

Environmental Accounting: Pillar of Corporate Social Responsibility and Disclosure

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Abstract: Globalization and privatization paradigms has emerged corporate social responsibility as one of the significant measure. As per the Hindu Philosophy, Environment is to be valued and protected like parents. Therefore, Environmental reporting has become an ingredient for sustainable development. Environment protection and accounting has become one of the most crucial areas to be focused on for achievement of Corporate Social Responsibility. In Today's era sustainability in global market is witnessed by meeting the needs of consumers by providing health and safety standards. Every corporate is required to disclose the information regarding their contribution towards environment. This paper gives a conceptual framework of foundation of environmental accounting from CSR concept. The aim of study is to examine the extent of corporate environmental disclosures by the listed companies. The study also focuses on analyzing the impact of profitability on environmental disclosure. Content analysis and regression tools are used for conducting the research. EAR is not found to be satisfactory as most of the companies are making the qualitative disclosure instead of quantitative disclosures in their annual reports. Therefore, in order to improve the EAR practices in the companies, the proper authority need to implement the environmental standards and guidelines.

Keywords: Environmental accounting and reporting, Environmental accounting, Environmental disclosures, listed companies

Introduction:

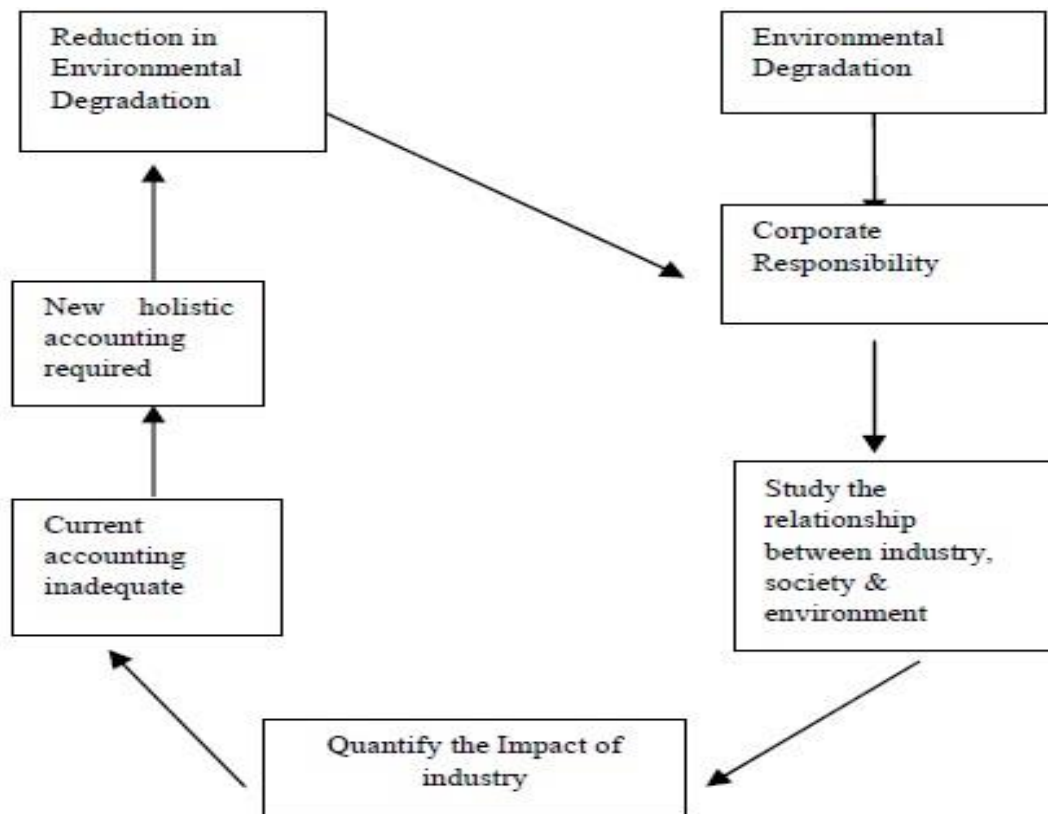
Corporate Social Responsibility is the foundation of effective corporate governance and ethical business practices. Now a days companies are making a positive contribution towards society & environment so as to build trust in its brands, develop strong relationships with their stakeholders, and to create long-term value for society & its business. There are five important pillars of CSR strategy- Corporate Governance, Business Ethics, Employees, Society, and Environment. The companies use environmental reporting as means to disclose the progress on each of the five core pillars of CSR strategy. Environmental disclosure in India is at emerging stage, even though its importance has gained significance world-wide. Recent years have witnessed the growth of environmental accounting in the companies. Today corporations are participating in the prevention of the environment and making the contribution for the same. The developing countries like India are facing the two major problems in this regard. One is regarding protection of the environment and other is regarding promotion of economic development. Economists in the world are making attempts to develop a system that report both gross domestic product and green domestic product, to give a better picture of the trade-offs involved in the process of economic growth. Corporations are utilizing the resources for environment conservation and deals with the environmental problems. Environmental reporting has become an ingredient for sustainable development. Environment protection and accounting has become one of the most crucial areas to be focused on for achievement of Corporate Social Responsibility. To reduce and prevent the adverse impact of environment on social, economic and political spheres, measures are being taken at the national and international level. For better environmental management and overall corporate governance corporate environmental reporting in India has emerged as a development. Corporate houses have to include environmental performance information in their reporting system to maintain the faith of their stakeholders.

