Chapter 4

Research Methodology

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Research methodology

Introduction

The procedure by which researchers go about their work of describing, explaining and predicting phenomena are called methodology. (Cargill 2005)

This chapter highlights the all technical aspects of the study. All the crucial elements of research have been defined in this chapter. It includes the research design, type of data, data collection tools and techniques, sample size, sample specification and statistical techniques used for data analysis. All the above factors have been determined on the basis of research objectives which itself is the outcome of review of literature and pilot survey.

Every research work can be carried out using different approaches and the approaches vary depending on the nature of work. In spite of this fact every research work has some common stages, which when required can be divided into various sub stages. Different authors have different viewpoints but some of the basic steps remain the same. As per Luck and Rubin every research work has the following stages:

1. Define the problem/problems

2. Specify the information required

3. Identify the source of information

4. Decide the technique for gathering the information

5. Gather and process the information

6. Analyze and interpret the information

7. Present the findings
In context of this research above mentioned stages are defined below -

Define the Problem/problems

The first step in any research is to define the problem. Problem definition involves a broad statement of the general problem and identification of the specific components of the research problem. Prevailing social condition of dissatisfaction, greed, distrust, and rivalry has motivated the researcher to work and find out the reasons for the same. It was observed that all these issues are not the problems but are symptoms of the problem. The problem is ethical disgrace in the society. Social ethics have lost its position, which in turn creating problems like distrust and dissatisfaction. This ethical downfall is the outcome of multiple factors like social, political, organizational or individual. Corporate causes of such ethical disgrace are causing behavioral changes; this is the fundamental research problem.

Specify the information required

To study the corporate cause of behavioral degradation it was important to understand and divide the phenomena into various components. The study was divided into three parts to understand the phenomena from social and corporate viewpoint. Secondary source of data and pilot survey helped in identifying the variables that were included in the study. These were the variables that helped in fulfilling research objectives.

Identification of source of information

Keeping the research objectives in view derived variables were converted into questionnaire and distributed to general public. On the basis of their responses another questionnaire was framed for corporate feedback. Thus basically, information was gathered from two sources;

- General public
- Corporate executives.

Techniques for gathering the information
A sound technique of data collection ensures better analysis. Single questionnaire was used for the first two research objectives. Hard copies of the questionnaire were distributed to the respondents. For the last research objective e-questionnaire was used. The questionnaire was framed using Google forms same were sent to the corporate executives via email.

Process, analyses and interpretation of the information

In this thesis data is analyzed using three different techniques. The techniques were chosen on the basis of research objectives. Factor analysis, percentages and discriminant analysis were used to process the data and fetch meaningful information out of it. Interpretations were made on the basis of statics associated with each technique.

Present the Findings

Research findings are presented in the last chapter of the thesis. Findings have been classified into five sections. Each section represents the findings of different work/analysis. Findings of review of literature, pilot survey and analyses have been presented in different sections of the chapter.

Research design

A research design is a plan of action to be carried out in connection with a research project. It is basically an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Field, 2005). It is a blueprint for conducting the research. It lays down the foundation for conducting the research project. A good research design ensures the effectiveness and efficiency of the project. Research design may be broadly classified as exploratory research, Descriptive research and Causal research.

Exploratory Research

Exploratory research is used in cases where the problems are not clearly defined and additional information is needed to develop the approach. Exploratory research aims at acquiring basic knowledge within the problem area. It is mostly suitable when there is no clear theory, the problem is hard to demarcate, and also when important characteristics
and relation are hard to determine. In this research initially a qualitative exploratory was conducted which is explained in annexure 1.

Descriptive Research

Descriptive research is suitable when the problem is clearly structured and there is no intention to find connections between causes and symptoms. The researcher knows what he or she wants to investigate but not the answer. Descriptive research is most suitable to gather information when investigating total or random sample. This research may be termed as descriptive research as all efforts were made to define and describe the behavioral aspect of CSR.

