

Chapter I

Introduction

1.1. Introduction

Rapid population explosion and rising living standards among the Earth's inhabitants are putting an unendurable strain on nature and environment. The word Environment is derived from the French word "Environ" which means "surrounding". Our surrounding includes biotic factors like human beings, Plants, animals, light, air, water, soil, etc. it means "everything outside of your body." Thus, Environment is a complex of many variables, which surrounds human beings as well as the living organisms. Environment includes water, air and land and the interrelationships which exist among and between water, air and land and human beings and other living creatures such as plants, animals and micro organisms (Kalavathy, 2004). Mankind has been a part of history of negligence, apathy toward such external factors or surroundings for personal benefits. This has developed a sense of ignorance towards safety, lethal mechanical glitches and depreciation of the environment owing to uncountable unnatural disasters. The revolution in the field of science and technology during nineteenth and twentieth century led to massive exploitation of natural resources and man was basking in the glory of his supremacy over others so the realization that the existence of humanity lies in the dependence upon the will of nature came as an eye opener but, came very late. So, in the 21st century we are experiencing a shift towards nature and spirituality. A change in the ideology is already perceptible all over the world. Consequently, environmental ethics have become an integral part of education, research and development.

Vasudhaiv Kutumbakam the gist of Indian vedantic philosophy believes in symbiotic existence of man and nature where adherence to ecosystem is a part of life. It insists minimal usage of natural resources to support life system. The research work by Singh C. B. (2002) reflects the same philosophy. He opined that the existence of nature is always closely linked with the emotional sensitivities of man. The discovery of so many values and truth of life of Indian

culture has taken place under the umbrella of 'Nature'. The environment, synonym of nature, its functional behavior and character are related to the environment in one form or another. In support he further argues that, in the *Vedic* and *Upanishad* periods man and his society attained a new direction through nature to discover the truth of Indian spiritualism along with the survival and development of nature, forest life and plants.

Vyas N., (1996) has discussed about relationship of Nature and Man, and noted that Man has been always curious to know the real world around him. In course of time he could develop deterministic cognition strengthened as it is by the evidential and critical study of experience at all levels. From this stage of Science as Knowledge, he could successfully translate it into Science as Power. The moot problem is that all this linear pursuit of man goes in the name of progress and humanism.

The indiscriminative utilization of natural resources for meeting developmental demands, rapid industrialization and unplanned urbanization are adversely impacting the environment. Dumping of wastes into our rivers and lakes, clearing forest land for cultivation, making available the agriculture land for industry and increased emission of harmful pollutants into the environment have all contributed to degrading our environment. Degradation of the environment and its symptoms like global warming and climate change has become a cause of grave concern all over the world. Every society, small or big, is feeling the ill effects of environmental degradation and this poses a high level of risk to the existence of plant, animal and human life.

In the light of economic development and various growth models, it is imperative to understand the various elements involved in the present growth model. The last forty years can be called as the age of development, but the greatest paradox is that this period also marked human irresponsibility towards the preservation and sustenance of nature and ecosystem. It appears that the vast and innumerable gifts of nature are not enough to suffice human needs and greed. Sachs W. (1997) has studied that the relations between North and South have been cast in this mould; 'development' provided the fundamental frame of reference for that

mixture of generosity, bribery and oppression which has characterized the policies toward the South. For almost half a century, good neighborliness on the planet was conceived in the light of 'development'. Today, the lighthouse shows cracks and is starting to crumble. The idea of development stands like a ruin in the intellectual landscape. Delusion and disappointment, failures and crimes have been the steady companions of development and they tell a common story. Moreover, the historical conditions which catapulted the idea into prominence have vanished. Above all the hopes and desires which made the idea fly, are now exhausted and development has grown obsolete.

With respect to developing and underdeveloped countries, Gurjar R. D (2003) has found that the philosophy of developing countries to the sustainable development is different. According to them, poverty is the greatest polluter of environment and therefore acceleration of economic growth to meet the basic needs of the people is the only alternative to safeguard the environment. The developing or underdeveloped countries also argue that if the industrialized rich countries are really serious about environment they should assist the former with finance and environmental friendly technology to promote their economic growth. But the common thread, whatever the diametrically opposite views for development may exist, is a firm commitment to promote economic growth but to keep the adverse effects of industrialization, urbanization and environmental deterioration under control.

