MANAGERS’ PERCEPTIONS ON STAKEHOLDER AND PURPOSE OF RESPONSE TOWARDS CORPORATE ENVIRONMENTAL DISCLOSURE IN SRI LANKA: LEGITIMACY AND STAKEHOLDER THEORIES PERSPECTIVE

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ABSTRACT
The objective of this paper is to examine how managers’ perceptions regarding stakeholders’ value and purpose of response relate to companies’ environmental disclosure. The study employed legitimacy and stakeholder theories as the basis for explaining environmental reporting practices. Of 134 environmental disclosing public companies, 99 (74%) companies were selected by using proportionate stratified random sampling by business sectors. The questionnaire was addressed to the executives responsible for the environmental management and reporting for enquiring about important stakeholder via three dimensions of power, legitimacy and urgency and purpose of response through the lens of gain, maintain and repair legitimacy. Representing 84%, responses from these managers were then contrasted with companies’ quality of environmental disclosure, which was measured by using Clarkson et al.’s (2008) environmental disclosure index that was prepared based on Global Reporting Initiative (GRI) guidelines as well as quantity of environmental disclosure, which was measured using number of sentences. Descriptive statistics, correlation and regression were used to analyze the collected data. Findings of the study show that there are moderate associations between the managers’ perception on various stakeholders and purpose of response. Most important stakeholders are government, shareholders, and environmentalists while least important stakeholders are competitor and supplier in the decision to disclose environmental information. Further, results reveal that the core purpose of disclosing environmental information by companies is maintaining legitimacy than gaining or repairing legitimacy. Management is also motivated by level of companies’ income for disclosing environmental information. Around 27% and 23% of variation in dependent variables quality as well as quantity of environmental disclosures could be explained by encompassing all independent variables. It is concluded that managerial perception on various stakeholders regarding environmental performance is reflected on companies’ environmental disclosure for maintaining legitimacy and achieving social recognition. The results of the study would enable the companies, regulators and other stakeholder for planning their environmental performance and disclosure in order to achieve sustainable development.

Keywords: environmental disclosure, GRI, legitimacy theory, stakeholder theory

INTRODUCTION
Given the urgency for people to save dying earth, many forums have been formed such as Earth Summit, Stakeholder Forum, Kyoto protocol, etc. The environmental concern is not only in a few countries but also it could be seen in many countries. Elkington (1994) cited the view of George Gallup International Institute where the opinion survey of 22 countries representing over 20,000 people believed the main concern is to be given to protect the environment even at the expense of economic growth. As a result, several corporations are involved in environmental protection or performances which could be observed via the lens of environmental disclosures from the companies’ annual reports. Moreover, Cormier, Gordon
and Magnan (2004) also noted that environmental information disclosed in annual reports and other communication media are increased due to stakeholders’ demands.

O’Dwyer (2002) argued that much of the existing literature considers annual report disclosures, but ignores the values and attitudes of managers and how these have an influence on reporting. Similarly, Adams (2004) noted that more research is needed on the process of disclosure to ensure firms’ accountability rather than only looking at the annual report. To understand the phenomenon, most of the previous studies have been conducted within developed countries- Australia, Europe and America where environmental knowledge and regulations are high. But, Elijido-Ten, Kloot and Clarkson (2010, p.1033) noted “a study conducted from a developing country perspective where mandatory reporting is almost non-existent and environmental awareness is generally low could provide a rich setting”.

Suchman (1995) noted that the purpose of organizational response is to either gain legitimacy or maintain legitimacy or repair legitimacy. Although legitimacy theory is applied in environmental disclosure studies (Cormier et al. 2004; O’Donovan, 2002; Wilmshurst and Frost, 2000) there is a theoretical gap that motivation/ decision to report environmental disclosures are not fitted into the purpose of responses either gain or maintain or repair of the legitimacy theory and how those purposes relate to the environmental disclosures. Moreover, Many studies (Huang and Kung, 2010; Elijido-Ten, 2009; Roberts, 1992) used proxy variables to identify drivers of environmental disclosures and failed to identify actual causes for environmental reporting through managers’ point of view as they play a vital role in the decision to report environmental information (Islam and Deegan, 2008; Adams, 2004; O’Dwyer, 2002).