Causal Research

Causal research is used to obtain evidence of cause- and- effect (causal) relationships. Causal research is appropriate in the following purposes

- To understand which variables are the causes (independent variables) and which variables are the effects (dependent variables) of a phenomenon.
- To determine the nature of the relationship between the causal variables and the effect to be predicted.

Data Collection tools

The research design is basically descriptive, but initially an exploratory research was conducted to test the practicality of the research idea. As the objectives are concerned with knowing the intrinsic impact (behavioral impact) and expectations, it was quite difficult to collect data on these sensitive issues. First of all, it was important to know whether or not corporate sector has any intrinsic impact on society, here intrinsic impact implies the impact of corporate sector’s practices on behavior of the people. A deep study of data collection tools and techniques suggested the hidden issue questioning technique of in depth interview for the initial data collection. Fifty respondents were interviewed. Instead of making notes, voice recorder was used to maintain the continuity and concentration. This part of data collection was mainly concerned with corporate impact, though it was also useful in gaining insight into societal expectations. At this level, data
were also collected using focus group interview method. Five mutually exclusive groups were constructed to understand the societal expectations and corporate impact. Above mentioned exploratory data collection was highly useful in framing the research objectives.

Main data collection was started after framing the research objectives. For the fulfillment of first and second objective questionnaires were used. Third research objective was based on the analysis of first and second objectives, e-questionnaire was used at this level.

There were total 27 items in the questionnaire. Out of which 17 were related to the impact of corporate practices (11 were measured on scale and used in the analysis) and 10 questions were related to the societal expectations. Questionnaire items were generated through extensive review and a pilot survey. In this research the impact of corporate practices on social behavior has been rated using five-point Likert scale, ranging from strongly agrees to strongly disagree.

The Likert scale was developed by Rensis Likert and is a widely used rating scale. Likert scale requires the respondents to indicate a degree of agreement or disagreement to a series of statements.

Reliability and validity of the instrument was insured by applying statistical technique for reliability and validity test on SPSS. The scale recorded Cronbach’s alpha coefficient value 0.829. Cronbach’s alpha is a measure of internal consistency that is how closely related a set of items are as a group. It is considered to be a measure of scale reliability.
Sample description

A total of 300 respondents completed the questionnaire. Tabular presentation of sample is given below.

Exhibit 4.1 Sample description

<table>
<thead>
<tr>
<th>gender</th>
<th>Total number of respondents</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>175</td>
<td>58.33%</td>
</tr>
<tr>
<td>Female</td>
<td>125</td>
<td>41.67%</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
Exhibit 4.2 shows age composition of the sample. It is important to mention here that study does not involve any age wise analysis.

Exhibit 4.2 Age composition of sample

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-35</td>
<td>70</td>
<td>23.33%</td>
</tr>
<tr>
<td>35-45</td>
<td>85</td>
<td>28.33%</td>
</tr>
<tr>
<td>45-60</td>
<td>80</td>
<td>26.67%</td>
</tr>
<tr>
<td>60 above</td>
<td>65</td>
<td>21.67%</td>
</tr>
</tbody>
</table>

Out of total 300 respondents, 175 were male and 125 were female respondents. Respondents were also categorized in different age groups.
Corporate Sample

Based on the responses of above mentioned sample, another questionnaire was framed for the feedback of corporate sector. 20 companies were selected. This part of study follows judgment sampling as well as convenience sampling, where companies are selected on the basis of personal judgment and convenience of the researcher.