Gupta K. (1999) has observed that the origin of 'audit' can be traced to the need to ensure that a person who came into possession of money or property belonging to another has properly accounted for by him. Thus, in the beginning, it was merely a scrutiny of cash transactions and the auditor merely 'heard' or was satisfied with oral explanations to 'pass' the transactions as genuine and correct. The Industrial Revolution in England gave a boost to the organization of large undertakings for carrying on large-scale industrial and commercial operations. In our two epics, the 'Ramayana' and 'Mahabharata' also there is mention on system of maintenance of books of accounts and examination or verification of the same subsequently for control purpose. So, the existence of audit discipline can be traced back even to Pre-vedic and Vedic period where the literature posits

numerous references indicating that accountancy and audit were practiced in elementary form in ancient India. Valmiki's Ramayana presents one incident when Lord Rama asks Bharat on meeting him in the while leaving Ayodhya for vanvasa: "is your income more than your expenditure and your expenditure less than your income?" (Valmiki Ramayan, Ayodhyakand, Sarga, 100). Another reference prominently brings forth the prevalence of accountancy and auditing in Mahabharata times when King Yudhisthira ordered his brother Nakula to look after the army's accounts (Mahabharata, Shantiparva, Sarga 40)

Massive industrialization started posing serious threats to nature and its resources, with aftermaths in the form various natural calamities , depletion of ozone layers, oil spills from marine vessels, leakage of nuclear radio actives, noxious gas leakage, etc. Businesses started exploiting natural resources and habitats at unprecedented rate, so need arose of augmented efforts in all directions i.e. technological interventions, framing of policies at global level yet these efforts cannot replenish the damage done. The world has witnessed some destructive environmental disasters that have put a question mark over man's accountability towards environment.

'Environmental Audit' is an emerging auditing tool and is of substantial interest in view of the increasing recognition that global warming and climate change have already begun to take place, and cannot anymore be perceived as likely future events. It is generally accepted that the survival of the human kind (and of all living organisms for that matter) depends on the protection and sustenance of the environment and that no amount of cost incurred to achieve that purpose would be too high. The very mention of the terms 'environment' and 'climate change' will evoke instantaneous reaction in the mind of everyone concerned with the future of mankind. The terms will also raise apprehensions about the well-being of successive generations, - the present and the future.

Thompson et. al. (1999), defined Environmental auditing is an established management tool which provides a periodic, formalized check against an established set of criteria to assess the current situation of a company with respect to their obligation on several fronts: meeting Environmental Management

System (EMS) objectives; compliance with laws and regulations; and conformance with corporate code or policy and industry and association codes or policies.

In 1977, Arthur D'Little performed first independent environment audit for the Allied Chemical Co. in wake of serious environmental incident at one of the Allied's plant. The audit was comprehensive involving surveying of sites, records, operations, interviews, etc. and done voluntarily on the initiatives of Allied company, which included thirty five Allied's plants worldwide, to determine the level of regulatory compliance and internal environmental policies. Based on the audit findings the Allied Chemical Co. formulated auditing program for all its units in 1978.

With the emergence of environmental auditing practice, the parallel concept of environmental and social accountability started getting implications. Meanwhile, John Elkington coined the concept of 3Ps with regard to performance and reporting of corporates viz. reporting and disclosure of Profit (financial) performance, People (social) performance and Planet (environmental) performance. Hence, environmental accountability towards stakeholders became significant. In the backdrop of this Environmental auditing exercise, it is desirable to understand some findings on Environmental Accountability.

Cormier et al. (2004) proposed a model of environmental reporting, in which disclosures are made according to managers' attitudes and perceptions towards various stakeholder groups. More directly, Patten and Trompeter (2003) argue that "firms may believe that by projecting an image of environmental concern and awareness they can reduce the likelihood of having negative government actions initiated or passed." The proactive use of financial report environmental disclosure, because it appears to be aimed at addressing general public perceptions as opposed to being a direct provision of information to policy-makers, can thus be argued as a constituency-building political strategy tactic.

