

CHAPTER-I

INTRODUCTION

Environmental accountability is a matter of global concern, and the issue which is of global concern becomes an imperative for intensive research and empirical analysis. The purpose of the present work is to examine the topic of corporate environmental accountability in Indian context. It was chosen as the theme of the present study because pollution has impacted the global environment in monstrous proportions affecting mankind and other beings like never before. The corporate owns the main responsibility because they have been a major contributor to the cause of pollution.

This chapter is an introduction to the thesis research topic of ‘Environmental Accountability of Corporate Enterprises in India’. The introduction is important as it sets the theme for the entire chapter and the reader can easily understand the main underlying idea which would be elaborated in the subsequent chapters.

The introduction begins with discussion of the emergent issue of environment degradation from global perspective engulfed with challenges of poverty, population and industrialization along with developmental dilemma (as shown in Figure 1).

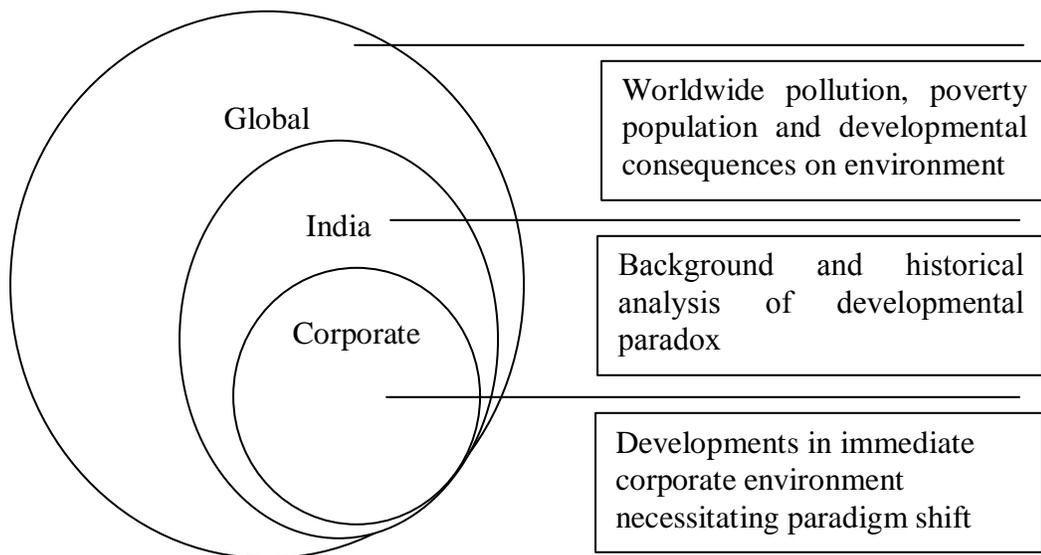


Figure 1: Scheme of Present Chapter

The focus next shifts to discussion of pollution related problems in India. The chapter then moves to discuss the obligations of corporate towards the society for

creating pollution, the emergent challenges posed by various developments in the society demanding action. Finally, the chapter presents the need for the study. The last section provides a layout of the chapters' scheme of the thesis.

1.1 The global issue of environmental degradation

Globally environment is becoming a central issue of discussion from the Earth Summit till the recent Rio conference. The reason is that Earth's environment not only in developing countries but around the globe is getting degraded due to anthropogenic activities i.e., *pollution created due to human activities* (Solomon et al. eds. 2009). OECD (2012) report titled *Environmental Outlook to 2050: The Consequences of Inaction*, issues a **forewarning of impacts** if everything continues in status quo, the health burdens of these impacts by the year 2050 would be that the outdoor air pollution (particulate matter and ground-level ozone) will cause highest environmentally related deaths worldwide and the number of premature deaths will more than double to 3.6 million in 2050, *highest in China and India* due to increase in urbanisation and ageing of population. Besides, causing acute shortage of clean drinking water to 240 million people. It is projected that Africa will suffer around 400 000 premature deaths in 2050 from malaria. Clean air, land and water will become scarce commodities in the coming future, causing degradation of human health in form of disease, injury, death and impairment to quality of life (Bolt et al., 2005). According to World Bank's annual publication, *Environment Matters*, 2005, approximately one-fifth diseases in developing countries occurs due to leading environmental risk factors of unsafe water, poor sanitation, and poor hygiene calculated at 1.7 million premature deaths per year and urban air pollution is estimated to cause about 800,000 premature deaths annually. Environmental degradation faces the major challenges of poverty and population explosion. It is also one of the Millennium Development Goal of India.