Judgment Sampling

Judgment sampling is also known as Purposive Sampling or Subjective Sampling is a sampling technique in which researcher relies on his or her own judgment when choosing members of population to participate in the study. Judgment sampling is a non – probability sampling method and it occurs when elements selected for the sample are chosen by the judgment of the researcher. (Black, 2010)

Convenience Sampling

Convenience sampling is a type of non- probability sampling that involves the sample being drawn from that part of population close to hand. Sample is selected because it is readily available and convenient as researchers are drawing on relationships or networks to which they have easy access. (Boxill, 1997)

The analysis of the third research objective involves a comparison between responsible companies (as per Forbes Magazine) and differently responsible companies. Out of 20 companies 10 companies were selected on the basis of their appearance in the Forbes list. Companies that were ready to give their feedback were included in the study as part of the first group that is ‘responsible companies’

For the selection of 10 companies for the differently responsible group judgment sampling was applied. The judgment was based on the analysis of annual reports of the companies comprising their CSR initiatives. Based on comparative analysis companies with good, average and below average CSR performance were included in the study.

The sample is a true representative of Indian Corporate Sector as it includes public as well as private companies from different industries like mining, FMCG, IT and so on. There are some companies in the sample that are highly responsible like NTPC, SAIL,
ONGC, OIL, and NMDC. These companies are taking continuous measures to minimize their negative impact on natural environment, people around their plants and society at large. Also there are companies that are not very much active so far as their social responsibility is concerned like Maharishi Ayurveda Products Private limited and INBISCO. The sample also includes some companies with high growth potential like Reckitt Banckiser and financial sector companies like SBI and United India Insurance.

A brief introduction of companies’ included in the sample is given below: (source: annual reports of the respective companies available at their official websites)

1. Oil and Natural Gas Corporation Limited

Oil and Natural Gas Corporation Limited is an Indian multinational oil and gas company. It is a Public Sector Undertaking (PSU) of the Government of India, under the administrative control of the Ministry of Petroleum and Natural Gas. It is India's largest oil and gas exploration and production company. It produces around 69% of India's crude oil (equivalent to around 30% of the country's total demand) and around 62% of its natural gas. ONGC was founded on 14 August 1956 by Government of India, which currently holds a 68.94% equity stake.

As far as CSR initiatives are concerned ONGC follows the guidelines issued by ministry of corporate affairs of the government of India

Following are the areas where ONGC has taken social initiatives

- Education including vocational courses,
- Health Care,
- Entrepreneurship (self-help & livelihood generation) schemes,
- Infrastructure support near ONGC operational areas,
- Environment protection, ecological conservation, promotion,
- Protection of heritage sites, UNESCO heritage monuments etc.
- Promotion of artisans, craftsman, musicians, artists etc. for preservation of heritage, Art & Culture,
• Women’s Empowerment, Girl Child Development, Gender sensitive projects,
• Water Management including ground water recharge,
• Initiatives for physically and Mentally challenged,
• Sponsorship of seminars, conferences, workshops etc.
• Promoting Sports/sports persons; supporting agencies promoting sports / sports persons

2. Coal India Limited

Coal India Limited (CIL) as an organized state owned coal mining corporate came into being in November 1975 with the government taking over private coal mines. With a modest production of 79 Million Tonnes (MTs) at the year of its inception CIL today is the single largest coal producer in the world. Operating through 81 mining areas CIL is an apex body with 7 wholly owned coal producing subsidiaries and 1 mine planning and Consultancy Company spread over 8 provincial states of India. As part of its Corporate Social Responsibility (CSR) efforts, Coal India Limited and its subsidiary companies regularly undertake various community development activities in and around the coalfield areas for the benefit of the local people. Some recent works done by CIL are:

• Installation/Repairing of Hand Pumps.
• Digging/renovation of Wells/Ponds/Dam etc.
• Water Supply through pipelines.
• Construction/Renovation and repair of Community Centre/building.
• Construction/repair of Roads/Culverts.
• Construction/repair of school building.
• Organizing Medical Camps.
• Organizing Sports and cultural activities.
• Misc. works.