Environmental reporting moved towards more established grounds imbibing specifications of Millennium Development Goals (MDGs). United Nations (UN)

motive to achieve sustainable development for future generations was routed through introduction of the practice of environmental auditing in accomplishment of Millennium Development Goals (MDGs).

Lewis (2008) has mentioned in his study that for the professional accountant, the final decades of the 20th century were marked by increasing compliance requirements in terms both of financial reporting and financial audit. The importance of sustainability issues in the context of accounting communication is increasingly recognized in mainstream processes and statements. The job of auditors was not remained restricted to verification or assessment of financial statements, other documents and activities but extended to verify proper compliance of various applicable laws, rules and regulations as well as propriety of expenditure.

It would be pertinent to notice what Moor and Beelde, (2005) have observed about Environmental Audit and its relationship with Accounting and Financial Management. There are not only similarities but also direct overlaps between financial accounting and environmental management or reporting. Many environmental expenses will be expressed in the financial statements. To guarantee that companies behave responsibly and limit any negative impact they might have on the environment, severe sanctions can be imposed in case of a violation of the environmental regulation. These sanctions, ranging from financial fines to the closing down of factories, can in turn be translated into going concern problems. In this framework, the audit is considered to be an instrument for building up an environmental care system or an environmental management system. This includes consideration of emissions and effluents, with their consequences for the environment, energy management, raw materials management, production methods and management, prevention and management of waste, external safety, information, education and participation of employees in environmental management, external information and presentation, and advice given by environmental coordinators and the inspection of the progress (Maltby, 1995).

As identified by Shrivastava A. K. (2003), the key areas of primal importance for environmental auditing are-

- a) Nature conservation: The conservation of a single local specie or protection of habitat has a role to play in maintaining global biological diversity and in the context of 'sustainable development' both cannot be separated.
- b) Energy: World Health Organization's (WHO) report has identified four links between energy supplies and poverty, viz.
 - respiratory disorders
 - depression amongst women at home due to shortage of grow light
 - rise in mortality
- c) Land use planning: The interdependence of global ecology, energy use and the form of settlements has long been understood. Built form and layout, density, and zoning, the concentration and dispersal of activities cause to very substantial variations in energy use in buildings and transport.
- d) Transport: Transport policy is concerned with level of accessibility or implications, and not directly concerned with measuring accessibility. Accessibility relates to basic questions of individual choice, economic growth and equity.
- e) Waste management:

Many environmental problems caused by waste arise from mere carelessness or casual storage or thoughtless disposal of waste. Yet important role has to be played in the management of refuse collection, transportation, recycling and incineration, etc.
- f) Eco-consumerism: It is hardcore fact that, no manufactured goods are without an environmental impact. The present scenario depicts that there is more environment information than ever before about the products available in the market.
- g) Community awareness: For implementation and successful achievement of governmental policies and programs regarding sustainable development, motivation and awareness at individual and community level at home and at work is *sine qua non*.

1.2 Rationale' of the Study

An upward trend in corporate environmental reporting is being noticed worldwide, as companies in developed countries such as France, Finland, Germany, Japan, Netherland, New Zealand, Norway, Sweden, UK and USA have started disclosing corporate environmental information voluntarily. However, the same cannot be said of developing countries since the extent of environmental disclosure has remained predominantly very low (Belal, 2000). Nevertheless, given the heightened interest and increasing demand from stakeholders for corporate accountability, this study further provides an avenue for organizations on ways to identify, classify, record, summarize and disclose various aggregations of environmental information. This invariably allows management to identify opportunities for cost savings. It provides an insight to organisations on how to satisfy the growing demands and continuous yearning for the voluntary disclosure of corporate environmental information in their annual reports. More so, it makes available for companies both within the private and public sectors on the need for environmental improvement and corporate environmental performance. This in the long run, it helps to visualize an image of the company as having a moral obligation to account for its environmental activities. Furthermore, this study will educate policy-makers on ways in which the environmental performance of companies can be measured and analyzed using ISO requirements. Besides, the study of present reporting practices by Indian corporates this research endeavor attempts to expound the environmental auditing practice in India.

