration, market development and product development with a focus upon quality, safety, productivity, technology in general and automation and information technology in particular and cost aspects of the organisation's strategic action orientation. Moreover, the issue of maintaining uninterrupted business is of prime importance for carrying out the production activity. It remains to be seen how the organisation has integrated its
human resource management with the business strategy. This is the subject matter of the next section.

7.4 Understanding the Relationship between Business Strategies and Human Resource Management Practices

As discussed in the previous section, it is observed that the organisation’s strategic action orientation focuses upon quality, safety, productivity, technology in general and automation and information technology in particular and cost aspects of the organisation’s strategic action orientation. In this section, an effort has been taken to identify the different areas of HRM that are related to these areas of strategic action orientation of the organisation. For this, information available from secondary data source and discussion with the members of the management team, executives from the HR department has been used in the discourse of this section. The different areas of human resource management practices of HPL have been analysed in five sub-sections covering acquisition and employment, development, motivation, maintenance and other related HRM issues. 12

7.4.1

An analysis of Haldia Petrochemicals’s employment pattern deciphers the fact that the organisation has a unique employment model wherein the entire workforce can be categorised into three groups viz. Contractual-Outsourced-Permanent (C-O-P) and the employment model can be referred to as C-O-P Model. This can be related

to the basic business strategy of the organisation and addresses the basic strategic action orientation of the organisation. A closer perusal of the C-O-P model reveals that under the permanent pay roll, there are two categories, executives and non-executives while under the contractual category, there are daily rated contractual employees (DRCEs) and monthly rated contractual employees (MRCEs). These employees serve the process, maintenance and administrative departments. A unique feature of the organisation’s C-O-P model of employment is that the entire workforce is under “Contract labour” category with approximately 1500 contractual workmen. The model helps in reducing the liability of the principal employer on one hand and on the other hand, ensures statutory compliance on the part of the contractor-employer with regard to nearly 1500 contractual workmen with provision for long term settlement in force with contractual employees’ union. In case the specific requirements are not adequately addressed by the contractor-employer there is provision for termination and a new contractor-employer may be deployed. Moreover, a system-driven monitoring and control system tracks any violation in proper implementation of non-statutory compliances in this regard. The workers in the contract category are covered under the employee state insurance schemes. Outsourcing initiatives covering a number of areas have been conceived and implemented. Effective outsourcing has been carried out for routine, repetitive but important HR sub-functions like the time office and travel desk functions. Moreover manpower redeployment exercises have been undertaken for analytical jobs that are directly linked to business strategies. The organisation’s basic strategic action orientation necessitates technology-enabled business process. For this, the core aspect of the production process requires a knowledgeable workforce and in
this context the core people are the process engineers who carry out high-end job of panel automated controlling. These employees are in the permanent pay roll of the organisation. In fact, engineers comprise 80% of the workforce under the permanent payroll of the organisation. In the opinion of the senior executive, the technology-driven control room is manned by non-unionised people which supports the basic strategic action orientation of the organisation of uninterrupted business process. This is also related to another area of the organisation’s strategic action orientation that is 100% capacity utilisation. Discussion with the managerial staff of the organisation reveals that the basic reason for opting for the C-O-P model of employment pertains to cost reduction wherein the entire burden of employing the worker is borne by the contractor and the organisation can pursue human resource management practices for the non-workers category. Moreover, the organisation has emphasised upon “de-engagement” of managerial staff from routine jobs such as time office, guest house, transport, canteen that are non-core in nature, and enable them to concentrate on the core areas that are strategically important to the organisation.