Therefore, the study aims to examine possible motivations behind voluntary reporting by Sri Lankan public companies using empirical evidence. Furthermore, this investigation adds to the literature on the application and refining of legitimacy and stakeholder theories by developing a model that could be used to analyse environmental disclosures.

RESEARCH PROBLEM

Amount of environmental information disclosed by Sri Lankan companies has steadily increased throughout the year while environmental reporting is not mandatory (Rajeshwaran and Ranjani, 2013; Senaratne and Liyana gedara, 2009; Rajapakse, 2008). Consequently, report users have difficulty to cross-check the accuracy of the environmental information provided in the annual reports unlike other developed countries where public access to specific information of corporate environmental performance are available, for example, Environment Protection Agency or Investor Responsibility Research Center have Toxic Release Inventory in US. Moreover, letters of warnings, penalties, and court sanctions pertaining to environmental activities which were issued to companies are also unavailable to the public. This implies that the general public has no way of accessing the information on the environmental performance of Sri Lankan companies unless voluntarily provided by those firms. It is questionable that variation in reporting practices due to lack of proper reporting regulations confuse the stakeholders to rely solely on the information provided by the companies for making decisions.

Moreover, Buhr (2007), Deegan (2002) and Gray and Bebbington (2001) review the most commonly cited reasons for reporting such as, explain expenditure pattern, develop corporate image, report company performance, gain competitive advantage, distract attention
from other areas, stakeholders’ right to know, win reporting awards, etc. while these reasons appeal to our intuition, it should be understood with the aid of theoretical framework in the Sri Lankan context. As Sri Lanka is a developing country and has different cultural background, findings from developed countries cannot be applied directly to Sri Lanka. Therefore, there is a necessity to understand why companies voluntarily disclose environmental information while environmental reporting is not mandatory.

OBJECTIVES OF THE STUDY

Objectives of the study are;

- To identify most important stakeholders perceived by management of the Sri Lankan public companies in reporting environmental information.
- To identify motivations perceived by management of Sri Lankan public companies in influencing decisions to report environmental information.
- To examine how managers’ perceptions regarding stakeholders’ values and purpose of response relate to companies’ environmental reporting.

LITERATURE REVIEW

ENVIRONMENTAL DISCLOSURE

Berthelot et al. (2003, p. 2) defined environmental disclosure as “the set of information items that relate to a firm’s past, current and future environmental management activities and performance”. Quality of reporting means type of data disclosed such as evidence (monitory, quantitative or declarative), news type (positive, negative or neutral) (Gray et al., 1995). It deals with ‘what is being reported’ (Walden and Schwartz, 1997 cited in Alrazi, Villiers and Staden, 2010) and ‘how the information is measured’ (Raar, 2007 cited in Alrazi, Villiers and Staden, 2010). Further, quantitative assessment of qualities of disclosures uses indices to assess and compare companies’ environmental reporting (Clarkson et al., 2008).

Quantity of environmental reporting is measured using: number of words or number of sentences or number of pages (Unerman, 2000; Milne and Alde, 1999; Hackston and Milne, 1996; Gary et al., 1995) or line counts (Patten, 2002; Wiseman, 1982) or number of theme occurrence (Walden and Stagliano, 2004). Number of sentences is better than words as sentence has clear meaning and reduces the subjectivity involved in interpretation of the environmental facts (Elijido-Ten, 2009; Hackston and Milne, 1996). Quantity deals with ‘how much is being disclosed’ (Raar, 2007; Walden and Schwartz, 1997 cited in Alrazi, Villiers and Staden, 2010).

ENVIRONMENTAL DISCLOSURE IN SRI LANKA

Rajapakse (2008) found that 44% of sample companies disclose environmental information as they have a responsibility to protect the physical environment which may be affected by their operations. In addition, the study indicated that most of the companies disclosed qualitative information and this information was not sufficient to make better decision relating to environmental issues of the firms i.e. “disclosures seem to be self-laudatory statements rather than qualitative information” (Rajapakse, 2008, p.7). Result of the Rajapakse is consistent with the findings of Senaratne and Liyanagedara (2009). They studied
corporate sustainability reporting practices in Sri Lanka using guidelines of Global Reporting Initiative (GRI). They found that out of 34 companies, 11 companies (32% of sample) have provided some form of social and environmental reporting where just only 2 companies have presented a sustainable report. The study revealed that environmental performance indicators was the least disclosed area (12%) out of three performance indicators (environment, social and economic).