This research acts as a link between objectives of environmental accounting system, environmental auditing practice and environmental reporting for business enterprises. The research attempts to contribute towards appraisal of environmental accounting and environmental auditing practice and objectives of transparent environmental reporting framework for the organization, which facilitates in preservation and protection of environment. Further, such intertwined exploration of framework may prove useful to management and other stakeholders in different ways for their decision making.

1.3 Objectives of the Study

The present research intends to identify issues related to environmental accountability and its disclosure by corporates. The objective of this research endeavor is to investigate the Level of Corporate Environmental Disclosure by companies by integrating both, qualitative as well as quantitative measures and understanding the same. Specifically, the study seeks to:

- I. expound the theoretical understanding of environmental accounting frame work.
- II. document the environmental accounting disclosure practices of select corporates.
- III. study application of ‘Environmental Auditing’ i. e. Assessment or Evaluation with reference to ‘Environmental Disclosure’ practices and its Impact in India.
- IV. study the objectivity of environmental reporting in India.
- V. gauge the relationship of size of firms, firms operating level and environmental disclosure.
- VI. evaluate the extent of compliance of the ISO 14000 (EMS) requirements on environmental disclosures by select corporates.
- VII. study disclosure of environmental performance and assessment trends among select companies.
- VIII. assess the driving forces for implementation of Environmental Audits.
- IX. ascertain the views of practising accountants, company directors, auditors, members of the professional bodies and managers with regard to the practice and utility of environmental accounting and auditing information.

1.4 Research Methodology

This part of the study discusses the research methodology followed and road map to fulfill the research objectives. This section explains research design, methods of research, research instruments, population, sample size, sampling method, sample unit, data source and data analysis tools. This part of study reveals absolute idea for understanding environmental auditing practice and its impact and applications in India.

1.4.1. Research Design

Research design establishes the assembly for the collection, measurement and analysis of the data. For the present research study descriptive cum exploratory research design is used to study the possible relationships among variables under study. Primary data have been collected through structured questionnaires, interviews and secondary data have also been collected from various sources as outlined in the subsequent part.

1.4.2. Methods of Research

The present research aims to bridge the gap between idea and practice of environmental auditing practice in India. The main objective of this research endeavor is to carry out a systematic study of role of environmental auditing practice in business enterprises in general and Indian corporate in particular. A systematic study is to be carried out to explore the relationship of the financial performance and its relationship with the disclosure of selected environmental parameters by the select Indian companies.

1.4.2.1. Case Study

The Third chapter of content analysis is carried out to study environmental accounting and auditing disclosure practices followed by Indian corporates. This is done with intention to identify issues of concern to business related to environmental accountability and its disclosure. The objective of this research endeavor is to investigate the variables related to environmental disclosure and importance given to them by select Nifty 200 corporates after analysing corporate reports with the help of qualitative measures. The purpose of this chapter is to supplement the objectives of this research endeavor specifically, to:

- expound the theoretical understanding of environmental accounting frame work.
- study application of ‘Environmental auditing’ i. e. assessment or evaluation with reference to ‘Environmental Disclosure’ practices and its impact in India.
- study the objectivity of environmental reporting in India.
- study the disclosure of environmental performance and assessment trends among select companies.

The Chapter Four intends to examine the objectivity of environmental auditing and disclosure norms and practices followed by select Indian corporates. It appears that Indian corporates are not following environmental auditing practices considering moral social responsibility but, it is accepted as unwanted obligation. Even after following the environmental auditing practices, different organisations are following different criteria and disclosure practices. Therefore, to assess the objectivity of the environmental auditing practice followed by Indian organisations this chapter undertakes the case study analysis.

1.4.2.2. Survey Study

The study intends to reveal the application of ‘Environmental Auditing’ i. e. assessment or evaluation with reference to ‘Environmental Disclosure’ practices and its impact in India. The present study has been carried out towards the assessment of driving forces for implementation of Environmental Auditing, which is one of the objectives of this research work. The objective here in this study is not only to analyze data but also to obtain understanding from the executives, professionals and academicians with respect to the Environmental Accounting aspects, Environmental Compliance scenario and Environmental Auditing practices in enterprises in India.

