## **CHAPTER - 3**

## RESEARCH METHODOLOGY

India has witnessed large number of Foreign Direct Investments in the form of multinational corporations in the last twenty years. As discussed in the previous chapter, globalisation and liberalisation have provided a great opportunity for Multinational corporations to be globally competitive by expanding their production-base and market share. As corporate globalization continues to expand, MNCs play a key role in defining markets and throw multiple challenges to national and global business environment.

Among them the first and foremost of our concern is, new sense of a wider corporate responsibility, not only to customers and clients, but also to the communities and societies that is largely talked about on the progressive paradigms of Human Rights, Environmental Concerns and Sustainable Growth. This is challenging the traditional view that business exist solely to make profits for their shareholders; all that matters is a profitable bottom line. This has led to the controversies that Multinational companies (MNCs) might be pursuing profit at the expense of vulnerable workforces, exploiting local resources, destroying environment and so on.

Secondly, doing business globally opens the arena for conflicts in norms. Many multinational companies have codes of ethics, mission statements and integrity policies guiding their practices. However, when operating outside of their boundaries they confront different sets of norms which sometimes conflict with their home based ones. In developed countries, the moral expectations of the host country are as stringent as of any other developed country. With third world host countries, though, the moral expectations often seem to be sloppier, multinationals are tempted to lower their standards and indulge in unethical practices when situations permit.

Thirdly, the globalization of production networks means that corporations increasingly source their products and services from overseas, making it more difficult to regulate corporate activities through a single country's national legal and regulatory mechanisms. This leads to discriminatory standards of practices by a single company at its different operational locations. According to Human Rights Watch, companies such as General Motors, Sunbeam Oster, and Zenith engage in gender discrimination and mistreatment of pregnant workers in factories in Mexico. In India, Coca Cola causes shortage and immense pollution to local water supplies. Articles published in The Economist (March 2005) estimate that in Burma, where the American oil company Unocal has operations, the government used 800,000 forced labourers in their army. Verité, a social auditing firm, found that workers are commonly penalised or dismissed for joining unions in Vietnam. Just last year the Washington Post reported that of eleven U.S. toy manufacturers in China, the average wage paid to workers was \$0.12/hour even though the minimum wage in China is \$0.30/hour. The examples of irresponsibility and injustice are abundant.

On the other hand, internationally, different societies have become more demanding in terms of expecting 'right behaviour' from the corporations. Integrating interests of host country's development issues and local communities into a company's business operations has become essential. Revenues and profits can no longer remain the only topics of conversation among corporate leaders; instead, they have to talk about the profound impact that their business relations with society and communities might have to their competitive advantages and operating revenues. In addition to higher revenues, environmental protection and sustainable growth also have to be accounted for the long-term development of the business and society. CSR has been demanded by various stakeholders as one response to these challenges. The universal approach adapted by the corporations to meet these demands is through 'Corporate Social Responsibility' (CSR), approach, that refers to business activities guided by codes of conduct that exceed legal and ethical standards relating to labour conditions, environmental impacts, human rights compliance etc. resulting in to better quality of life for all of its stakeholders.

## Significance of The Study

The rules of corporate governance have changed. And there has been a range of reactions to this change. On the one hand governments and local businesses welcome the trans-national players for furthering economic growth; on the other hand, there is an emerging social discontent against multinational corporations in different parts of the world. Labourers, marginalised consumers, environmental activists and social activists have protested against the unprecedented predominance of multinational corporations. To them, MNCs

overall impact on the host countries' social and environmental sectors is largely negative compared to its negligible contribution in the countries' economic development in spite of MNCs dossier claims of CSR. Exploitations and hman rights abuses traditionally have been thought of as being propagated by capitalists and governments against people or by one group of people against another; however, today, the process of globalization is making the multinational corporation (MNC) a prime player on the front of global human rights abuses. It is true that to earn goodwill of the stakeholders, MNCs publicize their corporate citizenship through reporting. These reports may prove to be, simply public relations tools that often do not reflect what companies really do and how firms operate, especially when faced with competitive or financial challenges. Many of the CSR reports of the most globalize MNCs remain broad statements of intention but lack specifics that would stimulate trust in their commitment to implement them. Sceptics argue that multinational corporations often use their sustainability or corporate social responsibility reports as "green wash," to cover over or divert public attention from business practices that continue to endanger the socio-environmental milieu and create risks for the communities in which they operate. Some critics go to the extent to argue that MNCs are "incompatible with sustainable development," because they have no long-term commitment to community or place, future generations, democratic governance, equity and social justice, and that they simply "seek to create greater wants, focusing on 'excessities' more than necessities." "Critics of MNCs business practices and sceptics of CSR reporting continue to question whether or not the information reported by multinational corporations accurately reflects their actual business practices, how effective the sustainable development programs of corporations are in addressing important

social and environmental problems of the host country and how committed senior executives in MNCs are to implementing development policies beyond mere compliance with legal and regulatory mandates as the critics also contend that these corporate social responsibility reports may be misleading, incomplete, and self-serving". (Dennis A. Rondinelli -2006)