In the context of resourcing, it is observed that the organisation recruits technical staff under the member category from local region in order to enhance the retention level with a view to address the strategic priority of uninterrupted business process. In the opinion of the senior executives of the HR department, the loyalty level being high, ensures that the ‘intent to leave’ gets reduced to a greater extent. With a view to address the issue of employee “poaching” HPL has been maintaining database of similar profiles across industry from where required human resources can be resourced effectively. Again, locational disadvantage in terms of geographic
distance alternative approaches involving the use of modern methods of recruitment like teleconferencing & video conferencing are being used by HPL to get the right kind of human resource to meet the strategic requirement of the organisation. Proactive and effective approaches to tackle manpower shortage without undermining the quality and productivity have been pursued by the organisation. A well structured employee induction programme is in force that ensures planned introduction of new joinees to people, process, work and the organisation. HPL has somewhat a “lean” manpower strength which is totally different from traditional organisations mainly PSUs that employ manpower to a larger extent. The organisation has therefore emphasised upon productivity enhancement through automation. The organisation’s employment in the year 2008 is approximately 800 employees, with the Executive: Non executive ratio standing at 2:1. Employees in the organisation’s pay roll are categorised into different grades. SG 1-08 comprise non-executives cadres designated as Members. Engineers and Officers fall under SG 9A and Assistant Managers, Deputy Managers, Managers and group make-up Work Level IV. Senior Manager (SG 11), Chief Managers (SG 12) and Deputy General Manager (SG 12 A) comprise Work level III. Work Level II is comprised of General Manager (SG 13), Senior General Manager (14) and Chief General
Manager (SG 14A). The highest level Work level I, is comprised of Vice President (SG 15), Senior Vice President (SG15A) and Executive Vice President (SG16).

A close examination of data relating revenue per employee and profit per employee (Figure 7.1) reveals that there has been substantial enhancement of productivity measured in terms of the two variables. The increasing trend in revenue per employee and profit per employee reveals that during the period under study there has been substantial improvement of employee productivity measured in terms of the two variables. Compared to the previous period (2001-2002), the percentage increase in revenue per employee for the period 2002-03 has been 112.37% which has exhibited an increasing trend over the next subsequent year. These results may be interpreted in terms of productivity enhancement through technology upgradation and also motivation of employee. This may be verified from the analysis of employees' line of orientation in the next section.

7.4.2

It can be safely be argued that training as a developmental intervention in the perspective human resource management practices at HPL, is embedded in the system which addresses the strategic priorities of the organisation. Training has been aligned with the two areas of strategic priority i.e. safety and quality which have been discussed in the subsequent sections. The areas of strategic priorities of
HPL are being address through the developmental aspect of human resource management practices in terms of increasing employee engagement level, better adaptability with the technology enabled work system, aware about customers’ demand and developing employees’ functional competencies. In order to address these issues several areas of human resource management practices of HPL can be highlighted. These include a comprehensive Mentoring programme that is implemented with effective association with Cross Functional Superiors that ensures two way flow of information between the mentor and protégé. Need based training jointly identified by employees and their superiors in order to address operational issues relating to the logistic process coupled with behavioral issues as identified by business imperatives of the organisation for the crux of training initiatives. Again the relevance of training gets lessened to a larger extent on account of the technology driven work system in HPL. In other areas, well-established training programmes to enhance employee involvement are being conducted on a regular basis and competency gaps identified through performance management system are also addressed through training and development interventions. The SAP system has provision of training and system embedded in it in the form of training needs identification, training plan and maintaining training records. This also ensures effective alignment between technology (especially IT) and training at HPL.

7.4.3

It has already been mentioned in the last section that an important area of strategic action orientation of HPL is quality. Hence the relationship between business strategy and human resource management practices entails linkage of quality as a strategic aspect to the appropriate areas of human resource management. Moreover,
the vital role of HRM practices in addressing quality issues within organisations has been recognised in literature (Brown, 1996). Moreover, Storey's (1992) research highlights the relevance of quality in the context of the BS-HR relationship. The human resource management practices of the HPL have been aligned with the Quartz initiative discussed in the previous section. This is in line with the guidelines available in existing literature highlighting the linkage of quality issues with human resource management (Palmer and Saunders, 1992; Brown, 1996). The Quartz programme facilitates employees to know the workplace better, recognise customers’ expectations, spot, solve and prevent problems at workplace, undertake and carry out improvement activities. The Quartz culture connotes a uniform culture whereby employees regularly do what they are supposed to do, meet commitments following “Do it Right The First Time & Every Time” (DRIFT) approach by following safety practices like using helmets, safety shoes etc. The process also ensures involvement of people in improvement activities. The integration of the three Management systems has had important effect on human resource management practices. As part of these activities, training programmes aimed at providing quality education with 100% coverage has been ensured and employees participating in quality improvement processes have been acknowledged. Quality education has also been imparted to associate employees and contract employees as well. The process has resulted in the development of improved working conditions, unambiguous work requirements & job responsibilities, standardised processes & systems. It has also facilitated reduced variation in the size of workforce, reduced rework, availability of ready-made human resource, improved availability of resources. Prior to this, EIP (Employee Impact Program), EUREKA (Idea
Management), SGA (Small Group Activities), PS (Problem Solving) and IMS: ISO 9001, ISO-14001 & OSHAS-18001 have been implemented. As part of the Quality Education System (QES), training is provided in-house 1 day each for 7 weeks by trained facilitators. This training, which was earlier used to be imparted externally, is currently imparted internally since 2008. All new joinees including new joinees in the post of General Managers are required to undergo the training programme.