Poverty, is still prevalent worldwide and is recognized as something that itself, pollutes the environment (Report of World Commission on Environment and Development, Brundtland, 1987). It is a bane especially on developing nations. These nations depend more on natural resources like oil and gas for food and fuel resources of

rural household and industry. This forces them to dis-save the natural resource by consuming it. Hence, reduces the natural resource stock of a nation.

Huge population is again a burden on the economy. It outstrips any conservation effort with regard to environment. In fact, the monetary resources are used to feed the advancing population rather than conserving the nature. According to Ehrlich (1996) population increase destroys the natural resource **capital base itself** as well, like biodiversity, fossil fuel, groundwater, rich agricultural soil etc. This destruction and depletion of natural resource capital means; leaving less and less capital for future generation. A growing **population** exerts pressure on environment much over its 'assimilative capacity' causing long term damages. The assimilative capacity of environment is the idea that some waste produced by human activities decomposes with passage of time and gets absorbed into or integrated into the environment matter. According to the World Bank report, 1996, roughly 90 million people are added every year to global population. This causes fall in Per capita food production, and availability of per capita arable land, health, hygiene and again substantial stress on environment for feeding the growing population.

Industrialisation was considered as the key to leapfrog the growing population out of poverty. But it also leads to rapid environmental degradation. According to DesJardins (1998), the three factors of poverty, population growth and limited resources has become a challenge both economic and moral because just to meet the minimum needs of the huge world population living below subsistence level, large amount of economic activity is required through industrialization. This translates into large energy requirements and other demands from natural ecosystem. Hence, the dilemma of Growth or Development comes into picture, where industrialization becomes inevitable for growth of economy to pull population out from poverty but it causes rapid deterioration in environment in return. World bank report also testifies this fact that there has been a steep rise in greenhouse gas emissions (one of the causes of environmental injury) since late 1900's coinciding with rapid industrialisation (Forster et al., in IPCC, 2007). As shown in Figure 2, industry has contributed around 19.40% of global GHG emissions due to man-made causes also known as anthropogenic activities. Unfortunately, industries also cause other types of pollutions like water pollution, air pollution, solid waste pollution like

hazardous waste, noise pollution and so on. Industrial production discharges substantial amount of pollutants into rivers and air which in turn harm the health of those exposed to them.

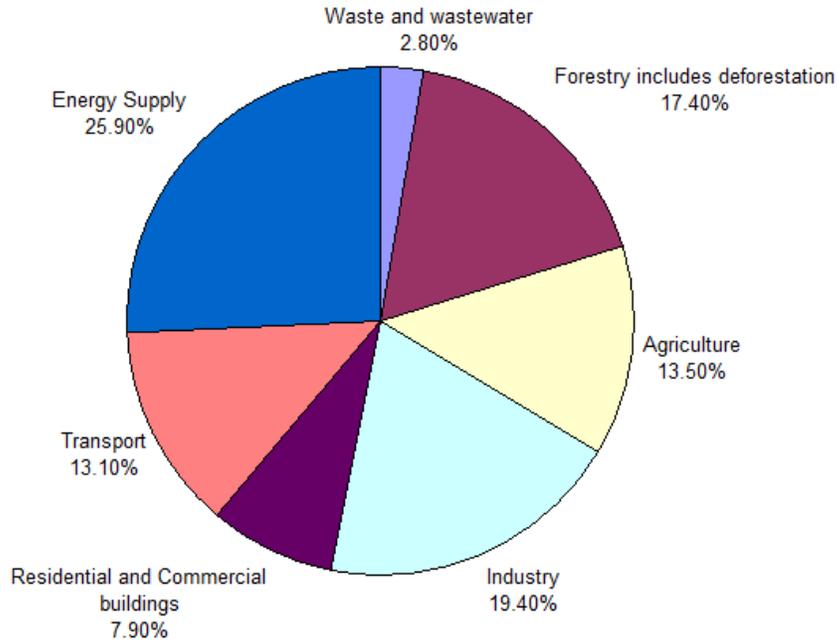


Figure 2: Share of different Sectors in Global Anthropogenic GHG Emissions

Source: Bernstein, L. et al. 2007

Hence, it is the duty of industry to take appropriate actions to safeguard the environment, disclose its environmental performances, conduct audit and be accountable for its environmental related activities.

The next section looks at the environmental problems focussed on Indian context.

1.2 Environmental degradation problems in India

India is one of the oldest civilizations in the world (*Profile*, National Portal of India) replete with natural endowments and, biological diversity (*Background*, Zoological Survey of India). Environment was an integral part of our ancient cultural heritage (Goel, 2003) and revered each of its constituents and entities by carefully preserving them (Sensarma, 1998; Sharma, 2009).