Recently, international organizations and nongovernmental rating and monitoring organizations have claimed an increase in corporate attention around the world to sustainable development and undertaking social responsibility in the host countries, but, the serious questions remain about how significant the growing number of corporate citizenship is, compared to the large number of enterprises doing business globally.

In response to such concerns, MNCs have increasingly taken steps aimed at demonstrating their social responsibility as business organisations. One prominent development has been the elaboration and adoption of a Code of Conduct concerning corporate social responsibility (CSR), but it was pointed out that, for many Multinational companies in developing countries, corporate social responsibility has been equated with philanthropy, often a matter for enhancing companies' self-image that results in least stakeholder engagement. Though MNCs have an incentive to carry out corporate social responsibility (CSR) so as to enhance their reputation for their long term benefit, they often overlook social responsibilities since these tend to create extra costs. These companies with no commitment to CSR in its broader sense have often little focus on issues such as responsibility in the industrial relations, supply chain; employee training and

development; women in the workforce; product / service quality and safety; board transparency; employment regulation such as child labour, working hours, minimum wages and worker safety. These practices strongly support the predominant business ideology, which is that since profit is the "bottom line," a profitable business can do no wrong.

To conclude, the liberalized economic and industrial processes have the potential to disturb social fabric through widening the gap between poor and rich and human right abuse. It can have negative environmental impacts, causing climate change, loss of natural resources, air and water pollution and extinction of species. At the same time, it has been repeatedly observed that industries are most effective as social volunteers when they are doing things that are close to their shareholders interests. These interests clearly differ with sectors and industries in which the companies operate: as oil companies world over clearly emphasise building local infrastructure; Avon, which sells products largely to women, is one of the world's biggest supporters of breast cancer research, Wipro, supporting innovative rural literacy campaign through computers.

So the overriding policy challenge is, to promote the positive impacts of globalize business development while limiting or eliminating its negative impacts throughout the world. While reviewing the literature, the information about MNCs business practices and the value attached to CSR while operating in the developing countries is found to be more prescriptive and lacking empirical evidences at large. The researcher having worked in the field of social

development and getting exposed to corporate world from close quarter time and often strongly feels that,

- CSR activities, in fact, need predominantly, to be driven by the development needs of the communities in which any national or global businesses exist. Deteriorating environment, employment conditions, corruption etc. at macro level along with poverty, poor infrastructure and living conditions, lack of education, inadequate health care facilities, and inadequate sources of livelihood in the surrounding communities at micro level have to be the prime concern to any industry having its business operations in India;
- > Corporations and MNCs in particular, need to carry forward and institutionalize CSR initiatives as one of the core function of its management system, and,
- Indian educational institutions, the corporate sector, the social sector, and the government need working together on the very important question of how to integrate CSR into the curriculum of business schools and into corporate business strategies. The following example can be used as a benchmark for such strategy:

While many hardware and software companies made a foray into elearning by using their old computers and having a team of developers work on the content. the biggest success story in this remains the e-choupal initiative of the ITC Group. ITC has been able to penetrate/ reach remote villages through the traditional choupals (village meeting places), by installing V-SAT, computers, public address systems, and solar power. It uses E-choupal (the name of its agriculture portals) to market its products as well as procure raw material. The system benefits the farmers, because they can sell directly to the company without middlemen.

With this conviction, the researcher found it necessary and interesting to study CSR practices and processes presently being followed by MNCs present in Gujarat and the employees' perspective on international CSR issues. Secondly, as the concept of CSR originally implied the responsiveness to social or stakeholder issues (Carroll and Buchholtz 2006; Morimoto 1994); the focus of the study revolves around examining social and stakeholder issues.

Hence the title of the present study is:

'Corporate Social Responsibility by selected Multinational Companies in Gujarat'.

(A study of 105 Employees' perceptions of 18 multinational companies' social responsibility undertakings).