As already discussed in the last section it has been observed that the organisation has implemented QUARTZ initiative which forms a part of the organisation’s strategic action orientation. The QUARTZ recognition programme provides a platform to employees for providing improvement ideas resulting in discernible outcomes. Employees are provided the opportunity to suggest product/process improvement through Small Improvement Projects (SIP), Key Improvement Project (KIP) and Eureka. Mandatory QES training is essential for participation in SIP and it involves new ideas less that 5 lakhs and it is limited to a particular department. KIP involves ideas leading to cost saving exceeding 5 lakhs and is cross-functional in nature encompassing areas like electrical, mechanical, safety, HR etc. Eureka involves problem solving initiatives in an area on the basis of the knowledge of in the concerned area. A team evaluates the SIPs, KIPs and Eureka and determines the category of award viz. gold, silver and bronze. The month of November is celebrated as the Quality Month. As per data available for August 2008, 136 employees have been recognised for their initiatives in quality improvement. There has been one project in Key Improvement Project, 31 projects in Small Improvement Projects and 65 in Eureka. These have resulted in a cost saving to the
tune of Rs. 3.55 crores. The project on KIP on “Reduction of Off-grade Generation in LLDPE during Grade Transition” has resulted in a savings of Rs. 91 lakhs. Moreover there have been QES-5 best facilitators and QES-5 other facilitators as well. In the subsequent period, there were 1 SIP and 1 Eureka gold project, involving a cost savings of Rs 14,300,000, Rs. 274,550 respectively; 8 SIP Silver and 2 Eureka silver projects involving cost savings of Rs. 7,470,945 and Rs. 997,000 respectively and 11 SIP bronze projects involving savings of Rs. 2,376,261. The areas covered in these projects include: areas like “Reduce cost of cleaning of suction strainer of Cooling Water Pumps in IOP”, “Reduce leakage of Tankers & Lorry trucks during transportation of Chemicals.”,” Saving of Energy in Cyclo-Pentane Recovery Column in AU Plant”, “Remote operation of siren using fibre optic cable and telephone network” etc. Moreover, there have been 8 QES facilitators. While the QUARTZ programme emphasises upon the quality aspect, almost all of these areas pertain to cost reduction initiatives of employees. Thus it can probably be argued that in an effort towards quality improvement, cost issues get automatically embedded and addressed. These have enhanced employee motivation and have been effective in developing a unique culture. At the same time these initiatives have also addressed the strategic issue of cost reduction.

7.4.4

Under the maintenance component of HRM practices of HPL, the important issues that may be identified in line with the business strategy are employee benefits and services, safety and health and employee relations.

It has already been mentioned that the organisation's interrupted business process necessitates the sourcing of knowledgeable workforce who would carry-out high-end jobs. For carrying out high-end jobs with the help of sophisticated technology the retention of the human resources assumes greater significance. Accordingly HPL has emphasised upon the benefits and services to retain employees within organisation. Some of the services that the organisation has provided include bus service (bus services include shift buses from 6 locations in and around Haldia, facility trip buses from townships and school buses for employees' children on payment of a token amount), canteen (one main canteen with modern amenities with a total seating capacity of about 200 and satellite pantry attached to control rooms for distribution of breakfast, lunch, evening snacks & dinner), guest house and emphasised activities for improving the Quality of Work Life. Employee accommodation is provided in a separate township for both executives and non-executives. Moreover, club facility, gymnasium, yoga sessions, swimming pool, library, cyber café, indoor games, family restaurant & bar, day-night facilities for football, cricket, badminton, volleyball, annual sports etc are also part of employee benefit and service component. Other employee benefit services components are interest subsidy on personal loans, benefits for housing for employees (SG 9 to 13) in the form of housing and rent assistance, medical expenses, reimbursement of hospitalisation expenses, annual leave and travelling allowance, personal accident insurance, annual medical check-up, group gratuity schemes, car reimbursement, subsidised work clothing, supporting professional courses of study, cell phone/voice data, flat maintenance, kit allowance, housing facility at HREL, club membership...
etc. These initiatives ensure that the knowledgeable workforce is effectively retained and contribute towards the productivity front.