According to new Indian Accounting Standards five key environmental laws are to be introduced. The main aim of amendments is to reduce the administrative burdens which hinder industry growth. The government has made it mandatory for the corporations to present environmental information in their annual reports. That is the reason environment accounting has become the major component of corporate social responsibility.

1.1. Environmental Disclosure

Environmental disclosure means to reveal environmental costs of development. It reflects the use of precious natural resources for generating national income through environmental reporting. Environmental accounting is the measure that can be used by companies to discover more of these opportunities and, bring environmental concerns earlier into planning, decision making, and operations, thereby, making a full disclosure of such issues (Bailey and Soyka, 1996). Environmental accounting provides a common framework for organizations to identify and account for environmental costs in order to support management decision-making, control and public disclosure (KPMG and UNEP, 2006). The environmental threat can be lessen by the combined effort of companies, other stakeholders of society and government. Practical application of environmental accounting helps in achieving the objective of reducing costs and increasing the stakeholders interest and faith in the business. However, environment related to the managers and companies is only limited to disclosure of environmental perspectives in environmental reports. Environmental Reporting refers to compliance of companies to disclose the environmental information in their reports. Information disclosed by the companies in their annual report about environmental accounting and reporting include present and future costs for products as well as capital expenditures made by the companies and activities on which the amount is being spent for resigning and controlling pollution etc. (Nasir Zameer Qureshi et.al.,2012). All Organizations irrespective of their sizes are expected to measure and report on their environmental performance. It is mandatory for all Companies to disclose their environmental matters for an understanding of the company's business in their Annual Report. If in the Annual Report sufficient information is not available it is treated as omissions. Companies and other stakeholders gets benefit from environmental reporting, and it is able to cater the needs of both external and internal users of such information. Corporate reporting is growing beyond financial and environmental performance. A major challenge to reporting community in India is to improve comparability among environmental reports

1.2 Conceptual Model for Environmental Accounting



Source: Antherjanam, S. (2014).

The above model shows the relationship between corporate responsibility and environmental accounting. The model defines the clear relation as to how the industry gets impacted by quantifying the environmental accounting information to the stakeholders. The environmental information into the real system of presenting the information in the annual report has actually built the new holistic accounting. This study attempts to provide the information about how environmental accounting relates with the profitability of the company.

1.3 Scope of Environmental Accounting

The scope of Environmental Accounting is incredibly broad. It includes company level, national international level. The subsequent aspects are enclosed in Environmental accounting. Environmental accounting is a management tool for enhancing the economic performance of the organization. He explored the information and developed the model named EEGECOST model which was applied to the company to see its implementation and got success (Patrick, 2006). Environmental accounting can be used as a tool for organization change for this a model is being developed by Gray et al. which states that environmental accounting is used to negotiate the conception of the environment by companies that have not significantly changed (Gonzalez et al. 1988). Environmental accounting has got its roots from social responsibility and developed across framing up of different model and implementation of those models on the companies to see the impact.