Note: In India, small and medium size MNCs are comparatively a newer phenomenon than the other countries of Asia due to the government's restrictive trade practices till 1991. In Gujarat, barring a very few big MNCs, many small and medium sized MNCs are still in its transitory forms in terms of collaborations and takeovers. In this situation it is likely that these companies had little time to establish rapport with outside community and society that is 'external stakeholders'. This, in itself may be a limiting factor for creating an 'image' of their business operations to the outsiders. Thus, to generate an unbiased and authentic information the researcher considered it right to approach only one group of stakeholders, i.e. 'employees' of the respective companies to

seek information of their companies' CSR practices and their perception on the CSR undertakings by the companies.

## Goals of the study

- 1. To understand the state of 'Social Responsibility Undertakings' of Multinational Companies of Gujarat through their employees' perception.
- 2. To devise a tool to adapt from, for designing company specific CSR business model for MNCs in particular.

## Objectives of the Study

- To study the Corporate Social Responsibility (CSR) profile of the Multinational Companies' of Gujarat.
- To study factors affecting Corporate Social Responsibility (CSR)
   Undertakings among the Multinational Companies of Gujarat.
- 3. To study the perceptions of employees about the performance of CSR processes undertaken at their companies in Gujarat.
- 4. To examine employees' perceptions about their companies' level of adherence to Corporate Social Responsibility Regulations mentioned under Global Social Responsibility Guidelines given for Multinational Companies.

- 5. To study the opinion of employees about 'International Social Responsibility' with special reference to Multinational Companies.
- 6. To examine relationship between organisations' 'Corporate Social Responsibility Profile' with location, size, age, mode of entry and nature of business of the Multinational Companies.
- 7. To explore relationship between the perception of the employees about 'Corporate Social Responsibility Practice', 'Corporate Social Responsibility Process Performance', 'Adherence of their companies to CSR Regulations' and the employees' opinion on 'International Corporate Social Responsibility' with location, size, age, mode of entry and nature of business of the Multinational Companies of Gujarat.
- 8. To explore relationship between the perception of the employees on 'Corporate Social Responsibility Practice', 'Corporate Social Responsibility Process Performance', 'Adherence of their companies to CSR Regulations' and the employees' opinion on 'International Corporate Social Responsibility' with their age, education, years of experience, function and past experience of CSR related work.
- 9. To explore relationship between type of the organization with the employees' perception on 'Corporate Social Responsibility Practice', 'Corporate Social Responsibility Process Performance', 'Adherence to

CSR Regulations' and the employees' opinion on 'International Corporate Social Responsibility'

- 10. To explore relationship between employees' perception on 'Corporate Social Responsibility Practice', 'Corporate Social Responsibility Process Performance', their companies' Adherence to CSR Regulations' and the employees' opinion on International Corporate Social Responsibility'.
- 11. To measure intensity of commitments to various Corporate Social Responsibility processes and Corporate Social Responsibility Regulations by Multinational Companies of Gujarat.

## **Operational Definitions:**

#### Corporate social responsibility (CSR) (as defined in Wikipedia, the free encyclopedia)

'Corporate social responsibility (CSR, also called corporate responsibility, corporate citizenship, and responsible business) is a concept whereby organizations consider the interests of society by taking responsibility for the impact of their activities on customers, suppliers, employees, shareholders, communities and other stakeholders, as well as the environment. This obligation is seen to extend beyond the statutory obligation to comply with legislation and sees organizations voluntarily taking further steps to improve the quality of life for employees and their families as well as for the local community and society at large'.

For the present study, Corporate Social Responsibility (CSR) is used as an umbrella term for corporate citizenship, corporate accountability, corporate social performance, corporate responsibility etc. as appear in CSR literature including various CSR Standards and Guidelines for multinational companies.

#### Social Responsibility Undertakings

Business has many operative as well as management functions. During the operationalisation of these functions, if a company is able to reflect following aspects in its conduct Social Responsibility seems to be undertaken ......

- > When business outcomes are not strictly measured in terms of 'Profitability' only.
- When business ethics synchronizes with host country's economic, social and culture aspects and generate 'common good' for all the stakeholders and,
- > When a company's activities build human and social capital within the host country where they operate.

For the present study keeping these aspects of business as focal point, the researcher has made an attempt to incorporate them in organisation's Corporate Social Responsibility Profile, Corporate Social Responsibility Practices, Corporate Social Responsibility Processes and Adherence to Corporate Social Responsibility Regulations. These four components together help to study 'Social Responsibility Undertakings' of MNCs for this study.