Corporate social responsibility reporting has been analyzed by Rajapakse (2009) on critical perspective. The study showed that 120 companies out of quoted public companies (238) have reported CSR. Moreover, the study found although many companies produced CSR reports, those reports did not communicate economic reality of corporate entities. Reporting companies used their power on accounting to politicalize social accountability via manipulating their operational results.

Rajeshwaran and Ranjani (2013) reported that quality of disclosing environmental information is still at a low level in Sri Lanka as indicated by Rajapakse (2008) and Senaratne and Liyanagedara (2009). Even though it is at a low level in Sri Lanka, it is higher compared with previous years. Senaratne and Liyanagedara (2009) indicted quality of report was C level i.e. minimum level according to the GRI guideline. But, Rajeshwaran and Ranjani (2013) showed that some companies have achieved B level according to the GRI guideline. The numbers of companies disclosing environmental information has been increasing to 47% in 2013 (Rajeshwaran and Ranjani, 2013) from 44% in 2008 (Rajapakse, 2008) in Sri Lanka.

ENVIRONMENTAL DISCLOSURE IN OTHER COUNTRIES

Level of environmental information reported by companies in annual reports or other communication media has risen around the world (KPMG, 2011; Chung and Parker, 2010; Razzed, 2010; Elijido-Ten, 2009; Chatterjee and Mir, 2008; Al-Tuwaijri et al., 2004; Cormier et al., 2004). From European perspective, Gray et al. (1995) conducted environmental disclosure practices of UK companies from 1979 to 1991. They discovered that environmental disclosure practice rose over the years, particularly the level of increase was high after 1986. They concluded that environmental information was disclosed by companies to improve legitimacy in society.

But in the case of Australia, amount of environmental disclosures was higher than USA, Canada and UK in 1995 (Gibson and Guthrie, 1995) whereas its place was 23rd among the 3,400 companies in 2011 (KMPG, 2011). Clarkson et al., (2008) developed index based on GRI sustainability reporting guideline to measure discretionary reporting. Clarkson et al., (2008) found positive association between environmental performance and level of discretionary environmental disclosures. Average score of quality of discretionary environmental disclosure was 19.13 out of 95. Similarly, Cormier et al., (2004) used different index to measure quality of environmental disclosure. They found mean of environmental disclosures was about 86 out of total scores 111.

In India, companies did not disclose any bad news in the annual report as well as website (Chatterjee and Mir, 2008). Out of the 45 companies, only 23 companies have disclosed environmental information in the website which ranged from 1 sentence to 129 sentences and the average was 20 sentences. Similar results were found by Elijido-Ten (2009) where quality of annual report environmental disclosure ranged from 0 to 22 with an average of 6.58 where a firm could be able to get maximum number of 54 in Malaysia. She
reported that quantity of environmental disclosures ranged from 0 to 95 sentences with an average of 16.37.

**JUSTIFICATION FOR CHOOSING LEGITIMACY AND STAKEHOLDER THEORIES**

Motivations of voluntary environmental disclosure have been analyzed by various researchers into two broad views *first*, market based motives, *second*, social based motives (Elijido-Ten, 2006; O’Donovan, 2000, Gray, 1995).

Several authors noted economic benefits, such as increase share price, increase profit by reducing cost, of disclosing environmental information which have increased by examining the relationship between extent of environmental disclosure and economic measures of firm’s wealth (Sengupta, 1998; Botosan, 1997). This phenomenon is underpinning with efficient market hypothesis where investors are rational and share price reflects actual price of the share due to availability of all current information (Fama, 1965). Therefore, company discloses relevant information to market for evaluating company’s value.

Agency theory is also connected with market based motives. Agency is relationship between agent and principal where agent is companies’ management and principal is some of stakeholders e.g. shareholder. Agent always acts with a self-motive than for principal benefits (Jensen and Meckling, 1976 cited O’Donovan, 2000). Gray *et al.* (1995) argues that agency theory is economic theory and is related to maximizing wealth of the agent.