1.4 Role of corporate in Environmental Sustainability

CSR times, 2015 revealed that Infosys has achieved new milestones in Environmental sustainability by focusing on energy efficiency, water conservation and waste management etc. They are making new building by taking into care the environment factor. As per the Article in Economic times ITC devote significant resources to sustainable development. The company has a sustainability committee to help integrate social and environmental objectives with business strategies and set goals in contributing to climate change mitigation. Cisco technology is also working towards environmental sustainability by working on improving our own environmental performance and using technology to help the customers reduce their impacts. India environment Portal mentioned that Nalco has bagged the India Pride Award for the year 2015-16 for CSR, Environment Protection and Conservation, instituted by the Dainik Bhaskar Group. The company has planted over 78 lakh trees in the periphery of its operating units so far. Companies have traditionally used print medium of information disclosures on sustainability and environment for various strategic reasons.

2. REVIEW OF LITERATURE

Bhate (2002) examined that the Indian respondents are most involved with environmental issues, just like the involvement of UK respondents. Economic liberation and deregulation of Indian industries have created more awareness among Indians regarding environmental problems. Now there is increased disclosure of environmental information on companies websites and annual reports in order to gain organizational authenticity. Banerjee (2002) reviewed the emergence of company environmental reporting (CER) in India has been a vital development, both for higher environmental management and overall company governance. Cunningham and Gadenne (2003) studied that an improvement in environmental regulations and revealed that it acts as a force for changes in annual report. He concluded that environmental regulation acts as an drive for firms to include information on environmental problems in their annual report. Tuwaijri et al. (2004) used equation approach to analyze the relations among environmental disclosure, environmental performance and economic performance. They documented a positive association between environmental performance and environmental disclosure by using proxy for environmental performance using the proportion of total waste generated recycled as identified using the TRI information and measure environmental disclosure using a content analysis in four classes, potential accountable parties designation, toxic waste, oil and chemical spills, and environmental fines and penalties, disclosures that are mostly nondiscretionary. Ahmed and Sulaiman (2004) examined the extent and sort of voluntary environmental disclosures in annual reports by Malaysian corporations of construction and industrial products. The study concluded that the environmental disclosure was low to the extent, and the environmental information disclosed in annual reports was scattered in the report and not targeted in a specific section. Sahay (2004) identified that in India environmental reporting is in booming stage. The rationale for inadequate environment disclosers is probably that less pressure is applied to Indian firms by environmental teams, public and the government. The study examined the environmental reporting of top 250 Indian firms ranked in terms of sales in economic time survey (ET). The data was collected by means of questionnaire. The collected data recommended that conservation of energy was shown in the board of director's report due to provisions of Indian company law. Only few firms has reported their environmental and social performance. Chauhan (2005) explained the various forms, scope and legal framework of environmental accounting in Indian context and suggested a proposed framework for implementing environmental accounting practices in India and concluded that it is the right time for the corporates to prepare a firm environmental policy, to control pollution, and disclose sufficient details regarding environmental aspects in their annual statements. A well-defined environmental policy, proper follow up and accounting procedure is required for sustainability. Malarvizhi (2008) observed that Indian companies follow diverse reporting practices on the internet i.e. Annual reports, standalone reports and sustainability reports etc. But Annual reports are considered as the most favored channel of disclosure. Cho et al. (2009) examined the reasons as to non-disclosure of environmental information by some companies. They found that the disclosed environmental cost do not seem to be of quantitative materiality. They suggested that disclosing information by firms see this as strategic worth.

This found that company seems to add environmental information into their annual reports as a additional weight. Qureshi et.al. (2012) in their research work concluded that a well-defined environmental policy is required as correct accounting procedure which can be used for follow up. They expressed environmental accounting and reporting as a vital part of business strategy and recognizes the multiple skills required in compilation and analysis of the requisite knowledge. Special emphasis is laid on extraction of reports and their standards, for different business and restrictive functions. They also explored the important barriers for environmental accounting and news. Shukla et.al. (2013) revealed that the development of environmental accounting has not been changed . Companies are putting effort for environmental protection. but no disclosure related to ecological cost, liability, and ecological expenditure was found under the study.

RESEARCH METHODOLOGY

3.1 Research objectives

- To examine the extent of corporate environmental disclosures by selected companies.
- To analyze the relationship of profitability and environmental disclosures in terms of monetary form.

3.2 Hypothesis of the study

The proxy variables for profitability and environmental disclosures are used for the purpose of analysis. The profitability is measured by variables such as net profit margin (NPM), return on capital employed (ROCE), earning per share (EPS) and dividend per share (DPS) and environmental disclosure is measured by variable environmental cost

H0: There is no relationship between environmental cost and net profit margin (NPM), return on capital employed (ROCE), earning per share (EPS) and dividend per share (DPS).