3. Steel Authority of India Limited

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Steel Authority of India Limited is one of the largest state-owned steel making company based in New Delhi, India and one of the top steel makers in world. With an annual turnover of Rs. 50627 crore. With an annual production of 13.9 million metric tons, SAIL is the 24th largest steel producer in the world. It is a public sector undertaking which trades publicly in the market is largely owned by Government of India and acts like an operating company. Incorporated on 24 January 1973,

Steel Authority of India is currently working on following social areas

- Healthcare: Akashya and Chetana are the major projects in this area
- Education
- Water infrastructure
- Model Steel Villages
- Solar power
- Calamity aid
- Vocational training
- Sports promotion
- Preservation of arts and culture
- Women upliftment

4. National Mineral Development Corporation

The NMDC Limited is a state-controlled mineral producer of the Government of India. It is owned by the Government of India and is under administrative control of the Ministry of Steel.

It is involved in the exploration of iron ore, copper, rock phosphate, limestone, dolomite, gypsum, bentonite, magnesite, diamond, tin, tungsten, graphite etc. It is India's largest iron ore producer and exporter producing about 30 million tons of iron ore from 3 fully mechanized mines in Chhattisgarh and Karnataka. It also operates the only mechanized diamond mine in the country at Panna in Madhya Pradesh.
Some of the areas of focus under CSR scheme are –

- Literacy / Education/Cultural development.
- Safe drinking water/Health care & Sanitation.
- Skill development for sustainable income generation & Livelihood
- Agriculture & Infrastructure development
- Suitable assistance to handicapped & mentally challenged children and under privileged people in the society.
- Promote awareness programmes against social evils such as Alcoholism, AIDS etc., and to spread the awareness of legal rights & responsibilities.
- Suitable assistance to the victims of natural calamities such as Floods, Earth Quakes epidemics etc., in any part of the Country.
- Promotion of cultural, social & sports activities.

5. Gas Authority of India Limited

GAIL (India) Limited is the largest state-owned natural gas processing and distribution company in India. It is headquartered in New Delhi. It has following business segments: Natural Gas, Liquid Hydrocarbon, Liquefied petroleum gas Transmission, Petrochemical, City Gas Distribution, Exploration and Production, GAILTEL and Electricity Generation. GAIL has been conferred with the Maharatna status on 1 Feb 2013, by the Government of India. Only six other Public Sector Enterprises (PSEs) enjoy this coveted status amongst all CPSEs.

CSR initiatives of Gas Authority of India Limited includes

- Community development
- Drinking water and sanitation
- Literacy enhancement and education
- Environment protection
- Healthcare/ medicine
• Skill development/ empowerment
• Infrastructure
• Construction of toilets

6. Bharat Heavy Electricals Limited\textsuperscript{10}

Bharat Heavy Electricals Limited (BHEL) owned by the Government of India, is a power plant equipment manufacturer and operates as engineering and manufacturing company based in New Delhi, India. Established in 1964, BHEL is India's largest engineering and manufacturing company of its kind. It has been granted the prestigious Maharatna status in 2013 by Govt of India for its outstanding performance. The elite list of maharatna contains another 6 behemoth PSU companies of India.

CSR policy statement of BHEL shows following commitment by the company

• Inclusive India: Mitigation of hunger and poverty through livelihood promotion/augmenting income generation, imparting vocational Skills
• Healthy India: Promoting health care including preventive health care and sports
• Clean India: Sanitation and making available Safe Drinking Water, Cleaning and preserving the Rivers, Clean surroundings; toilets in schools specially for girls
• Educated India: Promoting education with thrust on informal education to reduce dropouts at primary school level, value education, and digital education
• Responsible India: Women Empowerment, Setting up old age homes, day care Centre and such other facilities for senior citizens, Rural Development Projects and Slum Development Projects
• Green India: Ensuring environmental sustainability with emphasis on projects based on Solar Energy.
• Heritage India: Protection of national heritage, art and culture

7. National Thermal Power Corporation\textsuperscript{11}
NTPC Limited (previously known as National Thermal Power Corporation Limited) is an Indian central Public Sector Undertaking (PSU) under the Ministry of Power, Government of India, engaged in the business of generation of electricity and allied activities. It is a company incorporated under the Companies Act 1956 and a "Government Company" within the meaning of the act. The headquarters of the company is situated at New Delhi. NTPC's core business is generation and sale of electricity to state-owned power distribution companies and State Electricity Boards in India. The company also undertakes consultancy and turnkey project contracts that involve engineering, project management, construction management and operation and management of power plants.