Although market based motives influence the management to disclose environmental information these theories did not reveal all motives of the companies (Deegan, 2002, Gray *et al.*, 1995). Hence, next section discusses social based theories.

Social based theories emerged from concept of social contracts. It is introduced by Jean-Jacques Rousseau who argues that for human beings to live in society, they should have implicit social contract that offers certain rights in return for accepting certain responsibilities (Russell, 1946 cited Elijido-Ten, 2006). Society gives right to business organization to operate in society. Thus, the organization has responsibility to fulfill expectation of the society in return of the right (Guthrie and Parker, 1989). Deegan (2002, p.272) pointed out that “corporate disclosure polices are considered to represent one important means by which management can influence external perceptions about their organization”.

In accounting literature most generally used theories are political economy theory, legitimacy theory and stakeholder theory. Gray Owen, and Adams (1996, p.47) defined a political economy as “the social, political and economic framework within which human life takes place”. O’Donovan (2000) reported that political economic theory is border one than either legitimacy or stakeholder theory. It is not a purpose of the study to examine whether organization discloses environmental information as all-inclusive political, economic and social reasons. Therefore, the study adopts legitimacy and stakeholder theories which are discussed next.

Legitimacy theory states that organizations continually seek to ensure that they are perceived as operating within the bounds and norms of their respective societies (Lindblom, 1994). These bounds and norms are not considered to be fixed, but change over time (Islam and Deegan, 2008), thereby to maintain the legitimacy or social
contact organization must take actions and those actions should be known by society. Dowling and Pfeffer (1975) indicate that communication plays instrumental role to ensure legitimacy. Communication takes the form of annual or environmental report and website disclosure. Legitimacy provides a general framework in which to examine how a firm responds to its environment and society. However, within that society there are many groupings of individuals which are called stakeholders (Cormier et al., 2004).

Freeman et al. (2007, p. 6) and Freeman (1984, p. 46) defined stakeholder as “any group or individual who can affect or is affected by the achievement of the activities of an organization”. Freeman (1984, p.1) indicates that “current approaches to understanding the business environment fail to take account of a wide range of groups”. He also pointed out that stakeholder theory provide ways to address the various demands of different stakeholders in order to manage them effectively in the dynamic environment. Even though stakeholder theory has been broadly applied in management literature (Davenport, 2000; Clarkson, 1995; Roberts, 1992; Ullmann, 1985), limited number of studies used the theory in the domain of company environmental disclosures.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

According to legitimacy theory, purpose of organization response is to either gain or maintain or repair legitimacy (Suchman, 1995). In order to decide the purpose of company response, the company needs to recognize its important stakeholders (O’Donovan, 2000). Similar view is presented by Cormier et al., (2004) that managers need to assess stakeholders’ interest on environmental reporting. However, they noted that it is nonsensical to directly match managers’ assessment of stakeholders with environmental reporting. Therefore, it is needed to examine how managers’ corporate concern/ purpose of response affect environmental disclosures. In the meantime financial condition and control variable directly and indirectly impact environmental disclosure (Cormier et al., 2004; Elijido-Ten, 2009). By considering previous arguments, conceptual framework of the present study is developed in broader perspective to investigate managers’ motives (Figure 1).

Figure 1- Conceptual framework
Managers’ perception on important stakeholder

The study focuses ten types of stakeholders such as shareholders, lender, government, employees, customers, suppliers, media, environmentalists, competitor and public as stakeholder group based on Freeman (1984) to evaluate managers’ perception on important stakeholder which is measured using Mitchell, Agle and Wood’s(1997) identification of attributes: first, the stakeholder’s power to influence the company, second, the legitimacy of the stakeholders’ relationship with the company, and third, the urgency of the stakeholder’s claim on the company.

