



A comparative study of Environmental Reporting and Disclosure practices of Indian Oil Corporation Ltd. (IOCL) and Reliance Petroleum Ltd.

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Abstract

Environmental reporting is primarily concerned with reporting an organisation's environmental performance and it focus on the environmental reporting compliances in corporate sector. Other reporting criteria such as carbon and other greenhouse gas emissions are also covered. Environmental reporting remains voluntary in India so many corporations are ignored to disclosed their information in this sector. There are major differences in terms of the quality and quantity of environmental information, reported by entities from varied industries and countries. This paper is identifies the environmental reporting practices is followed in selected oil producing companies namely, Indian Oil Corporation Ltd. and Reliance petroleum Ltd. finding are shows that both companies are disclosing information related to environmental reporting.

Key words: Environment, Disclosures, Companies, IOCL, RIL etc.

Introduction

Environmental protection is the primary function of the future of humanity. It defines how we should protect ecosystems, air quality, integrity and sustainability of our resources and focusing on the elements that place stress on the environment. Industrialization contributes major part for the economic development and prosperity of a country. It provides employment opportunities and wealth generation while on other hand it leads to environmental deterioration in varied manner: depletion of natural resources, air pollution, water pollution and soil pollution, global warming, climatic changes.

Businesses are regulated to prevent pollution and to keep their own carbon emissions law. Pressures on companies to reduce pollution have varied over time with societal expectations and attitudes. In India the Ministry of environment has separately issued "ECO-Action 21" (Environmental activity evaluation programme) which enables small businesses to design and operate environmental management programme to carry out conservation activities and to publish environmental reporting with relatively ease. Environmental awareness among Indian stakeholders gets strengthened with advancement in communication technology. Stakeholders are sensitive about the harmful impacts

of industrial activities on environment. Such high propensity of environmental awareness ensures a more cautious approach among Indian corporations to be environmentally responsible. Our society urgently needs to create a social mechanism by which economic entities can rationally estimate the good business practices that deliver economic benefits to environment-friendly businesses. Environmental information must be disclosed without impairing the usefulness of environmental reporting. It must meet the information needs of users with guaranteed quality and comparability with previous periods and other enterprises. Therefore, in present scenario highly need to companies disclosed more information related to their environmental protection policies.

Review of Literature

A literature review is a comprehensive summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research. Some of the literatures of reviews are as follows:

- 1. A. Porchelvi, (March 2020) “Environment Reporting and company characteristics - A study of Indian companies”** : The present study is an attempt to understand the environmental accounting and reporting practices of manufacturing companies in India also analyses whether environmental disclosure practices are more strongly influenced by corporate characteristics. A sample of 50 Indian Manufacturing companies selected for the study from Cement, Pharmaceuticals, Paper & Pulp, Steel and Petroleum, Oil & Refineries sectors. Result shows that size of the company and net profit are the good predictor variables and there is a relationship between environmental disclosure level of companies and corporate characteristics. The study found the concept and practice of environmental disclosure is increasing in broader perspective in India it should be supported by reporting standards and guidelines from the accountancy profession.
- 2. Pizus Biswas, Tasnia Rahman, Nikher Ahmed Sarker, Adhora Sudha and Tushar Chandro Dey (November, 2019) “Environmental Accounting Disclosure Practices in Bangladesh and Its Impact on Investor Decisions”**: This study is focuses to identify the environmental disclosures made by Bangladeshi companies and analyze the overall disclosure practice of the countries’ industries. And also collect the investor’s feedback on whether or not environmental disclosure information is making a difference in their decision making process and their opinion about the company The study shows evidence that reinforces the fact that Bangladeshi companies are disclosing less environmental information than an ideal company should. Also there are lack of regulation and interest in disclosing proper information. Although by conducting a survey it was seen that majority of investors and probable investors are interested in these information and are supportive of eco-friendly companies.