The company has also ventured into oil and gas exploration and coal mining activities. It is the largest power company in India with an electric power generating capacity of 45,548 MW. Although the company has approx. 16% of the total national capacity it contributes to over 25% of total power generation due to its focus on operating its power plants at higher efficiency levels (approx. 80.2% against the national PLF rate of 64.5%). It was founded by Government of India in 1975, which now holds 74.96% of its equity shares on 30.09.2015 (after divestment of its stake in 2004, 2010, 2013, and 2014) In May 2010, NTPC was conferred Maharatna status by the Union Government of India.

Company’s CSR covers a diverse range of issues such as basic infrastructure development, education, community health & sanitation, capacity building and gender empowerment.

8. Oil India Limited

Oil India Limited (OIL) is the second largest hydrocarbon exploration and production Indian public sector company with its operational headquarters in Duliajan, Assam, India under the administrative control of the Ministry of Petroleum and Natural Gas. The company is a state-owned Navratna with its corporate offices in Noida in the New Delhi-NCR region.

OIL is engaged in the business of exploration, development and production of crude oil and natural gas, transportation of crude oil and production of liquid petroleum gas.
The company's history spans the discovery of crude oil in the far east of India at Digboi, Assam in 1889 to its present status as a fully integrated upstream petroleum company.

Oil India Limited is actively contributing to social development. Following are the Indian Oil’s key CSR projects

- Indian Oil Education Scholarship Scheme
- Industrial Training Centre, Digboi, Assam
- IndianOil Sachal Swasthya Seva in Andhra Pradesh, Telengana and Uttar Pradesh
- IndianOil’s Assam Oil Division Hospital, Digboi, Assam
- Swarna Jayanti Samudaik Hospital, Mathura, Uttar Pradesh
- Assam Oil School of Nursing & Assam Oil College of Nursing, Digboi, Assam
- Swachh Vidyalaya Abhiyan
- IndianOil Multi-Skill Development Institute, Digboi, Assam
- Rajiv Gandhi Grameen LPG Vitaran Yojana
- Shikshak Dakshyata Vikas Abhiyan, Digboi, Assam
- Sarve Santu Niramaya, Digboi, Assam

9. State Bank of India

State Bank of India is an Indian multinational, public sector banking and financial services company. It is a government-owned corporation with its headquarters in Mumbai, Maharashtra. SBI provides a range of banking products through its network of branches in India and overseas, including products aimed at non-resident Indians (NRIs). SBI has 14 regional hubs and 57 Zonal Offices that are located at important cities throughout India.

SBI has a comprehensive CSR policy approved by the Board and the focus areas are

- Supporting Education
- Entrepreneur development
• Health care
• Assistance to Poor and under privileged
• Environmental protection
• Clean energy
• Help in National calamities.

10. United India Insurance Company

United India Insurance Company Limited (Wholly owned by Govt. of India) under Department of Financial Services, Ministry of Finance (India), is a public sector General Insurance Company of India and one of the top General Insurers in Asia. With the net worth of Rs. 5407 crores and profit of Rs. 528 crores, the company has collected gross premium of Rs. 9709 crores as of in the financial year 2013-14. The company has more than seven decades of experience in Non-life Insurance business and was formed to its present form by the merger of 22 companies, consequent to the nationalization of General Insurance companies in India.

United India Insurance Company headquartered at Chennai has more than 2046 offices consisting of 28 Regional Offices, 8 Large Corporate Offices and 406 divisional, 673 branch and 876 micro offices.