In line with the approach of ensuring uninterrupted business process and technology focus of the organisation, a SAP-based Electronic Time Attendance System is in force and issues like shift allocation, leave, tour etc. are monitored through the system. This highlights the application of IT in carrying out HRM function which in turn is aligned with the important areas of strategic action orientation of the organisation. Employees can log on to HR Intranet and apply for leave/tour online. Moreover as already identified in the previous unit regarding the extensive application of Information Technology in different areas of operation, the IT enabled employee self service is another unique illustration of such initiative. This includes leave application system, tour application, shift change approval, e-payslip system, Idea management system, competency score, safety inspection, e-help desk etc. Other HR application include salaries receivable, benefit enjoyed, processes, recruitment, training, performance management, web mail of the organisation, value understanding, etc.

Maintenance of harmonious Industrial Relations is a business imperative for a number of strategic reasons like uninterrupted business process, 100% capacity utilisation etc. It has already been mentioned that the entire band of "worker" is outside the organisation's pay roll. This approach makes sense because the high-end jobs are manned by the non-unionised employees. Thus disruption in the core business process is not normally expected and the traditional issue of employee relations as applicable to Indian organisations is not relevant in the case of HPL. However, employee relations issues in the context of BS-HRMP relationship within
HPL, assume a different form for employees under the contract category. Although
the organisation's C-O-P model provides insulation against disruption in the core
production process, maintenance of harmonious employee relations is a strategic
necessity for smooth running of the logistic process and the organisation has
emphasised upon development of an effective administrative control system in line
with statutory guidelines for meeting the strategic requirements. In this perspective,
a unique characteristic of the C-O-P model is that although workers are under the
contractors' pay roll, a system has been developed that in other way ensures
compliance on the part of the contractor-employer on certain pay and benefit related
issues. The system involves monitoring of statutory compliance in respect of the
contractual workmen. Monitoring and implementation of non statutory compliances
honoured through agreement / environmental factors. As part of the maintenance
function the organisation has implemented wage revision schemes for the non
executive employees. However, the organisation is not having a smooth ride in the
context of employee relations. A newspaper report\textsuperscript{14} claims that 75% of workers are
under the DRCE and MRCE since 2000 with no provision for provident fund and
gratuity. Sporadic disruptions have been observed at baggage, loading and forklift
sections that disrupted the strategic requirement of uninterrupted business process
in the organisation that entails the unbroken chain of production, packaging and
transportation. The disruption can be ascribed to the demand placed by the union
for 183 casual workers which is unacceptable to the management. The management
of the organisation said that over the years, a number of contractual personnel have
been absorbed in the permanent pay rolls, in different areas of core activities in the

\textsuperscript{14} Statesman 16, October 2008
light of an rational method based on requisite qualifications, skills and competencies to meet the requirement of the business strategies of the organisation.

In the previous section it has been observed that safety forms an integral part of the organisation’s strategic action orientation. It has already been mentioned that HPL’s production process involves handling of hazards and therefore adherence to safety norms becomes more significant in the context of HRM. The organisation considers safety as a “line function” and “everybody’s responsibility” and it has accordingly aligned its safety initiatives with the human resource management practices whereby efforts are taken to minimise/make zero consequences arising out of accident through effective HR interventions. The Health Safety Environmental guidelines are well documented in the form of manual for easy reference and access. Once an employee enters the gate, he is subject to the full-fledged safety norms and practices. One day safety training is compulsory for all new joinees. Accident / Incident Investigation System comprising various aspects of reporting and attention issues, Work Permit System covering different aspects of permit and automated fire combating system are in place for addressing issues relating to safety of employees. Efforts are taken to make employee aware of the safety norms and practices. In line with the policy of “safety as a line function”, the organisation’s governance structure relating to safety involves the head of the safety district as the Team Leader, Senior Engineers or officers as team safety leaders, shift-in-charge or shift engineers as the duty of shift safety leaders, employees in the category SG 9 and above and SG-8 and below as members of central safety committee and human