However, British rule pushed India to total ruins (Naoroji, 1901; Federation and Hyndman, 1907; Hyndman, 1907), languishing in *poverty* (Naoroji, 1878), (Nehru, 1946;

Gaur, 1988). Even after independence, poverty remained much rampant. Population growth added more fuel to fire as it derailed any steps taken by government to improve the poverty situation. For instance, India stands second to just China supporting 17.4% of world population 2.4% of world land area; and is likely to surpass China in a few years time. The population density of India has increased from 325 in 2001 to 382 in 2011 (population per sq km) as reported by Office of the Registrar General and Census Commissioner, Ministry of Home Affairs.

After independence, India, needed a strong growth trajectory to improve the living standard of its people and to take them out of poverty. Consequently, the country embarked upon planning for rapid industrialization' (Nag, 1949. p-111), as a tool to increase productivity by *exploiting to the full the natural resources* and manpower (Narayan, 1944, p-4, emphasis added). Hence, industrialization was considered the only solution for challenge of poverty, population and development. India became a large industrial base. According to Morgera (2009), first-ever report of its kind on accountability around the world, India industry has contributed approx 24% of GDP in 2005 and which has grown @7% between 1999 and 2004. India ranks 7th largest energy producer in the world (2.49% of world's total energy production). It is fifth largest energy consumer (3.45% of total energy consumption of world in 2004) as well. The population of India is expected to reach 1.47 billion in 2031-32.

What we forgot during the planned development is that the growth occurs in a win win situation, where there are none or manageable long ranging or immediate external effects of growth. The negative effects of *industrialization* also became apparent. Industrial activities caused significant air, water and land pollution, afflicting illness, morbidity and mortality locally and globally. Industrial Green house gas emissions has been the major cause of global warming and damaging changes in world weather leading to severe droughts, floods and spread of diseases. Various reports confirm that globally the industry accounts for one-third of all the energy used and for almost 40% of worldwide carbon dioxide (CO₂) emissions. India's *Greenhouse Gas Emissions* (2007) (MoEF, May, 2010) report states that GHG emissions of industry is at 22%.

India is at a critical juncture of environmental crisis. It is reported that India has the worst air pollution in the entire world, beating China, Pakistan, Nepal and Bangladesh,

also that India's levels of 'fine particulate matter' (Mani et al., 2012) suspended in the air are nearly five times the threshold where they become unsafe for human beings. Particulate matter is one of the leading causes of acute lower respiratory infections and cancer. The World Health Organization found that Acute Respiratory Infections were one of the most common causes of deaths in children under 5 in India,'(news, Yale Centre for Environmental Law and Policy, 2013). At present, surface water sources like rivers, lakes, streams and wells are polluted with biological waste and untreated sewage containing toxic substances to such an extent that they have become unsuitable for human consumption. For instance, the Ganga, the holy river, throughout its entire stretch has become so polluted that government has to launch programme to clear its waters. Indiscriminate disposal of municipal solid waste is yet another colossal problem in India. E-waste is appearing in heaps like developed countries. Approximately 40,000 tonnes of e-waste are generated in India. Further, India relaxed environmental restrictions also for attracting FDI also. As a result, there was widespread exploitation of natural resources. According to World Bank report 2013 (in collaboration with MoEF, India), the total cost of environmental degradation in India is Rs. 3.75 trillion approx. (**US\$80 billion**), equivalent to **5.7%** of **GDP** in **2009** (the reference year for damage estimates) as presented in Figure 3.

