

ENVIRONMENTAL ACCOUNTING: DISCLOSURE PRACTICES OF SELECTED INDIAN COMPANIES

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ABSTRACT

The growth in environmental accounting research and interest in the last few years has been little short of phenomenal. The review of prior research shows that the major contributions have been related to the motivations for social and environmental disclosure. However, other important research areas such ethical/accountability issues and how to cost externalities which have already been considered within the context of developed countries are yet to emerge within the developing country context. Since most of the industries effect the environment at some level, researcher would like to study what Indian corporates do to protect the environment. This paper is an attempt to study the significance of environmental accounting and its disclosure practises of Indian companies. Researcher has taken 100 companies and 11 environmental variables to study the disclosure practises of Indian companies.

Keywords: Environmental accounting, Disclosure, Corporates, Existence of Policies and Systems, Operational aspects, India

INTRODUCTION

Environmental Accounting is an important tool for understanding the role played by the business enterprises in the economy towards the environmental safety and welfare. It provides data highlighting both the contribution of business enterprises to economic wellbeing and the costs imposed in the form of pollution or resource degradation.

Every business has an overriding responsibility to make the fullest possible use of its resources - both human and material. An enterprise is a corporate citizen. Like a citizen, it is judged by its actions in relation to the environment and society of which it is a member as well as by its economic performance. As far as Indian corporate sector is concerned, it is sad but true that it has not been performing as a good citizen. There are many laws that have been enacted and amended from time to time to make the corporate sector to fulfill its social

responsibility for better development of Indian environment and economy. Therefore, recent years have witnessed rising concern for environmental degradation which is taking place due to increasing industrial activities. It may be noted here that the environmental degradation and pollution spoil human health, reduce economic productivity and lead to loss of amenities.

Manufacturing companies all over the world have realized the significance of energy conservation - utilization and measurement of cost and benefit pertaining to total energy of all forms such as electricity, fuel, gas, lubricant oil, conventional and non-conventional energy purchased, consumed and stored. The mitigation of energy resource use without impairing the quality and functions of the organization rendered the multi-national companies to stay competitive. The energy conservation in the firms brought cost reduction, cost leadership and market leadership. The western developed countries including USA, UK, France, Germany, Australia, Japan and New Zealand have recognized the concept of calculated energy consumption in their manufacturing and service sectors. The International Accounting Standards Board (IASB) identified and recognized the measurement of energy conservation under the name and style of Environmental Accounting.

CONCEPT OF ENVIRONMENTAL ACCOUNTING AND DISCLOSURE

Developing countries like India are facing the problem of protecting the environment, and promoting economic development simultaneously. A trade-off between environmental protection and development is required. For this purpose, environmental accounting is required to measure the impact on the environment caused by the economic activities of the corporate sector. Environmental accounting can either be in a descriptive or quantitative manner or both. A standard system of this type of accounting is still in process. In the Indian context, the corporate sector is not really enthusiastic in this matter. Wherever they are bound to fulfill the legal requirement as per the applicable law/act, they do so to avoid any litigation. Otherwise, the corporate sector is not serious enough towards the environmental protection; therefore, it is quite obvious that they are not interested in environmental accounting.

Now, some corporate units have been describing some costs and benefits figures related to environmental impact in their director's report. Some sincere efforts, both at the government and corporate level, are required to develop environmental accounting in the national interest at large. Although it is true that this type of accounting cannot be developed like financial accounting due to its limitations, it can be developed up to a remarkable level, which will fulfill the need of economic development with environmental safety.

WHY WE NEED ENVIRONMENTAL ACCOUNTING AT CORPORATE LEVEL

It helps to know whether: corporation has been discharging its responsibilities towards environment or not. Basically, a company has to fulfil following environmental responsibilities.

- (a) Meeting regulatory requirements or exceeding that expectation.
- (b) Cleaning up pollution that already exists and properly disposing of the hazardous material.
- (c) Disclosing to the investors both potential and current, the amount and nature of the preventative measures taken by the management (disclosure required if the estimated liability is greater than a certain percent say 10% of the companies' net worth).
- (d) Operating in a way that those environmental damages do not occur.
- (e) Promoting a company having wide environmental awareness.
- (f) Control over operational and material efficiency gains driven by the competition global market.
- (g) Control over increase in costs for raw materials, waste management and potential liability.