3.3 Sample size

The study considered the data of the 50 NSE Listed companies. For the purposes of this research, firms are categorized on the basis of following features:

1. Disclosures made on Environmental activities (Non-Monetary Disclosure)
2. Disclosure of Environment Cost and Profitability (Monetary Disclosure)

Out of 50 companies, only 27 companies have disclosed the information regarding environmental activities in monetary terms, rest has reported in non-monetary form. These companies have only given the qualitative information regarding the conduct of environmental activities and initiatives undertaken to protect the environment.

3.4 Sampling Technique

A technique called content analysis is used for systematically analyzing the environmental disclosures being made by different corporate and Regression analysis is used to study the impact of profitability on corporate by such disclosures. To adopt this approach the major reason is that it is a popular method that

has been widely used for financial research over the years. The popularity of the method provides a significant body of evidence against which results can be compared.

3.5 Data collection and analysis techniques

The present study considered the data of last 10 years ranging from period 2005-2015. The secondary data is collected from the annual reports of the companies using Capitaline and Money control website. A content analysis technique is used for analyzing the environmental disclosures being made by different corporations and Regression analysis is used to study the impact of profitability on corporate disclosures.

3.6 Limitations of Study

Due to nature of the topic, this study is subject to certain limitations. The important are presented here.

1. Data of only 27 sample companies can be used for analyzing the relationship of profitability with environmental cost. As they have only shown environmental activities in terms of money.
2. There are no generally accepted Accounting Standards, Regulations, Rules, etc., as to how to disclose the environmental information
3. Information regarding activities and cost are scattered under different heads in annual reports which takes a lot of time to collect the data.
4. Cost and benefits relevant to the environment are not easily measurable.
5. Environmental Accounting is an extended process and therefore, to draw a conclusion with help of sample companies will not give the generalized view.
6. Inputs for Environmental Accounting are not easily available in the annual reports of the companies because measurement of costs and benefits related to the environment are not easily. Still the honest attempt has been made to explore the information and make the analysis using that information.

3.7 Scope for further research

In the present study the attempt has been made to give the conceptual framework of emergence of environmental accounting from the concept of CSR. Further research can be conducted on exploring how environmental accounting is developed over a period of time. In the current study the sample consists of NSE listed corporate and its impact on profitability. For future research comparison of listed as well as non listed companies can be made to gives more detail analysis on the concept of environment accounting. Comparison can also be studied for public and private companies in terms of environmental disclosures.

4. DATA AND MEASURES

4.1. Extent of corporate environmental disclosures by selected companies

Out of 50 companies, only 27 companies have disclosed the information regarding environmental activities in monetary terms, rest has reported in non-monetary form. These companies have only given the qualitative information regarding the conduct of environmental activities and initiatives undertaken to protect the environment.

Table 1: Environmental Disclosure by NSE Listed companies

	No. of companies	Percentage (%)
Directors report	13	26.53
CSR Activities	12	24.49
Environment sustainability	7	14.28
Business responsibility report	9	18.35
Others	8	16.35

In table 1, five different heads have been made i.e. Director's report, CSR activities, environmental sustainability, business report and others except these four heads. Companies falling under each head are mentioned along with percentage. It has been observed that the corporate are disclosing the environmental accounting information in their annual report but no standard format and criteria for disclosure has been observed in the sample companies. Majority of the companies are disclosing the information under

4.1.1 CSR and Director's report

Table2 : Disclosure of Environmental Activities by Listed Companies

Sr. No	Company Name	Disclosures			Environmental Activities	Project Undertaken
		CSR activ ities	Direct Or report	Othe rs		
1	Asian paints	<input type="checkbox"/>			Water recharge & conservation projects and rain water harvesting	Projects adopted in Tamil Nadu (<i>Cuddalore, Chennai District</i>), Maharashtra (Khandala, Satara District), Gujarat (Ankleshwar, Bharuch District), Uttar Pradesh (Kasna, Gautam Buddha Nagar District), Haryana (Rohtak District), Telangana (Patancheru, Medak District)
2	Axis bank	<input type="checkbox"/>			Natural resource conservation	Conservation through tree plantation in Andhra Pradesh, Assam