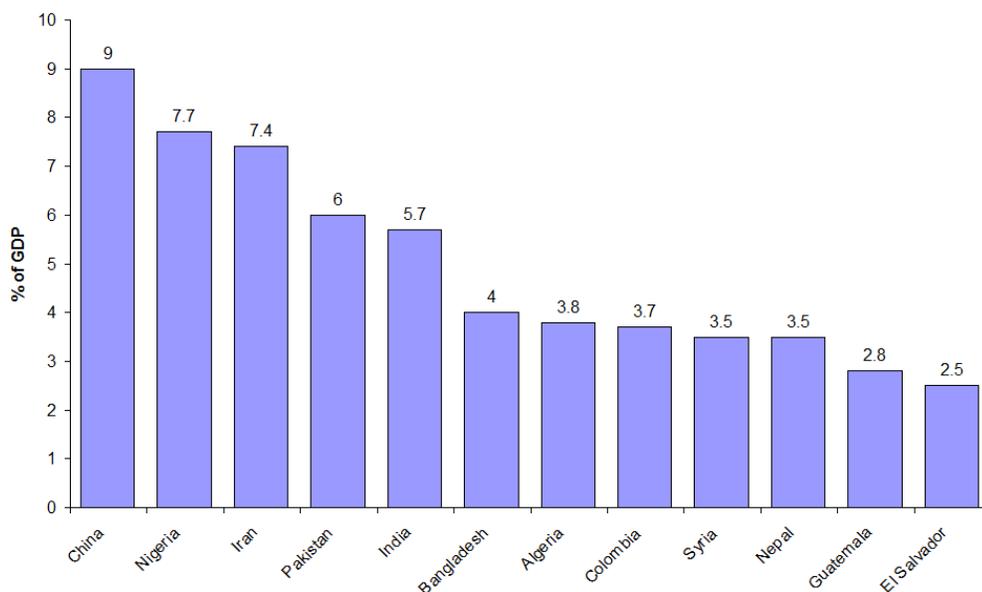


Figure 3: Cost of Environmental Degradation (Health & Natural Resources Damages)
Source: Bank (2012): Green Growth: Path to Sustainable Development

The above discussion states that corporate or industry hold a huge responsibility towards environment pollution. They have been the instrument causing the extreme damage to environment. The moot question is how to reconcile growth ambitions with climate sustainability. The concept of sustainable development (SD) holds the key to this dilemma. The Brundtland report defines SD as, ‘The development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs’ (WCED, 1987). Understandably, sustainability concept recognizes that a viable relationship is possible between an organization’s economic performance and its environmental and social activities.

1.3 Developments in immediate corporate operating sphere

There have been strong developments in the immediate business operating environment. These developments have necessitated a change in the paradigm of existence among corporate entities. The developments are listed as follows:

- Tremendous rise in power of corporate
- Industrial accidents causing enormous damages
- Regulatory inclination towards environmental safety
- Global sustainability standards
- Environmental opportunities
- Environmental Management Systems
- Confrontational attitude by society
- Environmental litigations
- Increase demand for environmental reporting by stakeholders
- Increase demand for Environmental auditing
- Practice of CSR falling short of remedying the environmental degradation problem

1.3.1 Rise in the power of corporate

Corporate entities have become the new rulers of the world (Korten, 2001) because reports indicate that they possess capital whose worth is more than total capital of some countries. Transnational firms are seen to try to even mould laws of a nation when the

situations turn adversarial. When they can wind up and relocate, it leaves little incentive for the corporate to invest in local environment. In case of any harm or injury done to health of individuals or nature, there are enough evidence to suggest that they have tried to manipulate the government too, as happened in Bhopal and go unscathed for years (Bendell, 2004).

1.3.2 Enormous industrial accidents

There has been rise in enormity of environmental damage due to industrial accidents. One of the worst industrial disasters of all times occurred in Bhopal, India, in December 1984 in which it is estimated that about 10,000 plus people died within a short period of time and about 500,000 more people suffered unbearable injuries due to massive poisoning. The children are still born with birth defects. Several reports indicate how Union Carbide failed to clean up the site and the plant continuous to leak several toxic substances into local aquifers which hazardously contaminates water and continuous to cause distress to local people (Broughton, 2005). Other similar incidents such as Chernobyl and Exxon-Valdez disasters, called for an inquiry into the environmental policies of the corporate entities.

1.3.3 Rise in regulatory pressure

Worldwide reports suggest that since 1970s there has been significant increase in environmental regulations especially for multinationals. The regulatory pressure has also increased in India since then. For instance, Environment Protection Act (1986) was passed to devise and enforce environmental laws and policies in India.

1.3.4 Rise in global sustainability standards

Way back in 1987, worldwide developments like the Brundtland Report, *Our Common Future*; strongly suggested the interdependence of human, ecology and economic growth (Brundtland Report, 1987), (Christofi et al., 2012) termed as 'inclusive growth'. At international level, the UN Global Compact was launched in 2000. It is a platform that provides global pillars of social and environmental actions. The Compact encompasses nine principles, drawn from the Universal Declaration of Human Rights, the ILO's

Fundamental Principles on Rights at Work and the Rio Principles on Environment and Development. It asks companies to act on these principles in their own corporate domains. Similarly, the GRI was established in 1997 with the mission of developing globally applicable guidelines for reporting on the economic, environmental, and social performance of corporations. Convened by the Coalition for Environmentally Responsible Economies in partnership with the United Nations Environment Programme (UNEP), the GRI incorporates the active participation of corporations, NGOs, accountancy organizations, business associations, and other stakeholders from around the world (Global Reporting Initiative, 2002). Countries now demand the multinationals to conform to local rules and regulations and further internationalisation also requires local corporations to rise up to international standards.