#### Multinational Companies (MNC) (as defined in Wikipedia, the free encyclopedia)

"Multinational corporation (or transnational corporation MNC/TNC) is a corporation or enterprise that manages production establishments or delivers services in at least two countries. A Multinational Corporation is a business concern with operations in more than one country. These operations outside the company's home country may be linked to the parent by merger, operated as subsidiaries, or have considerable autonomy."

The term Multinational corporations (MNCs) through out the study, except in quotations, is used to cover both Multinational corporations and Transnational corporations (TNCs) without further definition, as they often are used interchangeably in the context of CSR for large corporations operating in other countries. For this study Multinationals companies are the ones that are headquartered somewhere else and have a subsidiary/operation in India.

## Perception (as defined in Wikipedia, the free encyclopedia),

"Perception is the process of attaining awareness or understanding of sensory information. Perception is also a form of self-expression. What one perceives is a result of interplays between past experiences, one's culture and the interpretation of the perceived".

For the present study perceptions are information based on observations and experiences the employees had while working in the present organization.

## Stakeholders (as defined in Wikipedia, the free encyclopedia)

"Stakeholder may refer to:Stakeholder (corporate), a person, group, organization, or system who effects or can be affected by an organization's actions".

In the study, the term stakeholders refers to persons, groups and environment that are affected and likely to get affected by the organization's objectives, activities and outputs.

#### **CSR Processes**

For the present study, under 'CSR Processes' total thirteen variables/parameters are developed by the researcher. These thirteen variables will help to measure commitments of MNCs to 'Social Responsibility Undertakings'. They are:

- CSR Philosophy
   Business Ethics
   Corporate Citizenship
   CSR
   Communications
   CSR Knowledge
   Stakeholders' Dialogue
- Corporate's gain 8. Stakeholders'gain 9. Conflict Management 10. CSR
   Decision Making 11. CSR Review 12. CSR Audit and 13. CSR Reporting.

#### **CSR Regulations**

Under CSR Regulations twelve variables/parameters are taken for the study.

They help to measure adherence level of MNCs to Corporate Social Responsibility Global Guidelines given for MNCs. They are:

General Policy 2. Quality of Work Life 3. Employment 4. Industrial Relations 5. Human Rights 6.Environment 7. Consumer Interest 8. Direct Contribution to Local Communities. 9. Training 10. Disclosure 11. Corruption.
 Corporate Governance.

## Corporate Social Responsibility Profile

The aspects regarding structure and functioning that facilitates a company's CSR Undertakings are considered for profiling CSR of the company.

## Corporate Social Responsibility Practice

The company's present systems operative for CSR and ideology with which CSR is viewed and carried out comprises of CSR Practices for the present study.

#### **CSR Drivers**

These are the factors that enable the corporations to adopt relevant CSR strategies and activities. They are the reasons for, or a rationale to actually undertake social responsibility.

#### **CSR Barriers**

Constraints that the company face to get involved in social, ethical and environmental issues of the society and key communities where they operate.

#### **CSR Outcomes**

These are the expected results on overall business a company is expecting after undertaking CSR activities.

#### Research Design

The study is descriptive and exploratory in nature as the researcher has made an attempt to study and narrate the characteristics of the organizations' Corporate Social Responsibility (CSR) Undertakings on the basis of their employees' perception. The researcher has also made an attempt to explore whether any relationship exists between the employees' perception and various variables taken to study the Corporate Social Responsibility (CSR) Undertakings of the organizations under this study.

#### Universe and Sample

The researcher has chosen to conduct this study within MNC's, since in a developing economy like India, the MNC's are considered as very strong and critical actors of financial growth having its large impact on social and environmental milieu of the host country.

Universe of the industries is all 25 MNCs presently operating in Gujarat and their top and middle management employees.

To draw sample, within the broader category of probability sampling, multi-stage sampling technique is used.

Firstly, to select from, a list of Multinational companies of Gujarat was prepared with the help of...

- > a list provided by Industries' commissioner's Office, Gandhinagar and confirmed with official website of Ministry of Finance, Government of India.
- > a list of member industries of Federation of Gujarat Industries and Gujarat Employers' Association.

In the first stage Census method of sampling is used since there were twenty five industries. All of them were approached for data collection.