Following activities have been undertaken by United India Insurance

• Infrastructure developments in villages
• Safety & Insurance Literacy Programme in Schools-
• donation to Swachh Bharat Kosh
• Donations to NGOs

11. Essar India Limited

Essar Group is an Indian multinational conglomerate holding company with investments in the sectors of steel, energy (oil & gas and power), infrastructure (ports, projects &
concessions) and services (shipping, telecom, realty and outsourcing and technology solutions).

Essar began as a construction company in 1969 and diversified into manufacturing, services and retail. Essar, besides focusing on its vast and diversified business portfolio in the Eastern region of India (Chhattisgarh, Jharkhand, Odisha and West Bengal), has, through the Essar Foundation, adopted a multi-pronged strategy to address the many aspects of sustainable and responsible business.

Following are the areas where continuous initiatives are being taken by the company

- Education
- Livelihoods and women empowerment
- Health care
- Infrastructure

12. Alstom India Limited

Alstom is a leading supplier of train control systems for metros in India. It provides a complete range of systems, equipment and services in the railway sector. Alstom India is comprised of four businesses: Rolling stock & Components, Systems & Infrastructure, Transport Information Solutions and Train Life Services. With a full range of highly advanced products and solutions and a strong local footprint, it is well geared to participate in the upcoming rail transportation projects in India and South Asia, including high speed train projects.

Following are the focus areas for CSR initiative in Alstom India Limited

- Environment sustainability
- Rural development
- Promotion of education
- Eradicating poverty, hunger and malnutrition
- Technological upgradation of the society
13. Skoda Auto India Private Limited

Skoda Auto India Private Ltd. has been operating in India since November 2001 as a subsidiary of Skoda Auto, one of the fastest growing car manufacturers in Europe.

Skoda Auto India Pvt. Ltd. has been a socially responsible organization since the beginning, and has been contributing for CSR activities to support socially & economically weaker and deprived section of society and communities. The CSR activities are being carried out on a regular basis to help underprivileged section of society. It is important to mention that Skoda Auto India Private Limited takes CSR initiatives after identifying the problems in consultation with the local community and local survey. Following initiatives are being taken by the company

Education –

- Spoken English
- Girl child education
- Adult education programs
- Support to orphanage children for pursuing vocational courses, higher education
- Supplement the government education programs

Health care and safety -

- Primary health care including mother & child care projects
- First aid education
- Awareness on Mosquitoes related health issue and support in creation of self-sustained solutions (maintenance of sewerage, proper household waste / garbage disposal)
- Preventive health measures through awareness programs.
- Awareness on household safety(e.g. Rural household kitchen safety

Sustainable Livelihood –

- Support to Self-help Groups for undertaking new activities
- Vocational training Environment and Rural Hygiene related Development
- Development of green zone (tree plantation)
- Safe drinking water
- Sanitation & hygiene
- Renewable sources of energy.

14. Reckitt Benckiser (India) Limited

Reckitt Benckiser (India) Ltd. manufactures, sells, and exports drugs and medicines. The company's products include bulk drugs in the form of liquids, ointments, and tablets; denture products; food products, including tea, cashew kernels, and mushrooms; laundry products; household products; aromatic chemicals; and toiletries. The company was incorporated in 1951 and is based in Gurgaon, India. Reckitt Benckiser (India) Ltd. operates as a subsidiary of Reckitt Benckiser Group plc.

Reckitt Benckiser has been undertaking various outreach programs to promote health and hygiene across the India as part of its CSR initiatives. The FMCG Company on September 28, 2011 unveiled its hygiene behavior study, called ‘The Dettol Habit Study’. The Dettol Habit Study was carried out in 12 countries across seven continents and involved 12,000 people. Many other initiatives have also been taken by the company in the area of education, social welfare and environmental sustainability.

15. Jindal Steel and Power Limited

Jindal Steel and Power Limited (JSPL) is an Indian steel and energy company based on New Delhi, India. JSPL is a leading player in steel, power, mining, oil and gas and infrastructure in India. The company strongly believes that sustainable community development is essential for harmony between the community and the industry. It endeavors to make a positive contribution to the underprivileged communities by supporting a wide range of socio-economic, educational and health initiatives. Also, it is committed to integrate its business values and operations to meet the expectations of all its stakeholders.