1.3.5 Environmental opportunities

New opportunities are also offered by environment where corporate entities can invest in Environmental technologies rather than competing against it; which leads to inclusive growth and rewarded by stakeholders in terms of rise in market value of shares, customer choice, media recommendations and appreciations.

1.3.6 Environmental management systems

There has also been tremendous growth in voluntary code of conducts and standards of performance for environment like ISO series which are understood even by general public and are rewarded by stakeholders.

1.3.7 Stakeholders becoming more confrontational

The classical version of shareholders being the only stakeholder with legitimate interest in corporate affairs has given way to a wider context. There has been increasing awareness among societal members in the capacity of workers, investors, consumers, the authorities, and non-governmental organizations (NGOs) to recognize legitimacy of their interest in the working of the corporate entities. They vehemently oppose any action or inaction by corporate that affect them adversely. They take to social media or organize

campaigns against the corporate entity to change their course of doing things. This improvement in the society is worth taking care of by the corporate entity.

1.3.8 Power of environmental litigations

Public Interest Litigation is a very potent tool which allows any person to take a matter of public interest to higher judiciary whether the person is directly affected or not. In the case of environment, any person can represent the cause of 'nature' whether he/she is directly affected by not against the doer i.e., corporate entity. Our courts have also supported the PILs (Public Interest Litigation) and have directed for remedial measures, pinpointed the liability of the polluter, imposed monetary penalties and also in certain cases have directed an amendment in environmental standards.

1.3.9 Increase demand for environmental reports

Environment reporting has also rapidly gained acceptance as the means of communicating and demonstrating a company's commitment to improving environmental performance to stakeholders. The stakeholders are critically analyzing the reports for its relevancy and sufficiency of environmental information reported. Various internationally standardized report formats have also come into existence. For instance, GRI report is the most popular reporting framework across nations. These reports are demanded for international operations and for grading corporate on various sustainable indicators. The content analysis of such reports along with sentimental analysis has been much used instrument for data mining and grasping the hidden meaning not disclosed per se in the report.

1.3.10 Demand for revision of auditing assurance role

There has been significant demand for assurance provision by the users of environmental report for relevant and credible information provision. Recently, there has been a spree in production of various voluntary performances reports such as triple bottom line ranging from general purpose to specific reports such as Greenhouse Gas Emissions report. Worldwide, there have been efforts by various international bodies to lend assurances to these reports. Important are Carbon Disclosure Standards Board

(CDSB) and recent standards of ISAE-3410 released by International Auditing and Assurance Standards Board (IAASB) promoting guidelines on GHG –Green House Gas emissions assurance reporting. ISO-14000 series also stands for providing assurances by independent agency. These changes have modified the type of assurances given for environmental activities as these are more action oriented than qualitative statements offering verbal assurances only.

1.3.11 CSR deficiency in fulfilling environmental obligation

Organizations are also recognizing the importance of environmental preservation actions due to growing number of laws, regulations, and penalties in this area. All this has forced corporate to undertake corporate social responsibility and publish public documents such as triple bottom line reports which take into consideration financial, social, and environmental responsibility of their actions.

Though CSR concept was broader in scope than philanthropy or the charitable activities and covered legal, economic and ethical responsibilities as well (Kakabadse et al., 2005) yet it suffered from one main and sizeable limitation. CSR does not lay down that looking after the welfare of the society is an *'obligation'* for the organization and if not taken proper care, the public can impose punishment over the corporate for its failure to meet minimum moral responsibility a business has to undertake. Therefore, the need of today is to have a paradigm that seeks enforcements against voluntarism (as existing in CSR), where one end of the power rope of corporate is held in the hands of independent third party (like NGOs) who can sanction the corporate against any environmental misdoings. This paradigm becomes all the more important where pollution hazards are tormenting humanity in its present generation and crippling the future. Though Corporate Social Responsibility (CSR) is a widely researched topic in India and in global context, it suffers from the main limitation as identified earlier, that it looks into the voluntary social responsiveness of corporate.

1.4 Relevance and importance of the study

The study of Environmental Accountability is an emergent concept in corporate settings. Though a few guidelines are available but a holistic development of the concept

is amiss. The present research findings will propose a paradigm of corporate existence that will direct the focus of the corporate towards environmental proactive existence and transparency, and in this manner, contribute towards resolving the problem of environmental pollution at corporate level.

In addition, the focus of the study is on business concerns/corporations who are a major player in this context. A corporate is an artificial person run by managers in real sense. They act as trustees of the interest of the shareholders and wider stakeholders. Therefore, for managers, the paradigm of accountability is very important in today times because it is their pro inclination towards environmental concerns that larger impact is possible. The following paragraph elaborates this understanding.