3.	TCS	<input type="checkbox"/>			Animal welfare, agro forestry, conservati on of natural resources and maintaini ng quality of soil, air and water	Tree plantation drive at Velas and Mumbai (Maharashtra) & Chennai (Tamil Nadu)
4	Reliance	<input type="checkbox"/>			Disaster Relief	Implementing Agency - Reliance Foundation at
						KashmirSrinagar, Jammu Uttarakhand - Uttarkashi, RudraPrayag
5	Grasim industries	<input type="checkbox"/>			Natural Resource conservatio n program s &Non conventional Energy	Prgrammes started in Ujjain (MP), Bharuch (Gujarat), Haveri (Karnataka)
6	ICICI	<input type="checkbox"/>			Clean energy initiatives	At multiple offices of the Bank, including Mumbai and 24 rural branches
7	BHEL	<input type="checkbox"/>			Rain water harvesti ng	Project at Chahtrpur, Madhya Pradesh Stop dam in BHEL sports complex,h Stop dam Barkheta, Madhya Pradesh
8	Ultra tech	<input type="checkbox"/>			Natural Resource	Energy support programs

	cement				conservation n program s & Non- conventional Energy	at Rajasthan- Jodhpur, Nagaur, Jaipur, Chittorgarh Madhya Pradesh –
9	Vedanta			<input type="checkbox"/>	Environme nt Initiativ es	
10	HDFC bank	<input type="checkbox"/>			Environme nt protecti on	Projects started at Pan India
11	ITC		<input type="checkbox"/>		Soil & Moisture Conservati on, social forestry	Projects undertaken at Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Bihar,
						Rajasthan, Maharashtra, Madhya Pradesh, Odisha and New Delhi
12	Cipla		<input type="checkbox"/>		Ecologica l balance an d conservation of natural resources	Projects started at Margao, Patalganaga, Pahandrawa di, Girim, Mumbai. Goa, Maharashtra.
13	Wipro		<input type="checkbox"/>		Water Biodiversi ty Energy Waste management Sustainability advocacy and	Projects started at Bangalore, Pune, New Delhi, Mumbai.

					research	
14	Ambuja cement			<input type="checkbox"/>	Water resource	Projects started at Rajasthan, Gujarat, AndarParadesh etc.
15	Power grid		<input type="checkbox"/>		Installatio n of 200 nos. Solar Lights	Projects started at Mau, UP.
16	Hero motor corp.		<input type="checkbox"/>		Plant trees	Projects started at Delhi
					RELIEF PROGRAM – PROJECT HARIYALI -	Mandals of Visakhapatnam District (Araku, Paderu, Dumbriguda, Anantagiri,
					Tree plantation	Hukumpeta, Peddabayallu and Munchingput) Araku, Andhra Pradesh
18	NTPC	<input type="checkbox"/>			Solar energy, renewable energy	-
19	ONGC	<input type="checkbox"/>			Environme nt and ecological conservati on	-
20	Tata power		<input type="checkbox"/>		Support to natural calamit y, tree plantati on	Projects started at Pune Mumbai

						Singhbhum East Saraikela- Kharsawan Cuttack Haldia Raigad Gadag Ahmednagar
21	Hindalco Industries	<input type="checkbox"/>			Natural Resource conservati on progra ms & Non- conventional Energy	Projects started at Ranchi, Lohardaga(Jharkhand) ; Sonbhadra(UP); Singrauli(MP);Balrampu r (Chhattisgarh) ; Sambalpur(Odisha); Ernakulum (Kerala); Kolhapur and Raigad (Maharashtra)
22	Tata Steel	<input type="checkbox"/>			Protection of flora & fauna, agro forestry, animal welfare, resource conservatio n, maintaini ng quality of soil, air, water	Projects started at Jharkhand - East Singhbhum, Ramgarh, West Singhbhum, Dhanbad, Sundergarh Odisha - Ganjam, Jajpur, Kendujhar, Keonjhar West Bengal - Haldia Maharashtra – Mumbai
23	Bharti Airtel	<input type="checkbox"/>			SatyaBhartiAbhiya n- Sanitatio n	Projects started at District Ludhiana –