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15 Information collected from the interaction with HR executives, Executives associated with the safety dept and the PowerPoint presentation “Safety Management in HPL” available in the organisation.
resources encompassing all teams and shifts as emergency crew members. Promotional Activities like celebration of important days relating to safety, safety contests, etc are organised for popularisation of safety practices within the organisation. An emergency management system involving emergency management control room, organising emergency drills every two months on different scenarios and preparation and circulation of drill reports, etc is functioning within the organisation. Training on various aspects on safety are organised on a regular basis. There are training modules on safety, fire, health and environment and the associated training programmes are organised for both HPL & Contractor employees on the basis a training calendar and well-formulated Standard Operating Procedures (SOPs) / Standard Maintenance Procedures (SMPs). Larger coverage in the context of training in First Aid and life saving techniques has been achieved. Important initiatives in the context of Occupational Health include pre-placement Medical Examination, mandatory obligation of periodical medical examination (PME), development of an occupational health center that operates 24 hours with proper physical and human resource (doctor) infrastructure, etc.

7.4.5

Two other HRM issues have been identified as significantly related to the strategic action orientation of the organisation and these make up the fifth perspective of the BS-HRMP relationship at HPL. There are certain areas of human resource management practices that are relevant in the context of the strategic issue of the project “Supermax”. The HR representatives’ inclusion in core committee for the project signifies HR’s role in operationalising strategy. In this context, requirement of human resources, facilities to
be provided to the vendors and related administrative jobs for monitoring manpower movement and deployment pattern have been envisaged for smooth implementation of the project. These substantiate the importance of HRM in the perspective of growth strategy of HPL through the project “Supermax”.

It has already been mentioned that HPL has acquired Larsen & Toubro’s 51% stake in HPL Cogeneration (HPLCL) thereby making the acquired organisation a 100% subsidiary of HPL. Thus acquisition as a business strategy has been supported by appropriately aligning the different areas of human resource management practices. Effort has been taken to orient the employees of the acquired organisation with HPL’s cultures and standards through appropriate interventions. The compensation package and the benefit services like residential facility, transport and canteen facility etc. have been provided in line with HPL. Salary Fitment of HPLCL employees have been addressed in line with HPL standards by taking into account their experiences, knowledge, etc. Furthermore, employee engagement programmes have also been undertaken within the acquired organisation. Other areas like training, change management etc have been undertaken for establishing an appropriate relationship between the business strategy of acquisition and human resource management practices.

7.5 Understanding Employees’ Line of Orientation vis-à-vis BS-HRMP Relationship

7.5.1 Introduction

On the basis of the discussion in the previous two sections, the employees’ line of orientation questionnaire has been developed. The questionnaire contains 21 items in the form of statements highlighting the different aspects of the BS-HRMP
relationship at HPL. Apart from the common areas like internal marketing efforts (item 1, 2, 5), organisation’s personnel policies (item 10), physical environment (item 6), different specific issues relating to the organisation in the context of BS-HRMP relationship encompassing cost (item 18), quality (19), technological upgradation and adaptation (3, 9, 21), industrial relations (item 6), safety (12), growth (8) have been considered. Related HR issues like employment model (4) work environment (14, 17) employee relations (7) career opportunities (item 11), reward and compensation (13), employee services (item 16), training (15) and recognition (20) have been considered. The questionnaire has been exhibited as appendix V(a).

Reliability Statistics for the employees’ line of orientation questionnaire:

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
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<tr>
<td>Cronbach's Alpha</td>
</tr>
<tr>
<td>Standardized Items</td>
</tr>
<tr>
<td>N of Items</td>
</tr>
<tr>
<td>.880</td>
</tr>
<tr>
<td>.872</td>
</tr>
<tr>
<td>21</td>
</tr>
</tbody>
</table>

The above results indicate that the reliability test is highly satisfactory for the present study.