REVIEW OF LITERATURE

Financial implications and accounting challenges, associated with environmental issues have been the topic of considerable academic rhetoric and research only. After 2000, a number of attempts have been made all over the world, specifically evaluating environmental disclosure practices of companies. But still, only few research works have addressed the issues relating to environmental accounting and auditing.

kumar, Samantaand, Mohanty (2005) Environmental Accounting is defined as an important tool for understanding the rate played by the environment in the economy as a mutual relationship is identified between the two. Environmental accounting prepares accounts that exhibit the cost of environmental conservation during the normal course of business. This article highlights the growing importance of environmental accounting, lists the countries adopting it and finally explains its various methods.

Raar (2005) corporate responsibility demands that firms address environmental and social values in their firm's policy and key performance indicators. These are integrated through strategic planning and require firms to merge the long-term environmental and social values with short-term economic objectives and performance measures. Each firm's strategy will differ. This paper provides a normative reporting concept to connect the financial implications associated with long-term planning for environmental and social values with short-term accounting reports. Reporting variants adapted from total cost assessment. Life cycle costing and variable costing are integrated to offer upstream information based on a product segments view.

P Malarvizhi,(2013) Corporate environmental accounting and reporting is almost two decades-old now. Environmental accounting provides a common framework for organizations to identify and account for past, present and future environmental costs, in order to support management decision-making, also environmental reporting consolidates and compiles the environmental performance status of an organization. Thus, accounting and reporting for the environment has become increasingly relevant to companies in this millennium.

Rao (2015) for any educational programme to be effective, the cause and the goals should be clean. As goals, and objectives change, so do the methods in order to enhance the relevance of EE. It should be situation oriented, adapted to local circumstances and responsive to local needs. This can be achieved by working with the local communities and their institution

Renard, 1991, as cited by Schneider, (1994) locally adapted EE can easily be perceived by the villages as pursuing their interests, taking into account, economic, political, social and cultural constraints of the locality. It should be holistic action-oriented with problem solving approach. For protection of environment and sustainable development, EE should be internalized. It had to be undertaken by genuinely local people, with their own ethical motivation and financial basis. It implies commitment of the highest order. It desired results have to be accomplished. EE should be integrated in all spheres of relevance in agriculture, industry, education and in the real life activities (day-to-day). It should be able to answer environmental, human and developmental aspects of the locality.

RATIONALE OF THE RESEARCH STUDY

It is now well accepted that the industrial sector is one of the key agents of environmental pollution. The process of rapid industrialization enables rapid progress of civilization but at the same time it has significantly contributed to the accelerated rate of environmental damage. Business firms operate in the overall environment. They consume resources from environment and most of them pollute environment owing to very nature of their operations in which they involved. In other words, industry is considered as both the “users” and “polluters” of the environment. But as the responsible corporate member of the society the business houses have to balance this for the best of community at large and should adopt policies that are eco-friendly. The business enterprises should be socially and morally responsible and must recognize its obligation for the larger benefits of the society. A corporate entity is likely to contribute positively to the safeguard of the environment as well as society. The failure of such environmental responsibility amounts to the infringement of social obligation and deserves condemnation and penalty. And thus, environmental responsibility remains accountable to all actual and potential stakeholders. To manage and control the environmental effects properly the environmental information are of paramount importance.

In order to get the confidence of society, an organization itself needs to consider environmental matters in relation to its business operation and consequently needs to disclose useful environmental information to improve its environmental communication with different stakeholders from the viewpoint of accountability and reliability. It becomes inevitable for the organization to take the responsibility to convey environmental information to different stakeholders through environmental accounting and reporting. Business enterprises can disclose this information in their annual reports for various stakeholders. Actually such disclosure reflects the environmental performances of the business enterprises. For this, it requires environmental accounting. Environmental accounting is primarily designed in recording, measuring and reporting of the environmental impact on the organization itself and society in general.