In the second stage, purposive sampling is used as the researcher is aware that in most of the industries CSR is handled by Human Resource Department, a top management employee of Human Resource Department was contacted and requested for cooperation. Once convinced, he acted as a 'key informant' and provided the basic information about the company and it's Corporate Social Responsibility Profile.

In the third stage 'quota sampling' method was used. With the help of this HR employee and 'key informant', minimum three top and middle management employees from each major departments were identified who had some primary understanding in the area of enquiry and their willingness to spare time on filling up the questionnaire. The questionnaires were handed over to the 'key informant' of all 25 MNCs after explaining it in detail and their responses were awaited.

## Sample Size

Out of twenty five companies approached, eighteen industries and 105 respondents have responded satisfactorily and that is how the sample size is of 105 respondents from 18 MNCs of Gujarat.

**Note:-** On the ethical grounds and 'key informant's request the names of the company from which data were received or not received will remain anonymous. The list of the MNCs that were approached for data collection is given at the end of this chapter.

## **Pre-Testing**

The researcher personally administered the questionnaire to 10 professionals having varied educational background and working in different departments of corporate sector. The questionnaire was modified after understanding the difficulties faced by the respondents either in responding or categorizing responses in the questionnaire. Most of the subjective questions were omitted as the respondents were not ready to provide detailed information. Few questions were omitted as the responses to them were likely to be inaccurate.

Reference period – The data was collected from August 2006 to February 2007.

Source of data:

- 1. Employees' responses for their respective companies.
- 2. Records, annual reports, information on Website.

#### Method of data collection

A structured questionnaire along with a detailed note,(stating the purpose a of the research and seeking cooperation)was prepared. The questionnaire had following sections.

I. Organisation profile.- This section besides name and other general information of the organization includes information on organization variables like location, age, size and nature of business of the organisation and their mode of entry in to Indian market.

- II. Respondent's profile Includes background information on the respondents that includes their personal and work related information. Here the variables taken are age, education, qualifications, their total years of experience and past experience of CSR related work.
- III. Corporate social responsibility profile- This section includes information regarding each MNC's structure and functioning of CSR, major CSR programmes undertaken at original and host country, CSR drivers, barriers and expected outcomes etc and information regarding their adaptation to CSR Regulation Guidelines. On the basis if this information CSR Profile Index is prepared.
- IV. Corporate social responsibility practice profile- In this section statements indicating intentions, beliefs and responsible factors for CSR Undertakings are prepared. And the organisations's CSR Practice Index is prepared on the basis of employees' perception on them.
- V. Corporate social responsibility processes- Socially Responsible behaviour of any company is reflected through the processes involved in its overall business operation. In this research enquiry,

Various processes that can promote CSR are grouped in to thirteen Process Variables and they are,

CSR Policy
 Business Ethics
 Corporate Citizenship
 CSR
 Communications
 CSR Knowledge
 Stakeholder Dialogue
 CSR
 Decision making
 Conflict Management
 Corporate's Gain

Stakeholders' Gain 11. CSR Audit 12. CSR Review 13. CSR
 Reporting .

Corporate Social Responsibility Process Performance Index is derived from the respondents perception on these variables.

# VI. Adherence to CSR regulations as mentioned in CSR global guidelines given for MNCs.

There are many CSR Standards/Regulation Guidelines declared by various international and regional organisations and also governmental guidelines (as given in chapter-3). The regulations addressed in most of the Standards cover issues pertaining to various stakeholders. These regulations are put in to twelve groups and they are taken as CSR Regulation Adherence Variables. They are,

- General Policy
   Quality of work life
   Employment conditions
   Industrial Relations
   Human Rights
   Environment
   Consumer
   Training
   Direct Contribution to local communities
   Disclosure
   Corruption
   Corporate Governance
   CSR Regulations Adherence Index is prepared on the basis of the
   respondents' perception on these variables.
- VII. International social responsibility with special reference to MNCs.

This section has twenty one statements grouped in to three major variables. They are

1. Meaning of CSR 2. Preconditions of CSR 3. MNCs' CSR Operations.

The Opinion Index on International Social Responsibility is prepared on the basis of the respondents opinion on these three variables.

Nature of Data: The present study is largely based on empirical data / information collected from MNCs and its employees through questionnaire. The open ended questions were categorised and coded.

### **Data Analysis**

The entire data were pre-coded and meaningfully analysed using

- 1. Percentage Analysis
- 2. Chi-square test
- 3. t- Test.

Data were presented in tabular forms using single and bi-variant tables.