7.5.2 Overall Orientation

Out of the sample size of 100, response has been received from 51 employees. On the basis of the response received to the questionnaire some interesting insight may be drawn. In this perspective, high orientation has been observed in the context of the following strategically important areas identified in terms of mean scores (Appendix V(b)):

- Recognition for providing ideas relating to product/process improvement
- Awareness about the Health, Safety, Environment and Fire (HSEF) policy
• Awareness about QUARTZ policy and consideration of quality considerations in work performed

• Organisational success exclusively depending upon its ability to minimise the cost of operations and loss

• Organisational effort taken towards increase in production capacity

• Efforts aimed at technological upgradation have resulted in quality enhancement

• Employees adaptation to technological upgradation

• The technology adapted and the management practices help to do job in a better way

• Effective physical working environment and facilities in organisation

• Linkage between the work performed and organisation’s sustainability and growth

• Understating that the organisation has necessary resources and competencies in becoming a global leader in Petrochemicals

Thus orientation in maximum number of identified areas vis-à-vis BS-HRMP Relationship has been observed. It is observed that employees are aware of the strategic areas like quality and its related interventions, cost, safety, growth, technology, physical environment and issues related to internal marketing. Thus high orientation has been noticed in a number of areas that are associated with the strategic action orientation of the organisation which are excellent findings for the organisation.

Majority of the areas of HRMP fall under the moderate category of orientation; like physical working environment and facilities, welfare and benefit,
non-physical work environment, training, career opportunities, communication and compensation. Thus the HRMP areas need to be strengthened in the context of the business strategy of the organisation.

However the last three areas where relatively deficient orientation has been observed pertain to:

- **Effectiveness of the employment model** (Contract- Outsourced-Permanent) vis-à-vis organisation's sustainability and growth
- **Healthy industrial relations**
- **Agreement with organisation's personnel policies**

The above three areas may be considered as vulnerabilities for the organisation that call for necessary intervention in the right perspective.

On the basis of the results of principal component analysis (shown in annexure V(d)) that has yielded six factors, weights have been identified following the process identified in the methodology chapter. On the basis of the weighted scores that have been ascertained by multiplying the factor mean values with the respective weights, the overall orientation of employees is 77 percent (mean value 3.85) which is quite satisfactory.

### 7.5.3 Orientation differences based on background variables

The various categorisations on the basis of different background variables are (Appendix V(c)):

1. **Designation-wise: Members and Executives**
2. **Qualification-wise: Technical and Professional**
3. **Department-wise: Manufacturing including maintenance and Service**
4. **Experience-wise: Less than 5 years and More than 5 years**.
On the basis of the above categorisation, the first three factors signifying highest orientation for each of the categories have been identified. For the employees under member category the important issues are ideas about product/process improvement, HSEF and QUARTZ policy. For executives, apart from the product/process improvement, internal marketing efforts and technological issues are important. Thus the degree to which executives are oriented toward the internal marketing efforts is higher compared to the orientation of members in this regard. Hence the internal marketing efforts need to be percolated to the bottom level of the organisation. For employees with technical qualification, idea about product/process improvement, QUARTZ and internal marketing appear to be important. On the other hand, for employees with professional qualification, the important issues are ideas relating to product/process, production enhancement, and HSEF. For employees in the manufacturing units, the important issues identified are recognition for providing ideas relating to product/process improvement and awareness about HSEF policy and QUARTZ. The important item-wise orientations in terms of the first three items are same for two categories: members and employees in the manufacturing units. For employees in the service units the important issues are idea about product/process improvement, increase in production capacity and technological upgradation. In the case of employees within 5 years of experience, the important issues are ideas of product/process improvement, QUARTZ and internal marketing. While on the otherhand, the issues for employees with more than 5 years experience are HSEF policy, recognition for product/process improvement and QUARTZ.
Higher overall orientation has been observed among the members as against executives; employees with technical qualification as against professional qualification; employees in services department as against manufacturing including maintenance; employees with more than 5 years experience as against employees with less than 5 years experience. In fact among the different categorisations, the overall orientation is highest among employees with more than 5 years. This signifies the fact that orientation increases with more 'stay' within the organisation.