3. **Haslinda Yusoff, Siti Hazwani Kamaruddin, Erlane K. Ghani (2018) “Environmental Reporting Practices of Top Public Listed Companies: Analyzing Pre-Post Corporate Social Responsibility Framework:** This study examines the environmental reporting practices of the top public listed companies in Malaysia, before and after the introduction of the Corporate Social Responsibility Framework. Specifically, this study examines the level of extensiveness of environmental disclosures among the top public listed companies. In addition, this study identifies the factors that influence the environmental reporting practices of the top public listed companies. The factors examined in this study include industry sector, ISO certification, size and profitability. The findings of this study implicate that regulatory initiatives represent an influential factor in promoting environmental accountability via reporting practices among the companies in Malaysia.
4. **Nithesh, Roopa and Dr Aruna (September, 2018) “Environmental Accounting Disclosure and Reporting Practices in Annual Report – With Special Reference to Companies listed in BSE SENSEX”:** The result of the study depicts that more than 21 companies out of 30 companies used more than 400 words in environment disclosure. It was found that there was maximum usage of Directors’ Statement and Sustainability Reporting in the annual reports. Companies provide only qualitative information regarding environmental disclosure and the location of disclosure varies from one company to another. Quantitative information based on the total outflow of cash made by the companies can be classified under capital or operating expenditure.
5. **Md. Hafij ullah, K. Yakub, M. Hossain (2013) “Environmental Reporting Practices in Annual Report of Selected Listed Companies in Bangladesh”:** The study revealed that on an average sample companies disclosed 8.53 (15.23%) of the expected information in their annual reports and environmental disclosure volume and total asset of the companies are significantly correlated. The study opined that companies of Bangladesh are disclosing very inadequate environmental information in their annual reports. This study is expected to play an important role in creating consciousness among the users and preparers in disclosing more environmental information in annual reports.

Need and Significance of the Study

- ✓ Environmental information (EI) must help the society and firms to recognize the impact on the environment of business decisions. Therefore, it is need to study for environmental reporting for selected companies for better improvement of society.
- ✓ The constant need of information from the environment reporting help managers to identify environmental risks, structure of costs and investments which need a challenge to be faced by firms. Therefore, a need is felt to examine the disclosure and reporting practices in selected companies.

- ✓ Environmental Accounting and its reporting are, mostly, made by a voluntary character, especially when they concern the natural environment. The requirements of environmental standards, issued by International Organization for Standardization (ISO) have been the basis to many researches on environmental responsibility. Companies are much liable for the societal protection. Therefore, need to examine the environmental disclosure practices for selected companies.

Objectives of the study

The objectives of the study always decide a proper track to carry out the desired research activities. The following are the objectives of the study:

- To examine the environmental reporting and disclosure practices prevailing in selected public and private sector companies India.
- To evaluate the state of compliances of key environmental disclosure parameters in selected companies.
- To compare the environmental reporting and disclosure practices in public and private sector companies listed in Bombay Stock Exchange.

Research Methodology

In order to assess the structure and process for corporate environmental reporting and disclosure practices followed by Indian companies in their effectiveness in terms of substance & quality reported in annual reports researcher was selected total two (02) Indian companies. One company from public sector and one company from private sector respectively. The list of the selected companies is given below:

S.NO.	PUBLIC SECTOR COMPANIES	PRIVATE SECTOR COMPANIES
1.	Indian Oil Corporation Ltd. (IOCL)	Reliance Petroleum Ltd.

Table -01

Justification for selection of sample:

1. These companies are listed in Bombay stock exchange (BSE) and National Stock Exchange (NSE)
2. Good Credit rating given by the rating Agencies like CRISIL, ICRA.

Sampling method: Convenience and judgment sampling method were used for selection of sample.

Sources of Data- The study is based on secondary information and data were collected from the annual reports of Selected Companies, internet, journals, magazines, newspapers and books etc.

Period of the study- The Environmental reporting and disclosure practices of the selected companies will be examined for the last three financial years i.e. from 2019-20, 2020-21 and 2021-22.

Hypothesis: - The researcher was constructed the following hypothesis:

H₀ - There is no significance difference between the environmental reporting and disclosure practices between selected public and private sector companies in India.

H₁ - There is significance difference between the environmental reporting and disclosure practices between selected public and private sector companies in India.