1.4.1 Corporate managers-the kingpin of change

Corporations are made up of individuals whose values, goals and ideals are defined with culture and society. They often feel clash between personal value system and industrial and legal pressure. They also sit torn between environmental consciousness and the necessity of delivering shareholder profits as there is a dearth of research interlinking environmental consciousness and improvement in economic bottomline for the ease of corporate understanding.

However, this is not an easy task and challenges galore. Government, national or international, is becoming more firm, and stringent to enforce corporations for reduction of greenhouse gas emissions, curtailing waste and promoting recycling. Active pressure groups are demanding relevant and understandable environmental information about production and products to assess the environmental impact from production, products, and consumption. As a result, corporations are under pressure to “go green” beyond simply complying with environmental regulations.

Corporate managers are also considering it as important however it is not a trivial issue and challenges are:

- Firstly, the current paradigm of existence is the practice of CSR
- CSR focuses more on voluntary adoption
- There is no generally accepted reporting criterias
- It adds to the cost of preparation of annual reports

- There are no clear guidelines on identification of assets, liabilities, risks against which comparison can be made
- It needs the engagement of multidisciplinary team drawing the knowledge resources of accountants, engineers, environmental managers, auditors
- It needs the predisposition of board and higher level of management

Accountability provides the managers with a framework to view the business as intertwined with environmental upgradation. It is an integrated framework that encourages managers to reorient their business for new strategy, motivate employees, increase shareholders value by keeping organizational operational performance in line with environmental objectives. In other words, an integrated approach that incorporates sustainability and economic performance has nowadays become prerequisite for business to compete locally, nationally and globally.

The findings of the research will contribute towards understanding how managers perceive environmental issues facing their firm is an important step in attempting for inclusive growth and the development of pro-environment organizational behavior as it is the attitudes and behaviors of managers that shape corporate behavior. There is dearth of such studies at present featuring India and other developing countries.

1.4.2 Importance of ENGOs as stakeholders

The silent stakeholder, *Ecology*, has become a salient stakeholder to demand every decision whether strategic or operational being looked through the lens of environmental sustainability. Since, environment cannot speak for itself and needs the representative skills of Environmental representatives such as environmental non-governmental organizations (ENGOs) who are identified as the stakeholders for the purpose of the study. The stakeholders can demand information concerning the corporate actions, they can seek justification and impose sanctions on corporate for any actions they feel unjustifiable. Cooper & Owen (2007) suggest that accountability cannot be achieved without empowering the stakeholders in terms of materiality and completeness in reports which are responsive to their specific needs.

The study thus explores the perspective of Environmental NGOs who are the stakeholders representing nature on the premise that not only should the information be provided but it should have value that *allows action to be undertaken*.

The study in this manner will provide immense feedback to corporate to understand whether their reports are relevant and sufficient for the users and thus enables ironing out the gaps in understanding. Following the stakeholder theory, (elaborated in chapter 3- literature review) it is suggested that firms have a duty to all their stakeholders, not just to their shareholders. It is in the interest of firms to be responsible to all stakeholders.

The thesis thus explores the perspective corporate managers and Environmental NGOs as representative of nature in comparison with Corporate managers in India.

1.5 Conceptual definition of terms

1.5.1 Concept of environment

Environment is all around us and provides us basic life supporting system in five forms viz., air, water, land, flora and fauna. In ecological terms, the environment is referred to as “the sum total of all external conditions and influences affecting the life and development of organisms of the system”. In this definition, environment is considered as a system. It comprises both biotic (living) and abiotic (non living) components. These components interact with the external surroundings, affect them and get affected by them in return.

Another definition emphasizing this inter dependence of all the components of the system is as follows: According to Section 2(a) of the Environment Protection Act, 1986, “Environment includes: water, air and land; the interrelationship which exists among and between – water, air and land; and human beings, other living creatures, plants, micro organisms and property”. A proper balance need to be maintained between these components and their interactions must be carefully managed so that the balance is not disturbed. For the purpose of thesis, environment is used as referred above and also interchangeably with ‘nature’.

1.5.2 Operating environment

The term ‘Operating environment’ represents the political, regulatory, competitive, social and regulatory forces impacting the operations of an enterprise.

1.5.3 Environmental pollution

Environmental pollution occurs when man-made waste contaminates the land, water, air, etc., on which we live, breathe and survive, so grossly as to rendering it unfit for use or consumption.

1.5.4 Sustainability

The concept of sustainability with regard to development of an economy suggests a paradigm of existence where the growth occurs in a manner that the needs of present society is met while the natural resources are also conserved so that do not become deficient to meet the needs of future generations..