Against this backdrop, the present research study is intended to be concerned with the evaluation of environmental accounting and reporting performances of selected companies operated in India and to suggest the appropriate measures for improving the system. In other words, the study will endeavour to make an appraisal of the performance of the Indian companies in the light of environmental accounting and reporting.

SCOPE OF THE RESEARCH STUDY

This research study includes the current scenario of environment, impact of industry on environment, roles of government to save environment. This study also includes how companies play their role towards environment and what action they are taking to save environment.

100 Indian listed companies selected to analyse which company and sector is more aware towards environmental issues and disclosing environmental matter in their annual report also to study for which environmental issue all companies follow and disclosing in their annual report.

RESEARCH METHODOLOGY

Research Methodology decides the territory of proposed study and gives information to the readers about adopted process of analysis for the respective study. This includes aims for which the study is undertaken. This also clarify time, scope, data sources etc. of proposed study. Another significant aspect is tools and techniques which are used for the study. In brief this chapter helps to the researcher to decide his path of research work.

The population of the study consists of 100 companies of India. As the study is to be carried out by the individual researcher it is not easy to cover all companies as the samples for the study. So, leading listed companies of India will be taken under study.

In this study, researcher has taken 11 variables about the environmental accounting and reporting practices. Researcher has taken 100 companies and studied disclosure of these 11 variables in published annual reports of last 5 years

OBJECTIVES OF THE RESEARCH STUDY

Specifically, the objectives of the study are as follows:

1. To examine the needs and importance of environmental accounting and reporting practices in India
2. To study what extent level companies are disclosing environmental policies and system related disclosure in their annual reports
3. To study what extent level companies are disclosing Operational Aspects related disclosure in their annual reports

SOURCES OF DATA

Secondary sources of data has been utilised for this proposed research study

Secondary data have been collected from Company Annual Reports. The data are collected from the Company Annual Reports regarding disclosure of environmental practises.

SAMPLE SIZE

Researcher has selected 100 listed Indian companies.

For this research study 11 variables regarding environmental issues have been selected

A. Existence of Policies and Systems

Environmental Clearance Certificate
Environmental Management System
Environmental Policy
ISO 14001 certificate
Separate Environmental Department

B. Operational Aspects

External recognition for environmental protection
Internal reward system-Financial
Internal reward system-No System

Internal reward system-Non-Financial
Training to employees
Voluntary environmental protection

PERIOD OF DATA COVERAGE

Five years of Annual Reports for the year 2013 to 2017 of 100 listed Indian companies have been covered to study the environmental accounting and disclosure practices of selected Indian companies

TOOLS AND TECHNIQUES

11 environmental issues related variables have been identified to study the environmental disclosure practices by 100 selected Indian companies.

Average Disclosure of Environmental variables (Existence of Policies and Systems and Operational Aspects)

LIMITATIONS OF THE RESEARCH STUDY

1. This research study is limited to 100 listed companies of India.
2. Slight variations, in the respect of the secondary data, which is obtained from different agencies, may be overlooked in the analysis of the data.
3. Every possible attempt is made to obtain the information as closer to reality as possible.

DATA ANALYSIS

DISCLOSURE OF ENVIRONMENTAL VARIABLES

A. Existence of Policies and Systems – Average disclosure out of 5 variables

Table 1 - Existence of Policies and Systems variables

Environmental Clearance Certificate
Environmental Management System
Environmental Policy
ISO 14001 certificate
Separate Environmental Department

Table 2 - Average disclosure of Existence of Policies and Systems variables

INDUSTRY	NO. OF COMPANY	2017	2016	2015	2014	2013
Agrochemicals	5	4.8	5	4.2	4.2	4.2
Oil & Petroleum	9	4.44	4.22	4.11	4	4
Industrials	3	4	4	4	4.33	4
Metal	10	4.5	4.4	4.2	3.4	3.2
Automobile	6	4.33	4	3.83	3.67	3.83
Real Estate	1	4	4	4	3	3
Utilities - Regulated Electric	3	4	4	3.33	3.33	1.67
Consumer Industries	10	3.7	3.4	3.3	3.3	3.3
Chemicals	13	3.62	3.69	3.15	2.69	2.69
Textile Manufacturing	6	3.17	3.17	2.83	2.67	3
Pharmaceuticals	18	3.28	2.94	2.83	2.44	2.89
Rubber & Plastics	2	3	3	1.5	1.5	2.5
Construction - Building Materials	4	1	1	1.5	2.75	1.25
Medical-Hospitals	2	1	1	2	0	0
Packaging & Containers	1	2	2	1	0	0
Aviation	3	2.33	0.67	0.33	0	0
Food & Beverages	3	0.33	0.33	0.33	0.33	0.33
Financial Services	1	0	0	0	0	0

