



The impediments to Environmental reporting: A case from automobile industry in Sri Lanka

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Keywords –

Environmental reporting, Political Pressure, Standards, Organizational Factors, Individual Factors, Accurate Environmental Measures

ABSTRACT

Today human are facing critical environmental challenges. The environmental issues and the impact of them on the decision making process have been increasingly given attention to the financial reporting through the world. Many countries have their own policies for the implementation of environmental reporting.

This study identifies the significance of environmental reporting and reasons for short, inadequate Environmental Reporting in Automobile Industry in Sri Lanka. The primary data were collected using random sampling method from the top management of twenty Automobile Companies in Sri Lanka. The secondary data were collected from the Annual Reports, Journal Articles and Environmental Reports.

This study found that considering the Sri Lankan Automobile Industry, there are some critical impediments to Environmental Reporting according to the correlation analysis, regression analysis and regression equation. These problems are broadly identified as Lack of Political Pressure, Lack of Standards and Professional Guidelines, Organizational Factors, Individual factors and Lack of Accurate Environmental Measurement. It is clear that Environmental Reporting practices in the selected companies are less satisfactory and in order to improve Environmental Reporting in the Automobile Industry of Sri Lanka, there is a need of a systematic procedure put forward by the respondents without any further delay.

INTRODUCTION

Environmental accounting is an important tool for understanding about the natural resources of the economy. Currently the environmental problems are widely spreading over the world. As we know, there are very limited resources available for the use of all species on the earth including human beings.

In the area of Environmental accounting, no one pay a sufficient attention for Environmental reporting in Automobile industry of Sri Lanka. The reason for this may be attributed to the voluntary nature of the disclosures. Once the companies attained a certain level of disclosure, they were not motivated to go further (Ahmad, 2012). However, Environmental reporting is very important area not only for Sri Lanka but also the whole world too. Therefore, it is a social responsibility to identify reasons for the short supply of environmental reporting practices and convey them to policy makers in order to make suggestions to improve the quality of environmental reporting in Sri Lanka.

When considering the current status of Environmental Reporting in Automobile industry of Sri Lanka, there can be clearly see that some companies reporting their CSR achievements in their financial statements. But still they do not use a proper Environmental Reporting method to disclose their impacts to the environment. E.g. Diesel & Motor Engineering PLC (Winner - 48th annual report awards- ICASL)

There is a special part called 'Environment' in their annual report. According to that they value Combating climate change, Energy consumption, Water consumed, Water recycled, Waste management and Greenhouse gas emissions in physical terms. But they did not mention about those things at least in specific accounting policies and notes to the financial statements. According to the Assurance Statement, this company carryout an independent assurance engagement for the non-financial- qualitative and quantitative information based on 'Global Reporting Initiations G4 Sustainability Reporting Guidelines'.

ENVIRONMENTAL ACCOUNTING

"Environmental accounting, aims at achieving sustainable development, maintaining a favorable relationship with the community, and pursuing effective and efficient environmental conservation activities. These accounting procedures allow a company to identify the cost of environmental conservation during the normal course of business, identify benefit gained from such activities, and provide the best possible means of quantitative measurement and support the communication of its results." (Bhambu, 2014).

ENVIRONMENTAL REPORTING

"Environmental Reporting is the term now commonly used for environmentally related data verified (audited) or not, regarding environmental risks, environmental impacts& policies." (Qureshi, Kulshrestha, & Thiwari, 2012).

CRITICAL IMPEDIMENTS TO ENVIRONMENTAL REPORTING IN SRI LANKA

"The financial reports do not show a "true and fair view" due to the lack of adequate disclosures and independent audit attestation for environmental accountability of business organizations. Consequently, validity and reliability of financial reports is questionable. Thus, it is the responsibility of the firm to produce such information to meet stakeholders' requirements since stakeholder theory has recognized the stakeholders' right for such information." (Rajapakse, 2001).

According to B. Rajapakse, there are critical impediments that affect to the Environmental Reporting in Sri Lanka.

1. Lack of Political pressure

- a. Provision in the Companies Act - The sections 143-173 of the Company Act emphasizes the requirements, procedures and other relevant information applicable to the financial accounting and auditing of public companies, it is silent on reporting of social and environmental impact of these companies.
- b. Provisions in the National Environmental Act – According to section 23 A of the National Environmental Act, No.47 of 1980, companies which carry out the prescribed business activities should obtain an Environmental Protection License and submit Environmental Impact Assessment Report. But there is no prescribed mandatory requirement for public disclosure of this information.
- c. Provision in the Inland Revenue Act - No provision has been made for tax break or tax incentives for environmental friendly investments in the Income Tax Act, No. 28 of 1979 and its amendments.