The company serves its communities by:
• Ensuring they benefit from its presence by proactively responding to their needs
• Building and strengthening community institutions and Panchayti Raj Institutes (PRIs)
• Working in partnership with civil society organizations (CSOs) and government bodies to widen the reach and leverage each partner's individual experience and expertise
• Providing all assistance during times of disasters
• Encouraging its employees to volunteer

16. Polaris India Private Limited

Polaris India Private Limited was established as a wholly owned subsidiary of Polaris Industries Inc. (USA), which designs, engineers manufactures and markets innovative, high quality Off Road Vehicles (ORVs), innovative All-Terrain Vehicles (ATVs), Snowmobiles, Motorcycles and Electric powered vehicles.

Polaris India Private has taken many social initiatives in different areas of social issues. The company has taken initiatives to educate poor children and identify their inner abilities.

Polaris Environmental Sustainability Policy ensures conservation of energy and resource and minimal damage to the natural environment due to business or operational requirements. Following initiatives is being taken by Polaris India towards environment sustainability

• Reduction of paper and plastics consumption throughout Polaris facilities through the use of cashless vending in cafeterias
• Increased utilization of internal collaboration platform – Octopus – in preference to e-mails. This has cut down the use of emails, especially for broadcasts.
• Utilization of solar water heaters for cooking, and washing needs in the food court in the Campus
• Utilization of food waste to generate biogas in the Campus Food Court
• Campus lighting through solar street lamps, integrated with solar panels and storage batteries

17. Maharishi Ayurveda Products Private Limited\textsuperscript{20}

Maharishi Ayurveda Products Pvt. Ltd. was incorporated in 1986 under Maharishi’s Global Plan. The company is presently engaged in the manufacturing of Ayurvedic formulations, food supplements and medicines in the form of tablets, syrups, oils and pastes. It is also manufacturing a range of products for personal care, cosmetics, teas, coffee substitutes, food and beverages, in accordance to the guidelines of Ayurveda.

The Heads Office of Maharishi Ayurveda is at New Delhi and the manufacturing activity of MAP is presently at two units at Noida, SEZ and Faridabad and has total employee strength of over 800.

Maharishi Ayurveda Products Private Limited (MAPPL) is serving the society by delivering quality products. According to a senior official of MAPPL, company seeks to serve the society through its products. Maharishi Ayurveda comes as the fulfillment of the worldwide search for a more effective system of health, which is free from harmful side effects, is prevention oriented and capable of eliminating disease and its source.

Maharishi Ayurveda makes an important contribution to modern health care that it treats disease at its source rather than merely pacifying symptoms. The basis lies in prevention and in strengthening the body’s inner intelligence to maintain perfect health.

18. Cognizant Technology Solutions India Private Limited\textsuperscript{21}

Cognizant Technology Solutions Corp is an American multinational corporation. Cognizant is a leading provider of consulting, information technology and business services.

Cognizant's philanthropic and corporate social responsibility (CSR) initiatives are conducted through the voluntary efforts of Cognizant employees and the financial and administrative support of the Cognizant Foundation. Registered in March 2005 as a "Charitable Company" under the Indian Companies Act, the Cognizant Foundation aims to help "unprivileged members of society gain access to quality education and healthcare
by providing financial and technical support; designing and implementing educational and healthcare improvement programs; and partnering with Non-Government Organizations(NGOs), educational institutions, healthcare institutions, government agencies and corporations”.

Cognizant's has a grassroots corporate social responsibility project called Outreach, for which Cognizant's employees volunteer to support schools and orphanages.