An endeavor in this research study is made to explore the views of practicing accountants, other professionals, executives, managers, research scholars, academicians and post graduate students with commerce background. The study focuses on gathering and analyzing opinions received from the randomly selected respondents through a survey method i.e. quantitative method.

1.4.3. Research Instruments

Primary data has been collected using research instrument i.e. Structured Questionnaire. Structured questionnaire is used to collect opinion of practicing accountants, other professionals, executives, managers, research scholars, academicians and post graduate students with commerce background. This study

uses a Likert scale with equal intervals between response categories, to collect opinion on close ended questions.

1.4.4. Population

For the Case Study Method all the companies registered and listed in India are sampling elements for the work. For the Survey Method practicing accountants, other professionals, executives, managers, research scholars, academicians and post graduate students with commerce background in India are sampling elements for this research.

1.4.5.1. Sampling Design for Case Study

For case study analysis, samples are selected from companies registered and listed in India. Considering the emerging nature of the environmental auditing practice in India, large sample of Nifty 200 companies is considered for the content analysis in Chapter Three (Annexure 1). The object of this study is to find the possible elements of environmental disclosure in Nifty (CNX) 200 Indian companies spread across the eighteen industries are classified and grouped by National Stock Exchange. In order to undertake this study, data from the annual reports has been collected for each of the company in the sample for the financial year 2014-15 i.e. year ending March, 2015. The information on selected parameter is compiled from the Annual reports available from website of the respective company. There are number of ways in which Indian companies have started disclosing their environmental information to its stakeholders, such as annual reports, websites of company and separate sustainability reports.

For second case study, sample comprises three corporate giants belonging to environment sensitive industry. This case study is discussed in Chapter Four of the present study. Three corporate players from Steel, Petrochemicals cum Energy and Infrastructure industry have been selected viz. Tata Steel Ltd., Reliance Industries Ltd. and Larsen & Toubro Ltd. respectively for analysis purpose. Normally, Steel, Petrochemicals and Infrastructure industry are considered polluting the environment. Annual Reports from 2003-04 to 2014-15 (time span of twelve years) and available Sustainability Reports from the

websites of the above selected company are considered as secondary data for analysis.

The non-probability sampling approach was put to use and based on purposive sampling method for drawing of sampling units.

1.4.5.2.1. Methodology followed for the Content Analysis of Nifty 200 companies

In the First Case study Nifty 200 companies listed on National Stock Exchange, Mumbai are selected and the chapter is designed as under:

- I. study of guidelines for voluntary and mandatory disclosures recommended by different bodies
- II. identification of companies following environmental accounting and auditing disclosure practices
- III. study of information published by different organisations following the environmental accounting and auditing disclosure practices in India

The chapter Three of case study is divided in three parts, Part One narrates the need and importance of identified environmental parameters /components as far as disclosure practices are concerned. Part Two examines the related variables identified and reported by select corporates. This is done by analysing items chosen for disclosures so as to understand the relative importance given by corporates to the different select identified components. Part Three, lists out important contents of given preference in reporting as well as important components ignored or less weightage is given in reporting and disclosure practices by Indian companies.

1.4.5.2.2. Methodology followed for Case study of select Three Indian corporates

The methodology adopted in this study is an analytic-descriptive approach where observation and review of financial documents are the key techniques. Study of the reporting practices has been carried out considering Environmental Reporting and Auditing by procuring the financial information for the year 2003-2004 to

2014- 2015. Ensuring a high un-biased and consistent conduct of this study, multiple data analysis methods are used. Case study is used as one of the research methodologies to establish a connect between the theory of environmental auditing and the practices of environmental reporting at the actual ground level in the select companies. The rationale behind using the case study is that as there has been less uniformity in the guidelines, procedures and practices of environmental accounting, environmental auditing and environmental reporting, there exist several unanswered questions about the verification of organizational ethics and conduction of these ethics in actual practice. This study is an attempt to find out answers of these questions through qualitative analysis.