DATA COLLECTION FOR SELECTED COMPANIES

1=Item Disclosed
0=Item Not Disclosed

Information of Items		Indian Oil Corporation Ltd. (IOCL)			Reliance Petroleum Ltd. (RPL)		
		Y1	Y2	Y3	Y1	Y2	Y3
A	Board Environmental Objectives (7)						
	Specific targets	1	1	1	0	0	0
	Management's environmental policy statement	1	1	1	1	1	1
	Environmental budget	1	1	1	1	1	1
	Environment management system	0	0	1	0	0	0
	Environment auditing	0	0	0	0	0	0
	Legal compliance	0	0	0	0	0	0
	Award obtained for environmental protection	1	1	1	0	0	0
	Disclosures (A)	4/7	4/7	4/7	2/7	2/7	2/7
	% of Disclosures	57.14%	57.14%	57.14%	28.57%	28.57%	28.57%
B	Prevention or Repair of Environmental Damage (1)						
	Waste management	1	1	1	0	0	0
	Disclosures (B)	1/1	1/1	1/1	0/1	0/1	0/1
	% of Disclosures	100%	100%	100%	0%	0%	0%
C	Aesthetic Improvement (1)						
	Tree plantation	1	1	1	1	1	1
	Disclosures (C)	1/1	1/1	1/1	1/1	1/1	1/1
	% of Disclosures	100%	100%	100%	100%	100%	100%
D	Pollution Control Measures (1)						
		1	1	1	1	1	1
	Disclosures (D)	1/1	1/1	1/1	1/1	1/1	1/1
	% of Disclosures	100%	100%	100%	100%	100%	100%
E	Conservation of Natural Resources (1)						
		1	1	1	0	0	0
	Disclosures (E)	1/1	1/1	1/1	0/1	0/1	0/1

	% of Disclosures	100%	100%	100%	0%	0%	0%
F	Environmental Accounting (4)						
	Environmental cost	1	1	1	0	0	0
	Environmental liabilities and assets	1	1	1	0	0	0
	Scientific accounting and reporting practices	1	1	1	1	1	1
	Extraordinary items	1	1	1	0	0	0
	Disclosures (F)	4/4	4/4	4/4	1/4	1/4	1/4
	% of Disclosures	100%	100%	100%	25%	25%	25%
G	Project Planning and Management (3)						
	Environmental management	1	1	1	1	1	1
	Environmental risk management	1	1	1	1	1	1
	Accident and emergency response	1	1	1	0	0	0
	Disclosures (G)	3/3	3/3	3/3	2/3	2/3	2/3
	% of Disclosures	100%	100%	100%	66.67%	66.67%	66.67%
H	Social Cost (2)						
	Impact of organizational activities on environment	1	1	1	1	1	1
	Scientific environmental risks not required to be disclosed legally	1	1	1	1	1	1
	Disclosures (H)	2/2	2/2	2/2	2/2	2/2	2/2
	% of Disclosures	100%	100%	100%	100%	100%	100%
	Total Items disclosed by the selected companies(A+B+C+D+E+F+G+H)	17/20	17/20	18/20	9/20	9/20	9/20
	%age of Total Items disclosed by the selected companies (A+B+C+D+E+F+G+H)	85%	85%	90%	45%	45%	45%
	Mean Value	86.67%			45%		

Source: Annual Reports of Selected Companies

Table-2

NOTE:**Y1:** Financial Year 2019-20**Y2:** Financial Year 2020-21**Y3:** Financial Year 2021-22**IOCL:** Indian Oil Corporation Ltd.**RPL:** Reliance Petroleum Ltd.**Interpretation**

In the above table clearly shows that environmental reporting and disclosure practices are followed by the both selected companies namely, Indian Oil Corporation Ltd. (IOCL) and Reliance Petroleum Ltd. (RPL). Items selected for the purpose of study were categorized in eight (8) broad categories. From Environmental Objectives, IOCL disclosed 57.14% items in selected three financial years and Reliance Petroleum Ltd. (RPL) disclosed 28.57% items respectively. Other category namely, Prevention or Repair of Environmental Damage 100% of selected items were

disclosed by Indian Oil Corporation Ltd. (IOCL) and Reliance Petroleum Ltd. (RPL) disclosed 0% of selected items. IOCL and RPL both were disclosed 100% of selected items from the Aesthetic Improvement and Pollution Control Measures in all three financial years. From Conservation of Natural Resources, IOCL 100% of selected items were disclosed in all three financial years. And RPL 0% of selected items were disclosed in all selected three financial years. IOCL 100% of selected items were disclosed from Environmental Accounting in all selected three financial years. And RPL 25% of selected Environmental Reporting items were disclosed in all three financial years. 100% of selected items were disclosed from Project Planning and Management by IOCL. And RPL disclosed 66.67% of selected items in all selected three financial years. IOCL and RPL were made 100% of selected items from Social Cost in all three financial years.