1.5.5 Sustainability reporting

According to Gray, Owen and Maunders (1987), Sustainability reporting refers to communication of social and environmental effects of company’s products, processes and other operations to diverse interest groups of the society.

1.5.6 Environmental reporting

Environmental reporting is the outcome of the process of communicating the environmental impacts of corporate products, processes and operations on the society (Gray, Owen and Maunders, 1987).

1.5.7 Corporate environmental accountability

Corporate environment accountability is the legal and ethical responsibility of the corporate entities to provide an account of corporate’s environmental footprints. *Accountability* refers to one’s duty to explain, justify and report on his or her actions. Corporate accountability with respect to environment refers to both *mandatory as well as proactive voluntary actions* to actively account for and work towards mitigation of the sustainability footprint; and this distinguishes it from responsibility, which is a reactive

behaviour and is generally enforced by law or strong say of any stakeholder which may be societal groups, or consumer etc.

1.5.8 Transition

The term transition indicates the presence of positive approach (non-negative) towards various issues discussed. The term is used in the context of measuring the attitude of corporate managers towards environmentally accountable existence. It can be represented in the form of following equation:

Transition = Positive attitude of corporate managers towards topic of study

1.5.9 Non-governmental organizations (NGOs)

NGOs are alternatively called as ‘private organizations’, ‘international pressure groups’, and ‘voluntary agencies’. ‘*Non-governmental*’ stands for the fact that there is no involvement of governmental representative. The term ‘*organisation*’ lends the meaning that it is not some abrupt movement but rather has an organizational structure with permanent members, offices, and may or may not any financial income. According to Martens, K. (2002), ‘*NGOs are formal (professionalized) independent societal organizations whose primary aim is to promote common goals at the national or the international level.*’

1.5.10 Sanctionability

Till now, the huge concentration of corporate was to provide for social welfare through philanthropy and under the umbrella of CSR. Though hugely popular and still under practice, the paradigm of Corporate Environmental Accountability is considered as an advancement over CSR philosophy. The difference exists on the question of ‘sanctionability’. Sanctionability is the power accorded to external person or groups of person or a forum to ask corporate for information on environmental aspects not disclosed, or justifications for actions taken. Again, the forum has the power to impose or sanction fine or punishment over the guilty enterprise (Bovens, 2007).

1.5.11 Corporate social responsibility (CSR)

Corporate Social Responsibility refers to policies formulated and activities undertaken to represent to the society that the company is concerned with social issues.

1.5.12 Corporate social reporting

Corporate Social reporting is the outcome of CSR activities and refers to communication of CSR activities undertaken to either a particular interest group or to society at large on broad social issues such as corporate philanthropy, workplace health and safety measures, human rights, community engagement, product responsibility and labor rights.

1.5.13 Users of corporate reports

The ‘users’ of corporate reports are identified as those constituents of the society whose rights are affected by the organizational activities and thus they have a justifiable right to receive information from the corporate entity. The users could include investors, suppliers, customers, creditors, employees, analysts, lenders, government, NGOs and general public. For the purpose of the thesis, the users are identified as members of Environmental NGOs (Mitchell and Quinn, 2005). They are alternatively also referred to as NGOs or ENGOs.

1.5.14 Preparers

The term ‘preparers’ of corporate reports refers to companies’ directors, managers, accountants, internal auditors and any other official of the company who is either directly or indirectly involved in the preparation of environmental reports (Mitchell and Quinn, 2005). For the purpose of the thesis, the preparers are identified as corporate managers. They are alternatively also referred to as corporate entities.

1.5.15 Expectations gap

An expectations gap refers to the difference between the perception of preparers and expectation of users regarding various disclosures related to environment in annual reports (Mitchell and Quinn, 2005). For the purpose of this study, an expectation gap is measured with regard to seventeen disclosure variables identified after scrutiny of annual

reports of fifty sampled companies. Expectation gap is found out on the criteria of ‘relevancy’ and ‘sufficiency’ of pre selected environmental variables.

1.5.16 Relevancy and sufficiency

Relevancy means whether the environmental information supplied by preparers is related to the specific needs of the users. Sufficiency examines whether the environmental information disclosed is adequate to the needs of the users.

1.5.17 Stakeholders

Stakeholders are the persons or group of persons from society having legitimate interest in corporate activities. They can examine the corporate reports, evaluate their actions and demand justification of actions undertaken or missed. They can demand participation in corporate decision making and further revelation of any information not disclosed.