For an in-depth case study, analysis of three companies is carried out to check the environmental auditing practice and its impact with the help of following research methodology:

I. Time series

This section studies the behavior of individual variables over a period of twelve years duration i.e. financial year 2003-04 to 2014-15. The present analysis introduces selected variables under study and explains as to how the company discloses in the annual reports and sustainability reports these vital financial and environment related variables. This section studies the disclosure of individual variables, which are considered for the study.

II. Variables

Based on sensitivity of environmental concerns and previous literature, in present study seven environmental parameters have been identified. These variables are:

- (i) Carbon disclosure
- (ii) Global Reporting Initiatives (GRI)
- (iii) Environmental Policy
- (iv) ISO 14001
- (v) Renewable Energy
- (vi) Awards and accolades for environmental performance
- (vii) Research and development in the environmental area.

In context of present case study, all these parameters have been briefly explained later.

III. Techniques of analysis

The case study analysis has been carried out using basic statistical techniques viz. content analysis, correlation analysis and single factor ANOVA analysis.

IV. Data source

The data used in the study has been collected from the annual reports and sustainability reports of selected three companies for the Financial years from 2003-04 to 2014-15. These reports have been downloaded from the websites of the corporate selected.

1.4.6.1. Sampling Design for Quantitative Study

In order to obtain views on Environmental issues; adoption of Environmental Accounting; enforcement of Environmental Laws vis-a-vis compliance thereof and impact and applications of Environmental Auditing in Indian enterprises, structured instrument was administered amongst Chartered Accountants (CA), Cost and Management Accountants (CMA), Company Secretaries (CS) in practice as well as in service, managers of companies, research scholars, academicians and students of accounting and auditing. The present research intends to guide in understanding issues and practice of Environmental Auditing in India. The prime objective of this research endeavour is to carry out a systematic study of present status, applications of Environmental Auditing practice and its impact in India. The research design followed has been essentially descriptive and explorative in nature considering objectives identified.

1.4.6.2. Tools used for Survey Method

The study intends to reveal the application of 'Environmental Auditing' i. e. assessment or evaluation with reference to 'Environmental Disclosure' practices and its impact in India. The present study has been carried out towards the assessment of driving forces for implementation of Environmental Auditing, which is one of the objectives of this research work. The objective is to obtain understanding from the executives, professionals and academicians with respect to the Environmental Accounting aspects, Environmental Compliance scenario and Environmental Auditing practices in enterprises in India.

A Structured instrument was developed to study Environmental Auditing's impact and applications in India as an effective tool for environmental protection and preservation. The survey analyzed the behavior of all possible important variables on Environmental issues, Environmental Accounting, Environmental Laws vis-a-vis compliance thereof and Environmental Auditing. The answers made by the respondents for each question as well as sub question were quantified in categories and then computed in table form to illustrate the responses.

Likert scale

1	2	3	4	5
Strongly disagree	Disagree	Indifferent	Agree	Strongly Agree

The questionnaire was framed by following the Likert method of rating. For framing the questionnaire, statements related to the Awareness on Environment, Environmental Accounting, Environmental Compliance and Environmental Auditing along with respondents profile were framed. For analysis purpose, this study is divided into Two parts as under:

Part-I Questions pertaining to:

- 1.Awareness on Environment
- 2.Environmental Accounting aspects
- 3.Environmental Compliance issues
- 4.Environmental Auditing practices
- 5.Overall evaluation criteria

Part-II Personal Profile of Respondents'

The last draft of the questionnaire was then finalised as per the suggestions provided by observers and advisors of the pilot study which were to be introduced to the respondents in different states of India through posts and emails towards seeking the opinion (Annexure 2).

1.4.6.3. Reliability of the Structured Questionnaire

Instrument reliability was tested by evaluating the Cronbach alpha coefficient, which is the usual method accepted by researchers (Smith, 2003). Coefficient alpha indicates the degree of internal consistency among items in the questionnaire. Further, it also suggests how well items in a set are positively correlated to each other (Sekaran, 2003). Although the range of Cronbach alpha is from 0 to 1, values closer to 1 are accepted to have greater internal consistency. Any value above 0.6 is considered to be good and lesser than that as poor (Nunnally, 1978).