Therefore, IOCL disclosed total 85% of selected items in first two financial years i.e., 2019-20 and 2020-21 respectively. In financial year 2021-22 it was disclosed 90% of selected Environmental Reporting items. IOCL was disclosed total 45% of selected Environmental Reporting items in all selected three financial years.

The mean value of IOCL and RPL were 86.67% and 45% respectively in all selected three financial years.

Summarized Table

Information of Items	IOCL	RPL
Specific targets	100%	0%
Management's environmental policy statement	100%	100%
Environmental budget	100%	100%
Environment management system	33.33%	0%
Environment auditing	0%	0%
Legal compliance	0%	0%
Award obtained for environmental protection	100%	0%
Waste management	100%	0%
Tree plantation	100%	100%
Pollution Control Measures	100%	100%
Conservation of Natural Resources	100%	0%
Environmental cost	100%	0%
Environmental liabilities and assets	100%	0%
Scientific accounting and reporting practices	100%	100%
Extraordinary items	100%	0%
Environmental management	100%	100%
Environmental risk management	100%	100%
Accident and emergency response	100%	0%
Impact of organizational activities on environment	100%	100%

Scientific environmental risks not required to be disclosed legally	100%	100%
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Table-3

t-Test: Two-Sample Assuming Equal Variances

	<i>Variable 1</i>	<i>Variable 2</i>
Mean	86.666	45
Variance	1099.433	2605.263
Observations	20	20
Pooled Variance	1852.348	
Hypothesized Mean Difference	0	
df	38	
t Stat	3.061439	
P(T<=t) one-tail	0.002015	
t Critical one-tail	1.685954	
P(T<=t) two-tail	0.004031	
t Critical two-tail	2.024394	

For testing hypothesis, p value (**0.004031**) is less than **0.05**. Hence, null hypothesis has been rejected at 5% level of significance.

Results: MS Excel 2007

Table-4

The above table shows that the mean value of Environmental Disclosures of IOCL (86.67) is higher than the mean value of RPL (45). So it is found that difference between both IOCL and RPL was significance. According to the test result t Stat = 3.061 and the t critical two-tail value = 2.024 with .05.

Therefore, the t Stat value is greater than the Critical value on two-tail. Hence, Researchers reject the null hypothesis and accepts the alternate hypothesis at 95% level of confidence.

Findings

- IOCL disclosed most of the selected components of environmental reporting in all selected three financial years.
- IOCL disclosed higher environmental reporting items than RPL.
- Some components like, Aesthetic Improvement, Pollution Control Measures and Social Cost were fully disclosed both the selected companies i.e., IOCL and RPL
- IOCL is much aware about the environmental reporting practices then RPL.
- Selected items from Social Cost were fully disclosed by both the selected companies.
- Difference between environmental disclosure practices of IOCL and RPL were significance. Hence, Null hypothesis has been rejected.

Conclusion

Companies managers, need to be aware of how environmental reporting practices, affect the fundamentals of financial accounting & reporting practices of concern companies. Researches around the world, shows that annual reports are most effective channel of disclosures. A reference to environmental reporting means different effects to different group of users. Some tend to think of separate environmental reports and for others the focus will be on environmental contents in the annual report itself. It is evidence from this study that Indian companies have not yet developed a holistic approach to environmental disclosure & reporting practices, as there is lack of environmental reporting guidelines in Indian corporate. For e.g., IOCL disclosed appropriate environmental reporting items but on the other hand RPL gave poor performance. National and international higher authorities (State/Central Government) provide appropriate mandatory guidelines for environmental reporting practices to the different corporate.

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