						Rural
24	BPCL		<input type="checkbox"/>		Ecologic al balance, protectio n of flora and fauna, animal welfare, agroforestr y, conservatio n of natural resources and maintaini ng quality of soil, air and water	Projects started at Dist- Palghar, Maharashtra Dist- Tiruvallur, Tamil Nadu Dist- Kanchipuram,Tamil Nadu Dist- Kolar&Ramanagara,Kar nataka Dist-Tumkur,Karnataka Dist- Thiruvallur,Tamil Nadu Dist- Bharatpur, Rajasthan
25	HUL		<input type="checkbox"/>		Environme nt & Sustainabili ty - Supply Chain	Projects started at PAN India
26	Yes bank		<input type="checkbox"/>		Promotin g preventiv e	Projects started at Punjab, Uttar Pradesh,
					healthcare & Education of environment	Maharashtra, New Delhi, Rajasthan, Madhya Pradesh, Kerala, Tamil Nadu, PAN India
27	SBI		<input type="checkbox"/>		Natural calamities	

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It has been observed from the above table that the companies are investing mostly in conservation of natural resources and tree plantation activities for the environmental initiatives taken by them to save environment to the large extent. But some companies do not disclose their environmental cost separately and they include this cost as a part of CSR activities. As per the updated guidelines firms are required to disclose the separate accounts for environment initiatives. Apart from this, companies should also invest in other activities including oil & gas consumption, energy consumption, pollution control equipment measures etc. These types of initiatives will help companies to create their good image in front of their stakeholders which will help them to increase their profit in long run.

4.2 IMPACT OF PROFITABILITY ON ENVIRONMENTAL DISCLOSURE OF SELECTED COMPANIES

The objective of our study is to examine the impact of net profit margin, return on capital employed, earning per share and dividend per share on the environmental cost. The figure below represents the dependent and independent variables.

Variable	Formulae
Net profit margin	Net profit/sales
Return on capital employed	Profit before tax/ capital employed
Earnings per share	Profit after tax- preference dividend/ no. of outstanding equity share
Dividend per share	Gross dividend-preference dividend/ no. of outstanding equity share

Table 3 shows the formulas of profitability variables such as net profit margin, return on capital employed, earning per share and dividend per share are mentioned. In order to check the cause and effect relationship between the given variables, regression analysis is used for further analysis.

Table 4: Average values of variables from year 2005-2015

Sr No.	Company Name	Environmental Cost (IN RS)	NPM	ROCE	EPS	DPS
1	Asian paints	43800000	26.88	51.272	27.50	25.88
2	Axis bank	57500000	20.34	5.972	93.95	14.52
3	TCS	474300	27.036	48.172	70.99	34.40
4	Reliance	70700000	6.492	11.486	65.30	9.00
5	Grasim	1053000				

	industries		19.164	11.98	109.30	20.80
6	ICICI	28900000	20.966	5.938	55.43	12.63
7	BHEL	16417000	11.216	27.28	39.70	9.39
8	Ultra tech cement	6100000	11.364	16.83	77.83	8.20
9	Vedanta	4100000000	17.808	13.212	14.17	2.99
10	HDFC bank	9500000	19.898	9.372	43.81	8.23
11	ITC	314500000	25.05	47.162	9.29	5.29
12	Cipla	4560000	15.216	17.538	15.39	2.16
13	Wipro	472500000	17.826	25.504	25.38	7.80
14	Ambuja cement	187723000	12.968	18.852	6.88	3.64
15	Power grid	251000	-192.514	5.582	4.66	2.24
16	Hero motor corp.	20000	9.184	51.072	109.34	67.00
17	M & M	55400000	9.29	23.718	53.43	12.60
18	NTPC	83880000	16.472	11.502	12.60	4.36
19	ONG C	2886437705	26.664	27.912	24.41	9.40
20	Tata power	15800000	12.152	9.726	10.88	3.49
21	Hindalco Industries	16299000	6.848	5.258	8.59	21.09
22	Tata Steel	51100000	16.19	14.242	63.75	10.00
23	BhartiAirtel	6100000	13.162	14.458	19.62	1.73
24	BPCL	32983285	5.526	11.38	48.44	15.10
25	HUL	26300000	40.218	101.188	15.80	12.10

26	yes bank	157100000	44.07	11.672	35.91	5.90
27	SBI	40000000	21.66	7.472	135.06	28.00

Source: 2015 Financial Statements of Various Companies

Table 4 gives the descriptive statistics where average environmental cost incurred by each company is mentioned along with average net profit margin, return on capital employed, earning per share and dividend per share of 10 years. The data for environmental accounting has been collected from the annual report of each company where other independent variables are calculated by applying the formulas as mentioned in table 3.