The reliability test was run using Chronbach alpha to show how strongly the attributes/ opinion were related to each other and to the composite score. All dimensions of the questionnaire related with measuring opinion were tested and the Chronbach's alpha ranged from 0.810 to 0.925, which really shows the internal reliability of the scale.

1.4.6.4. Validity of the Structured Questionnaire

Convergent validity has been measured by comparing mean scores of scale with other measures of the same construct. It becomes clear from analysis that the means of same construct were measured and less variation was observed in the given question categories and average score was found to be as similar. Majority of the Respondent's were found as placed between 'Strongly Disagree' to 'Strongly Agree Category'.

1.4.7. Data source

In order to fulfill the objectives of the study, the research study used both secondary and primary data.

Secondary Data: The required data and other relevant information collected from published and unpublished reports, Business Newspapers; Magazines; Research Journals; Research Reports; Financial Statements of the selected companies and Government Publications and also e-data was a part of procuring secondary data.

Primary Data: The Primary data has been collected and further analyzed by administering of Structured Instrument (190 in number).

1.4.8. Data Analysis

Complete questionnaires in all respects were considered for the analysis. The raw data collected was further converted into numerical data and coded in MS Excel for further statistical analysis. Consultation with the expert and available Statistical Package for Social Sciences (SPSS version 21) software was primarily used for data analyses.

The statistical analysis of the variables in the study has been performed using Cronbach's Alpha, Descriptive Statistics, Frequencies and Percentages, Factorial Analysis, Pearson's Chi-square and single factor ANOVA analysis.

1.5. Limitations of the Study

All attempts have been made to ensure that the research is designed and conducted to augment the achievement of research objectives. The research work has limitations of data and authentic documents related to environmental auditing practices in India as it tries to study the impact and applicability in India in selected companies. However, there are some constraints that do not validate the research but need to be acknowledged. This research was conducted with the following limitations:

- The small sample of respondents was a significant limitation
- Environmental parameters considered in the both case studies are limited in number.
- The time span of only one year could be considered under the case study of Nifty 200 companies
- Only three companies could be selected from environment sensitive industry for another case study in Chapter Four

1.6. Research Outline

The study spans over SIX chapters as under:

Chapter One, i.e. present chapter, deals with the introductory part of the research work. It conveys about the rationale, objectives of the study, the methodology used for the research and also spells out the plan of the study.

Chapter Two explains the rationale and theoretical foundation of Environment in Indian context, Environmental Accounting and theoretical foundation of Climate Change, Sustainable Development, Green Economy, Environmental Governance, Environmental Accounting, Environmental Management System, Environmental Reporting and Environmental Auditing.

Chapter Three deals with the methodology of disclosure of Environmental Auditing in the financial statements by different corporate enterprises in India. This chapter deals with the practices of environmental auditing and reporting followed by the Indian companies. Here efforts are made to find out the reasons as to why environmental accounting and auditing disclosures are not widely practised and also that why it has not been followed seriously?

Chapter Four presents the case studies with a view to understand the process and issues underlying the disclosure practices followed by select Indian companies. In order to understand the different variables and their frequency of use, case study of few companies is carried out.

Chapter Five seeks to gain insight from the executives, professionals and academicians on the disclosure practices of environmental accounting and auditing. The purpose of this study is not only to generate statistics but also to contribute something concrete towards the development of generally accepted environmental accounting and auditing practices. The basic purpose of this exercise is to have a collective opinion from the senior and experienced professionals and executives dealing in the decision making related to the environmental accounting and auditing practice and related areas.

Chapter Six summarises the findings of this research study and suggests certain policy recommendations. At the end of the chapter, further areas of research on the environmental accounting and auditing have also been highlighted.

This research endeavor is opportune as it not only raises question on the dark and brutal side of mankind, where the irony is that man- the custodian of Nature and environment has left no stone unturned to destroy Nature's priceless bounty, but also is a humble attempt to offer a tool of Environmental accounting, environmental auditing and environmental reporting in man's quiver to minimize the disastrous impact and prolong the longevity of Mother Earth.

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