Among the different items, lowest orientation has been observed in case of agreement with HR policies in case of employees in the manufacturing including maintenance. This is an area which needs to be improved. The human resources concerned with the operational level activities at the shop floor should be made aware of the HR initiatives of the organisation. Again, for employees of the same category, highest orientation score among all the areas has been observed in the context of recognition for providing ideas relating to product/process improvement which is an excellent result and proves that employees directly involved with operational activities are strategically oriented in areas of product/process improvement. Aligned with this, is the orientation vis-à-vis cost/loss reduction. Strong orientation has also been observed in the context of HSEF policy which is another area that is strategically aligned.

Perfect (highest) orientation has been observed across all the categories (barring employees with more than 5 years experience) in the context of item no 20 i.e., employee recognition for providing ideas relating to product/process improvement which proves that employees are aware of the quality and cost reduction aspect. On the other hand, lowest orientation has been observed across all the categories.
(barring employees with more than 5 years experience) in the context of item no. 10 i.e., agreement with personnel policies which signifies the fact that personnel policies have not been able to create a positive impact amongst the employees. In the context of awareness of the Health, Safety, Environment and Fire (HSEF) of the organisation, higher orientation has been observed among the members and employees in the manufacturing units compared to the other categories which is an excellent indication for the organisation in the sense that employees closely attached with operational level are aware of the HSEF issues. Executives consider the issue of cost minimisation to be important as against other areas.

7.5.4 Item-wise statistically significant differences on the basis of background variables: Results of Non-parametric tests

With a view to understand the item-wise significant differences between and among the groups of different background variables, non-parametric Mann-Whitney test has been employed.

Designation-wise: Members and Executives

In the designation-wise classification (executive and members), significant difference (at 10% level of significance) has not been observed and null hypothesis has accordingly been accepted for majority of items i.e. 20 out of 21 items of the questionnaire signifying the fact that difference in terms of designation does not have a considerable influence on employees’ line of orientation vis-à-vis BS-HRMP relationship. Significant difference has been observed and null hypothesis has accordingly not been accepted and alternative hypothesis has been accepted in case of the following item:

Item 19: Awareness about QUARTZ policy

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It has been observed that the orientation is higher in case of members, which can be justified on the ground of greater orientation among the members with operational level issues as against the orientation of executives vis-à-vis other issues that may not be operational in nature.

Qualification-wise: Technical and Professional

In the qualification-wise classification (technical and professional), significant difference (at 10% level of significance) has not been observed and null hypothesis has accordingly been accepted for majority of items i.e. 18 out of 21 items of the questionnaire signifying the fact that difference in terms of qualification does not have a considerable influence on employees’ line of orientation vis-à-vis BS-HRMP relationship. However, significant difference has been observed and null hypothesis has accordingly not been accepted and alternative hypothesis has been accepted in case of the following items:

Item 5: Linkage between the work that I perform and my organisation's sustainability and growth

Item 18: Success of organisation exclusively depends upon its ability to minimise the cost of operations and loss

Item 19: Awareness about QUARTZ policy

It is observed that in all the above items, the orientation is higher in case of technically qualified employees which can be justified on the ground of greater orientation among the technically qualified employees who are largely involved with operational level issues as against the orientation of employees who are having professional qualification for whom other organisational issues that may not be operational in nature, may be important.
Department-wise: Manufacturing including maintenance and Service

In the department-wise classification (manufacturing including maintenance and service), significant difference (at 10% level of significance) has been observed and null hypothesis has accordingly not been accepted for the following 10 items (items 2, 3, 4, 6, 9,10 , 11, 12,19 and 21) on the basis of Mann-Whitney test:

Item 2: Organisation has necessary resources and competencies in becoming a global leader in Petrochemicals

Item 3: Technological upgradation have resulted in quality enhancement

Item 4: Effectiveness of the employment model (Contract-Outsourced-Permanent) for organisation’s sustainability and growth

Item 6: Appropriateness of physical working environment and facilities in the organisation

Item 9: Employees adaptation to technological upgradation

Item 10: Agreement with the organisation’s personnel policies

Item 19: Awareness about the QUARTZ policy

Item 21: Technology adapted and the management practices help to do job in a better way