FINDINGS

From the table no -2, it can be found that Companies from agrochemicals industry disclosing highest environmental related variables. Food & Beverages companies disclosing lowest environmental related variables. Chemical companies disclosing 50% of the Existence of Policies and Systems related variables whereas Financial Services companies not disclosing any environmental related variables

B. Operational Aspects – Average disclosure out of 6 variables

Table 3 - Operational Aspects variables

External recognition for environmental protection
Internal reward system-Financial
Internal reward system-No System
Internal reward system-Non-Financial
Training to employees
Voluntary environmental protection

Table 4 - Average disclosure of Operational Aspects variables

INDUSTRY	NO. OF COMPANY	2017	2016	2015	2014	2013
Industrials	3	4.00	4.00	3.00	2.67	2.67
Consumer Industries	10	3.00	2.80	2.70	2.10	2.00
Oil & Petroleum	9	3.22	3.00	2.11	1.89	1.78
Metal	10	2.90	2.90	2.30	1.70	1.50
Agrochemicals	5	3.60	2.20	1.80	1.60	1.80
Utilities - Regulated Electric	3	2.33	2.33	2.00	1.67	1.00
Chemicals	13	1.85	1.54	1.31	1.15	1.15
Pharmaceuticals	18	1.72	1.56	1.11	1.06	1.28
Real Estate	1	2.00	2.00	2.00	1.00	0.00
Automobile	6	2.50	1.50	0.83	0.83	0.67
Textile Manufacturing	6	1.50	1.33	0.67	0.50	0.67
Medical-Hospitals	2	0.50	0.50	0.50	0.00	0.00
Food & Beverages	3	0.33	0.33	0.33	0.33	0.33
Rubber & Plastics	2	0.50	0.50	0.00	0.00	0.50
Aviation	3	0.33	0.33	0.33	0.00	0.00
Construction - Building Materials	4	0.00	0.00	0.25	0.25	0.00
Financial Services	1	0.00	0.00	0.00	0.00	0.00
Packaging & Containers	1	0.00	0.00	0.00	0.00	0.00

FINDINGS

From the table no -4, it can be found that companies from Industrial sector disclosing highest environmental related variables. Construction - Building Materials companies disclosing lowest environmental related variables. Pharmaceuticals companies disclosing 50% of the operational aspects related variables while Financial Services companies not disclosing any environmental related variables

CONCLUSION

It is observed from the above table that during last 5 years i.e from 2013 to 2017. Agrochemical sector have secured first rank in two years. Industrials (heavy, medium) have secured first rank in three years and stood second in two years. Existence of policies and systems are concerned, agrochemical sector have secured first rank in 4 years and second rank in one year. As far as operational aspects are concerned, industrials have secured first rank in all the five years. This is mainly due to statutorily requirement, awareness and impact of their product and processes on the environment.

SUGGESTIONS

Environmental accounting at the corporate level includes preparation of environmental accounts for external reporting purposes as well as use of this information in internal decision-making. Professional accounting bodies at national and international levels should develop a separate conceptual framework on EAR specifying objectives, general assumptions, qualitative characteristics and guidelines for the companies. The enterprises should take initiative to track internal environmental costs and benefits to products and processes. They should try to determine full extent of their environmental costs and integrate them into decision-making. Companies in India (particularly those in the most polluting industries) should be asked to submit detailed environmental information to the government regarding emission of specific toxic chemicals, pollutants, effluents, damage to the environment and community health. They should also inform about the steps taken to reduce these externalities.

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