## Scheme of Chapterisation.

## Chapter-1 Introduction.

The chapter includes an overview of business environment in India, need for business to address development issues through Corporate Social Responsibility, historical overview of Corporate Social Responsibility, importance of Corporate Social Responsibility for Multinational Companies and its outcomes.

#### **Chapter-2** Review of Literature

In this chapter, a review of interpretations and submissions of Corporate Social Responsibility as a theoretical concept by prominent scholars and its contribution to the field of business ethics is presented. Also a brief review of some of the relevant researches carried out in various fields throwing light on Corporate Social Responsibility as an essential approach of overall business operations is presented.

## Chapter-3 Research Methodology

Along with significance of the study, the procedural details with objectives, research design, operational definitions of the terms used, chapterisation etc. are included here.

## Chapter-4 Research Setting

This chapter helps developing an overall understanding of Multinational companies, their historical development, their entry in to Indian market, their corporate image most often reported and international efforts to set minimum standards to regulate their corporate conduct.

#### Chapter-5 Corporate Social Responsibility-Theories and Models

An overview of some of the CSR Theories and Models is given in this chapter. This helps understanding Corporate Social Responsibility through various theories and concepts from where it is originated and then developed as a full fledged theoretical concept by itself. Models of Corporate Social Responsibility developed by few scholars are given that can help to operationalise CSR in practice.

## Chapter-6 Data Analysis and Interpretations.

Data is analysed and interpreted using Descriptive Statistics, and applying parametric(t-Test) and non parametric(Chi-Square) tests.

## Chapter-7 Findings, Conclusions, Suggestions and Action Plan

Findings and conclusions are separately written and on the basis of it, implications, suggestions and action plan in the form of CSR Matrix are presented in this chapter.

## Limitations of the study

- 1. It takes longer and proves difficult to approach personnel from the industries and receive feedback from them in the stipulated time. Despite close, rigorous follow-up, spread for more than six months, through personal visits, e-mail, telephone calls and even through personal and professional references, responses were received from only eighteen companies. Some of the companies had shown unwillingness to share information formally on the pretext of 'Company Policy' even though the researcher showed readiness to give in writing the assurance that the data would be consolidated and the companies names would not be revealed in the report. For the information on CSR Profile, some of the companies asked to use information that is officially published in annual reports and on websites in place of filling questionnaires after going through it.
- 2. The sample is not sub-divided by industrial sector and financial status as there was a common apprehension among contacted industries to share specific and revealing information.

FIGURE - 5

<u>List of the Multi National Companies in Gujarat.</u>

Sr. No.	Name of the Industry	Country of Origin	Location in Gujarat	Type of Industry	Establishment Year in India
1	ABB	Zurich/Sweden	Vadodara	Engineering	1989
2	BASF	Germany	Dahej	Chemical	2001
3	Bayer Cropscience	Germany	Ankleshwar	Agro Chemicals	2002
4	Bundy India Ltd.		Vadodara	Engineering	1998
_ 5	Cairn Energy	Scotland	Surat	Gas	1995
6	E.I.Du Pont	USA	Savli	Chemical	1998
7	Enarcon India Ltd.	Germany	Jamnagar	Energy	1995
8	FAG Bearings.	Germany	Vadodara	Engineering	1998
9	G E India	USA	Limbasi	Engineering	1996
10	GEA Process Eng.	Germany	Ranoli	Process Eng.	2005
11	General Motors	USA	Halol	Automobile	1994
12	Gujarat Gas	U.K.	Surat	Gas	1988
13	JM Huber	Switzerland	Jhagadia	Chemical	2005
14	Ingersoll Rand	USA	Ahmedabad	Engineering	1965
15	Lanxess ABS	Germany	Nandesari	Chemical	2004
16	Maersk	Denmark	Pipavav	Container port  Mgt	1996
17	Medtronic	USA	Vadodara	Health Care Prod.	1990
18	Perastrop	Netherlands	Vapi	Pharmaceutical	1999
19	Pharmacia (Pfizer)	USA	Ankleshwar	Pharmaceutical	1980
20	Sanofi – Aventis	France	Ankleshwar	Pharmaceutical	1989
21	Siemens	Germany	Ahmedabad	Engineering	2006
22	Shell India	U.K.	Surat	Gas	1996
23	Wyeth Ltd.	USA	Atul- Valsad	Pharmaceutical	1998
24	Inductotherm	USA	Ahmedabad	Engineering	1984
25	Milacron	USA	Ahmedabad	Plastic	1990s