It is observed that in case of majority of above items (excluding 12 & 19), the orientation of employees of service departments is higher than that of employees under manufacturing departments. The differences relating to different items identified above may be ascribed to the difference in perception. In case of item 4, it may possibly be stated that employees in the manufacturing are more attached with the routine operational activities that are “core” and are having different opinion about the C-O-P model. However, the difference with respect to item 9 is
significant from the organisational perspective in the sense that the employees in the manufacturing sector, who are required to have interface with technology, are not highly oriented towards it. This calls for necessary intervention in the context of technological upgradation. The difference arises out of the discernment about the physical environment prevailing in the organisation (item 6) which, the employees in the service units perceive to be excellent as against the environment in the manufacturing departments. This possibly raises the question of improvement of environment in the manufacturing units. In case of item 21, it is observed that orientation is less amongst members of manufacturing departments which signifies that technology adaptation needs to be more intensive in manufacturing units. Lastly, in items 12 and 19 the higher orientation of employees in manufacturing departments in the context of HSEF and QUARTZ is an excellent result and signifies that the employees at the operational level, are more aware about policies which are more relevant for them.

*Experience-wise: Less than 5 years and More than 5 years*

In the experience-wise classification (less than 5 years and more than 5 years), significant difference (at 10% level of significance) has been observed and null hypothesis has accordingly not been accepted for more than 50% of items i.e. 11 out of 21 items of the questionnaire signifying the fact that difference in terms of experience does have a considerable influence on employees’ line of orientation vis-à-vis BS-HRMP relationship. The items where significant difference has been observed pertain to:

*Item 1: Internal marketing effort*
Item 4: The employment model (Contract-Outsourced-Permanent) is effective for my organisation's sustainability and growth.

Item 5: I see a clear linkage between the work that I perform and my organisation's sustainability and growth.

Item 6: The physical working environment and facilities in my organisation are at par with similar organisations and appropriate for carrying out my activities.

Item 7: There is minimum disruption of work in my work place due to healthy industrial relations.

Item 10: In almost all cases, I agree with my organisation's personnel policies.

Item 11: There are opportunities for personal growth and development of skills, talent and career in my organisation.

Item 12: I am fully aware of the Health, Safety, Environment and Fire (HSEF) of my organisation.

Item 15: My organisation provides me the necessary training to do my job well and to enhance my capabilities.

Item 17: There exists an efficient and collaborative work environment where employees feel involved and motivated.

Item 21: The technology adapted in my organisation and the management practices help me to do my job in a better way.

As a general rationalisation for explaining the above differences, it can probably be argued that the differences arise out of longer 'stay' within the organisation which, assume significance for the items identified. Its fine for the organisation that people who are having a longer stay, have better orientation in terms of internal marketing, physical environment, HSEF, training, technology adaptation etc. However,
significant differences in terms of items 7 and 10 indicate the fact that employees who have been in the organisation for few years have seen more disruptions, most probably in recent times, as against employees who have been staying for a longer period of time and are accordingly better oriented in terms of a long-term perspective.

7.6 Conclusion

In a snapshot, it can be averred that in the light of HPL’s unique employment model (C-O-P), the Human Resource Management Practices can be segregated into two distinct areas, one involving the contractual workers outside the organisational pay roll and for them the employment relations issue is of greater significance, though, not truly in terms of the traditional nature of employee relations and for whom, certain aspect of orientation towards the strategic areas of safety is relevant. On the other hand there are specific areas of human resource management that are directly aimed at the human resources in the organisational pay roll, largely involving the knowledgeable workforce.

In the perspective of employees’ line of orientation, it can safely be stated that by and large, the high value employees’ line of orientation in terms of a number of strategically important is an excellent finding for the organisation under study. High employee orientation towards approaches like QUARTZ, technology adaptation, HSEF, etc need to be sustained. However areas like industrial relations, personnel policies need to be improved and necessary interventions need to be formulated. Again, employee orientations in areas that are specifically related to the business strategy need to be developed and inculcated amongst employees who are new to the organisation. On the whole, the high degree of employees’ line of orientation is
a result of effective and integrative policies and practices that have been translated to the lower level of a successful organisation.