2. Lack of Standards and Professional Guidelines

- a. Lack of Standards - Since 1996, companies in Denmark with significant environmental impact have been required to publish a “green account”, detailing significant consumption of energy, water, and raw materials. (Heba & Yousef, 2012). But in Sri Lanka, there is no any standard.
- b. Lack of Professional Guidelines - Regulatory bodies should develop a standard to guide the practices of Environmental Accounting and Reporting (Ahmad, 2012). But, so far no attempt has been made to develop accounting standards or guidelines for environmental reporting in Sri Lanka.

3. Organizational Factors

- a. Organizational Policies and Management support - Organizational policies and management support are the most important factors which lead to the production of material, social and environmental disclosures in the annual reports, the involvement of both top management and middle management (including accountants) of Sri Lankan business organizations to incorporate environmental issues within the financial statements is low. (Rajapakse, 2001) More standard-setting worldwide bodies require the inclusion of environmental performance information in annual reports; public accountants will need to develop the necessary expertise to audit these disclosures. (Heba & Yousef, 2012)
- b. Lack of Staff - Shortage of qualified staff is one of the dominant problems, faced by the business organizations in developing countries in the process of implementing suitable environmental reporting practices in their organizations.
- c. Conflict with Business motives/ Cost of reporting - The reason for this situation is that lack of awareness or negligence of the concepts such as social responsibility, organizational legitimacy and stakeholders’ rights etc. as they are mainly motivated by profit rather than environmental protection.

4. Individual Factors

- a. Lack of Knowledge and Training - In Sri Lanka none of the academic or professional bodies offer Environmental Accounting courses with their academic programs. The accountants should undergo relatively common training processes that might equip them to respond to environmental issues.
- b. Attitudes - Sri Lankan evidence shows that there are no clear positive attitudes among report preparers to integrate environmental information with financial information. Common view is that “environmental reporting (external) is a useless effort since there are no accepted guidelines and measurements and it may be an additional burden to medium and small scale business organizations. (Rajapakse, 2001)

5. **Lack of accurate environmental measurement** - Estimated values for environmental goods quantified or qualified in terms which have no fixed conversion into money. Social value placed on environmental goods and services are changing so fast that the estimates are likely to be obsolete before they are available for use (Qureshi, Kulshrestha, & Thiwari, 2012).

METHODOLOGY

The primary purpose of this study is to examine the Impediments to Environmental Reporting in Sri Lanka. The study focuses exclusively on all the companies of the Sri Lankan Automobile industry. The sample is therefore based on twenty Automobile companies in Sri Lanka and Random Sampling method was used to select the companies. Primary data about the Impediments to Environmental Reporting of Automobile Industry in Sri Lanka were gathered via a questionnaire from the top management of the sample companies and taking four from each company including Chief Executive Officer, Chief Financial Officer, Chief Accountant, and Accountant. Questionnaire is consisting with close ended questions on the basis of five point Likert scales.

The secondary data were collected through annual reports, research articles and environmental reports. The researcher used SPSS software to conduct the analysis. Microsoft Office Excel 2010 version has been used to draw graphs in the analysis. Response rate is 100%.

With the aim of testing the following hypothesis, an empirical study was carried out.

Ha0: There is a relationship between Lack of political pressure and Environmental Reporting

Hb0: There is a relationship between Lack of Standards and Professional guidelines and Environmental Reporting

Hc0: There is a positive relationship between Organizational Factors and Environmental Reporting

Hd0: There is a relationship between Individual Factors and Environmental Reporting

He0: There is a relationship between Lack of Accurate Environmental Measurement and Environmental Reporting

RESULTS AND DISCUSSION

Data collected from questionnaires has been analyzed, moreover regression analysis was used to draw the inference about the variables predicted based on five dimensions. All these methods are analyzed by using the SPSS 21.

Table 1: Reliability Analysis

Variable	Cronbach's Alpha value	Comment
Lack of Political Pressure	0.739	Acceptable
Lack of Standards and Professional Guidelines	0.826	Acceptable
Organizational Factors	0.841	Acceptable
Individual Factors	0.851	Acceptable
Lack of Accurate Environmental Measurement	0.839	Acceptable
Environmental Reporting	0.766	Acceptable

The above table shows that the reliability of the variables is closer or greater than the accepted minimum level 0.70. Here to measure the reliability of the questionnaire has used the alpha value. The reliability of variables with Environmental Reporting is above 0.70 and therefore every variable in the questionnaire has accepted.