1.6 Plan of the study

1.6.1 The proposed scheme of chapters is as follows:

Chapter I: Introduction

Chapter II: Literature Review

Chapter III: Research Methodology

Chapter IV: Transition in Managerial Perception towards Corporate Environmental Accountability

Chapter V: Voluntary Adoption of Environmental Disclosures and Stakeholders’ Expectations

Chapter VI: Environmental Auditing and Environmental Accountability Disclosure Index

Chapter VII: Discussion of Research Findings

Chapter VIII: Conclusion and Recommendation

1.6.2 Organization of the thesis

This thesis is organized into eight chapters.

The **first chapter** provides an overview of the theme chosen for the study. The chapter helps in understanding the importance of the topic from the broader global perspective, justification lent by the past background in India. According to Merriam-webster online dictionary, a ‘background’ is the scene that is behind and away from direct vision and ‘justification’ is an acceptable reason for doing something. Hence, the first chapter attempts to provide a rationale for undertaking the present study on the basis of imminent need which is articulated by past history. As presented in the chapter earlier, our country had to pass through tumultuous time period in the past and did not have a steady economic progress as it was divided and ruled by many kings, then by the Britishers. Hence, understanding the background is an important aspect to justify its present. It will also help in charting out the future path.

The **second chapter** presents a review of literature undertaken for the purpose of the study. The literature review is unquestionably the back bone of the study which enriches the investigator’s knowledge about what has already been done on the subject matter and where the gap exists. Hence, the available literature is reviewed across the themes of studies covering the proposed objectives.

Chapter 3 is an important chapter that lays the groundwork for empirical analysis of the collected data. It presents the research methodology, objectives with which the study was initiated, sampling techniques and considerations, building of questionnaire, hypotheses, research assumptions and limitations.

The **fourth chapter** of the thesis corresponds with the first objective of the study. It provides a glimpse of how corporate social responsiveness has changed over time. Looking at the deficiencies of various paradigms of corporate social existence, it presents the case of ‘urgency’ for environmentally accountable existence. Thus, the transition study is chartered from the time when corporate gave importance to philanthropy, following the coming of other terms like corporate social responsibility, corporate citizenship and finally reaching for the paradigm of corporate environmental accountability. In addition, the chapter displays the results of empirical analysis undertaken to understand the present presence of positive transition in corporate respondents.

The **fifth chapter** looks into the adoption of voluntary corporate environmental standards and information disclosure related to environmental issues. After explaining the need for voluntary efforts the chapter presents the data analysis and interpretation of the current views of corporate manager towards the topic of voluntary adoption and information disclosure. The last part of the chapter discusses the comparative responses of the two groups chosen for the study, the first being the corporate group and the next being the environmental NGOs group. The result of the information collected is used to highlight any differences in the views of both the groups with regard to environmental information disclosed.

Chapter 6 is laid out in a manner that first part examines empirically the current environmental audit practices which provide authentications and validations to the environmental information disclosed and compliance made with regulatory and voluntary standards. These become the basis for monitoring corporate activities and for enforcing accountability. The second part is devoted to discussion of important variables that should be incorporated in formation of accountability disclosure index to showcase the environmental concerns. It culminates the discussion of various objectives formed for the study.

Chapter 7 provides a synthesis of information puts together from primary and secondary data in the form of research findings. The **conclusion** provides a brief summary of the achievement of various objectives chosen and issues of research that can be pursued in the future. This becomes the final **chapter 8** that concludes by presenting a summary of the work done and provides suggestions for policy guidelines and potential improvements that would transcend the information barriers between issuer as well as the user of environment information disclosed.

1.7 Summary

The present chapter lays out the foundation of the topic of the thesis. The background of the study is covered in this chapter which throws light on the necessity of undertaking the research in the field of environment. The chapter began with addressing the concern for environment at broader level of total global economy. It revealed that the environment suffered due to presence of factors like poverty and population explosion

which required the nations to fasten the pace of development while ignoring the impacts on the natural environment. The similar situation prevailed in India as well which got compounded due to British rule and exploitation of Indian natural and human resources by them.

The chapter further evaluated the need for corporate to take action and imbibe environmental concerns as a paradigm of existence. Various reasons were listed which demanded the necessity for such an action. Among the reasons the important ones were degradation in quality of life of people due to environmental related illnesses, industrial accidents. In addition, rise in the power of corporate and wielding of large resources by them makes it an imperative for corporate to take urgent action and save the environment.

Another interesting feature was rise in the awareness of society towards environment conservation and their ability to confront the corporate who are blameworthy for spoiling the environment.

The present chapter thus underlines the importance of the field of study. The next chapter focuses on the relevant literature available to enable the researcher to gain a deep understanding of the relevancy of the topic and draw out important hypothesis and implied objectives of the study to enrich the field of the study.

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