19. INBISCO India Private Limited

Established in 2008, currently Inbisco India is the fast growing FMCG Company in India. Supported by strong and wide distribution network, product manufactured and/or distributed by INBISCO has reached entire country. INBISCO has become the pioneer and trend-setting market leader with the array of products and we strongly believe to provide consumers with high quality product which nutritious and delicious in taste. INBISCO India Private Limited has included its social obligation in its mission and vision statement. They are quality focused and caring for their employees. Their mission statement includes following points,

- To be a premier food company, offering delicious taste and high quality oriented food products.
- To create high quality brand and products that gains the trust of the consumers.
- To build strong brands and distribution channels across of India.
- To provide a challenging, fun and financially rewarding working environment where fair competition and a responsible attitude are encouraged.
- To be socially and environmentally responsible
20. Max Healthcare

Max Healthcare Institute is a healthcare institute based in New Delhi, India. The Institute is a wholly owned subsidiary company of Max India Limited.

As Corporate Social Responsibility, Max India Foundation is an initiative being launched by the Company focused on providing healthcare, creating health awareness and an endeavor to spread awareness for protecting our environment. Following are some initiatives taken by Max Healthcare

- Free Artificial Limbs for Underprivileged
- Blood Donation camps
- Day care for street children
- Adoption of Government School
- Life Line Express Project
- Rail Majra Health centre
- Assuring cancer patients
Statistical tools for data analysis

Factor Analysis

For the first research objective, Factor analysis was used. Factor analysis is a general name denoting a class of procedures primarily used for data reduction and summarization. In social science research, there may be a large number of variables, most of which are correlated and which must be reduced to a manageable level. Relationships among sets of many interrelated variables are examined and represented in terms of a few underlying factors. It is an interdependence technique in that an entire set of interdependent relationships is examined. (Albright, 2011)¹

Mathematically, Factor analysis is somewhat similar to multiple regression analysis, in that each variable is expressed a linear combination of underlying factors. The amount of variance a variable shares with all other variables included in the analysis is referred to as communality. (Dawson, 2002)⁶. The covariation among the variables is described in terms of a small number of common factors plus a unique factor for each variable. Factor model may be represented as

\[ Xi = A_{i1}F_1 + A_{i2}F_2 + A_{i3}F_3 + \ldots + A_{im}F_m + V_i U_i \]

Where

\( Xi \) = Ith standardized variable
\( A_{ij} \) = Standardized multiple regression coefficient of variable i on common factor j
\( F \) = Common Factor
\( V_i \) = Standardized regression coefficient of variable i on unique factor i
\( U_i \) = the unique factor for variable i
\( m \) = number of common factors

Factor analysis is highly useful when we have to group different variables into different groups. It is very difficult to understand the phenomena when so many variables are involved, in order to understand them clearly they must be grouped in some meaningful
categories. Total 11 corporate practices were identified having strong impact on social behavior, which were than grouped into five main categories.

As far as societal expectations are concerned, variables were selected from a qualitative interview and review of literature. Selected variables were measured on five point Likert scale. At this stage of data analysis no complicated statistical tools were applied. Simple percentages were used to know the opinion of majority.

**Discriminant analysis**

Third objective involves the application of Multivariate analysis. Linear Discriminant Analysis was used at this level. It was important to identify how different companies deviate from each other on behavioral aspect of CSR thus, discriminant analysis found to be most suitable technique.

Discriminant analysis is a technique for analyzing data when the criterion or dependent variable is categorical and the predictor or independent variables are interval in nature (Berendsen, 2011).²

Discriminant analysis is based on a statistical model which is called discriminant analysis model. The discriminant analysis model involves linear combinations of the following form:

\[ D = b_0 + b_1X_1 + b_2X_2 = b_3X_3 + \ldots b_kX_k \]

Where

- \( D \) = discriminant score
- \( b's \) = discriminant coefficient or weight
- \( X's \) = predictor or independent variable

The coefficients or weights \( b \), are estimated so that the group differ as much as possible on the values of the discriminant function. This occurs when the ratio of between group sum of square to within group sum of square for the discriminant score is at a maximum.
Citation

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