Further regression model is formulated to examine the impact of profitability on environmental disclosure of selected companies. The model is follows:

$$ENVC = b_0 + b_1NPM + b_2ROCE + b_3EPS + b_4DPS + e_{it}$$

Where ENVC is environmental cost, NPM is net profit margin, EPS is earning per share and DPS is dividend per share. In model e_{it} represents error term for given time & sample and b stands for beta. In model; b_0 is intercept or constant and b_1 is the slope for variable NPM, b_2 is slope of variable ROCE, b_3 is slope of EPS, b_4 is slope of DPS. Environment cost is the dependent variable and NPM, ROCE, EPS and DPS are independent variable to study the impact of profitability on the cost

Table 5 : ANOVA^b

Table 5 : ANOVA^b

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	19.027	4	4.757	6.821	.001 ^a
Residual	15.342	22	.697		
Total	34.369	26			

Analysis of Variance revealed that the p value is statistically significant at 5% level of significance as p-value is 0.001. It implied that the regression model as defined in equation (1) is statistically significant and we can trust the model.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1									

1	.744 ^a	.554	.472	.8350722	.554	6.821	4	22	.001
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a. Predictors: (Constant), DPS, NPM, ROCE, EPS

Table 6 gives the result of model summary table which shows that the adjusted R² value is 0.472 which means that 47.2% of the variance of environmental cost is explained by the independent variables taken in this study and rest are defined by some other factors.

Table 7: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	8.136	.336		24.227	.000		
NPM	.014	.004	.508	3.317	.003*	.866	1.155
ROCE	-.004	.010	-.078	-.440	.664	.652	1.534
EPS	-.005	.007	-.156	-.746	.463	.463	2.158
DPS	-.043	.018	-.516	-2.388	.026*	.435	2.298

One assumption of regression analysis is that there should be no correlation between the independent variables i.e. Multi-collinearity should not exist. The general rule of thumb is that VIFs exceeding 4 warrant further investigations. The above table shows VIF value below the cut-off level of 4 for each variable. It implied that there is no correlation between the independent variables. The result of the model is reliable now.

$$\text{ENVC} = 8.136 + 0.14\text{NPM} - 0.043\text{DPS} + \text{error} \dots \dots \dots (2)$$

The unstandardized coefficient values were used to formulate the mathematical regression model derived from equation (1) as equation (2). The findings of the study stated that NPM and DPS are having the impact on ENVC as their p value is less than 0.05. Further the result shows the positive relationship of Net profit (0.014) and negative relationship of DPS (-.043) with environmental cost. With change in single unit of NPM, the value of ENVC goes up by 0.14, keeping all the other independent variables constant. With change in single unit of DPS, the value of ENVC goes down by 0.043. The other two variables are not included in the model because their p-value is more than 0.05, which shows that they do not affect ENVC. The result implied that the companies tend to spend more on environmental activities whenever there is increase in their net profit and Vice-versa. On the other hand companies tend to decrease the dividend payable to shareholders just to spend more on the environment activities. It shows that the companies are now focusing on environmental activities. They are considering it as their responsibility and moreover, part of their business activities otherwise earlier the companies were treating environmental cost as extra burden. It is a great indication of growth of CSR.

Discussion and Conclusion

Environmental accounting gives environmental information to help make management decisions. Environmental disclosures help the organizations to make better decisions on the account of cost and profit. Organizations are now concentrating on factors such as cost reduction and pollution control by implementing environmental accounting. Many researchers have focused their research in the area of environmental accounting and sustainability. Our study intends to examine the extent of corporate environmental disclosures by the listed companies. The study also deals in finding the relationship between profitability and environmental disclosures. The findings of the study reveal that companies are well aware of the fact that the environmental issues will affect the business and industry. In spite of this, many companies are not still disclosing the environmental information in monetary terms. Companies are disclosing the qualitative and positive information on environment. Major reason for this may be that there are not proper guidelines by ICAI as to disclosure norms and determination of environment related costs and benefits. It can be concluded that in recent year's environment reporting is low in the firms which needs to be increased in years to come. Public has right to access the information related to environment and activities carried out by the companies for controlling the cost and pollution. Companies should report the environment related costs and benefits in their annual reports. The ideal environment reporting process will successfully combine all the five pillars of social responsibility, and some corporations will achieve, or have already achieved, that goal. Disclosing the environment related information in the annual reports of the company will lead to transparency.

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