Table 2: Correlation Analysis

	Pearson Correlation	P value
Lack of Political Pressure	0.787	0.000
Lack of Standards and Professional Guidelines	0.877	0.000
Organizational Factors	0.702	0.000
Individual Factors	0.473	0.000
Lack of Accurate Environmental Measurement	0.790	0.000

Correlation analysis is done to find out the relationship between independent variables and the dependent variable. If r value is close to 0 means there is no relationship between the variables and if r value is close to +1.0 means there is Strong relationship between the variables.

Table 3: Model Summary

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	.967 ^a	0.935	0.931	0.24407

a. Predictors: (Constant), Measurement, Organizational, Individual, Political, Standard

The R square value represent the validity of the model according to the collected data specially for this study the R square value is 0.935, implying that model collectively explains 93.5% of the total variability of the model with 6.5% error terms.

Table 4: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	63.592	5	12.718	213.508	.000 ^a
Residual	4.408	74	0.060		
Total	68.000	79			

Model is significant when p-value < 0.05 and in this case p-value (0.000) is less than “α” value of 0.05, so it means that the model used for this study is significant.

Table 5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.868	.117		-7.397	.000
	Political	.223	.055	.181	4.065	.000
	Standard	.352	.060	.331	5.843	.000
	Organizational	.307	.035	.335	8.724	.000
	Individual	.188	.033	.187	5.763	.000
	Measurement	.283	.066	.226	4.268	.000
a. Dependent Variable: E-Reporting						

* Significant at 0.05 confidence level

Regression model

Researcher can write regressions equation as follows by using independent and dependent variables.

Regression Equation Format

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + et$$

Y = Environmental Reporting
 β_0 = Intercept

X₁ = Lack of Political Pressure

X₂ = Lack of Standards and Professional Guidelines

X₃ = Organizational factors

X₄ = Individual factors

X₅ = Lack of Accurate environmental measurement

According to SPSS output regressions equation can be written as follows.

$$Y = -0.868 + 0.223X_1 + 0.352X_2 + 0.307X_3 + 0.188X_4 + 0.283X_5$$

The regression equation shows the relationship between Environmental Reporting and selected variables. Using this equation the affected factors of Environmental Reporting could be easily understood.

The constant value is -0.868.

- **0.223X₁** (Lack of Political Pressure)

There was positive relationship between Environmental Reporting and Lack of Political Pressure. It is the medium affecting factor to the Environmental Reporting. That was when Lack of Political Pressure increases by 1 (unit) then the Environmental Reporting increased by 0.223 assuming other factors remain constant.

- **0.352X₂** (Lack of Standards and Professional Guidelines)

There was positive relationship between Environmental Reporting. That was when Lack of Standards and Professional Guidelines increases by 1 (unit) then the Environmental Reporting increased by 0.352 assuming other factors remain constant.

- **0.307X₃** (Organizational factors)

There was positive relationship between Environmental Reporting and Organizational factors. That was when Organizational factors increased by 1 (unit) then the Environmental Reporting increased by 0.307 assuming other factors remain constant.

- **0.188X₄** (Individual factors)

There was positive relationship between Environmental Reporting and Individual factors. It is the medium affecting factor to the Environmental Reporting. That was when Individual factors increases by 1 (unit) then the Environmental Reporting increased by 0.188 assuming other factors remain constant.

- **0.283X₅** (Lack of Accurate environmental measurement)

There was positive relationship between Environmental Reporting and Lack of Accurate environmental measurement as regression model. That was when Lack of Accurate environmental measurement increases by 1 (unit) then the Environmental Reporting increased by 0.283 assuming other factors remain constant.

Conclusion

When consider about the Sri Lankan Automobile Industry, they measure the environmental impacts of their operations in physical units but did not disclose or report them by monetary terms in the Financial Statements. Thus, it can be concluded that supply of environmental information is inadequate to meet the information requirements of various groups of stakeholders in the country. According to Data Analysis of the following special circumstances were identified. It has shown that Lack of Political Pressure, Lack of Standards and Professional Guidelines, Organizational factors, Individual factors and Lack of Accurate environmental measurement are the impediments to Environmental reporting in Automobile Industry of Sri Lanka. The final conclusion is gain according to the correlation analysis, regression analysis and regression equation. Because of the R² value equal to 93.5%, it shows 93.5% variability of the dependent variable is described by the independent variable. As the correlation table the P value of all variables are less than 0.005. Therefore it can conclude as there are positive relationships between the Environmental Reporting and other independent variables.

Therefore the Automobile Industry must become more aware of development of Environmental Reporting and the protection of natural resources.

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