Managers’ perception on purpose of response

Motivations for decision to disclose environmental information are:

- True and fair view of operations (Cormier et al., 2004; Wilmshurst and Frost, 2000)
- Community concern with operations due to externally reported events (Barut, 2007; Cormier et al., 2004; Wilmshurst and Frost, 2000)
- Borrowing requirements (Cormier et al., 2004; Deegan, 2002; Wilmshurst and Frost, 2000)
- Stakeholders’ right to know (Adams, 2011; Cormier et al., 2004; Gray and Bebbington, 2001, Wilmshurst and Frost, 2000)
- Forestall disclosure regulations (Rizk, Dixon and Woodhead, 2008; Barut, 2007; Deegan, 2002; Gray and Bebbington, 2001)
- Impetus for internal developments (Ernst and Young and GreenBiz, 2012; Adams, 2011; Gray and Bebbington, 2001)
- Distract attention from other areas (Gray and Bebbington, 2001)
- Develop corporate image (Kabir and Akinnusi, 2012; Barut, 2007; Gray and Bebbington, 2001)
- Competitive advantage (Sujeewa and Rajapakse, 2011; Gray and Bebbington, 2001)
- Economic rationality consideration (Ernst and Young and GreenBiz, 2012; Adams, 2011; Islam and Deegan, 2008; Barut, 2007; Cormier, 2004; Deegan, 2002; Gray and Bebbington, 2001, Wilmshurst and Frost, 2000)
- Explain expenditure pattern (Gray and Bebbington, 2001)
- The desire to tell people what the company has done/ achieved (Gray and Bebbington, 2001)
- Strategic posture (Ullmann, 1985)
- Media attention (Barut, 2007; Cormier et al., 2004)
- To win reporting awards (Deegan, 2002)
- A belief in an accountability to report (Adams, 2011; Deegan, 2002)
- Threats to the organizational legitimacy (Sujeewa and Rajapakse, 2011; Deegan, 2002, Gray and Bebbington, 2001),
- Level of disclosure due to company size (Barut, 2007; Gray et al. 1995; Guthrie and Parker, 1990).
By reviewing literature, Barut (2007) categorized motivations of reporting social and environmental information into three major groups: proactive, reactive and risk base response. Proactive response means company provides information before any incident occurs in order to maintain survival of the company, avoid regulatory interference, prevent corporate change and gain social approval. Reactive is defined as disclosing information by the company to restate its position due to response to media attention, community and social concerns and externally reported events. Risk based response is as providing information effects on financial or market performance such as reduce company’s cost of capital and economic benefits like increase shareholder value, market share (Barut, 2007). On that basis, the above identified common motivations of reporting environmental information could be classified into proactive and reactive motives of environmental reporting as shown in Column 2 in Table 1. Risk base response is classified as financial condition and it is taken as separate variable for analysis.

Table: 1 Grouping motivations of environmental reporting in terms of purpose of response

<table>
<thead>
<tr>
<th>Management’s decision to report</th>
<th>Drivers/Group</th>
<th>Purpose of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestall disclosure regulations</td>
<td>Proactive</td>
<td>Gain</td>
</tr>
<tr>
<td>Develop corporate image</td>
<td></td>
<td>Gain</td>
</tr>
<tr>
<td>Strategic posture</td>
<td></td>
<td>Gain</td>
</tr>
<tr>
<td>Impetus for internal developments</td>
<td></td>
<td>Gain</td>
</tr>
<tr>
<td>To win reporting awards</td>
<td></td>
<td>Gain</td>
</tr>
<tr>
<td>True and fair view of operations</td>
<td></td>
<td>Maintain</td>
</tr>
<tr>
<td>Borrowing requirements</td>
<td></td>
<td>Maintain</td>
</tr>
<tr>
<td>Stakeholders’ right to know</td>
<td></td>
<td>Maintain</td>
</tr>
<tr>
<td>Competitive advantage</td>
<td></td>
<td>Maintain</td>
</tr>
<tr>
<td>A belief in an accountability to report</td>
<td></td>
<td>Maintain</td>
</tr>
<tr>
<td>Community concern with operations due to externally reported events</td>
<td>Reactive</td>
<td>Repair</td>
</tr>
<tr>
<td>Distract attention from other areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explain expenditure pattern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The desire to tell people what the company has done/achieved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media attention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threats to the organizational legitimacy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author constructed

- Suchman (1995) discussed various purposes of organizational response which are extend/gain legitimacy, maintain the present level of legitimacy, repair/defend lost legitimacy.
- Gaining legitimacy: When an organization moves into new or uncharted area it damages organization’s legitimacy. Therefore, the organization proactively disseminates information to people on how it takes action to protect people as well as environment without harming them. In gaining legitimacy, management knows about event/issue more than public.
- Maintaining legitimacy: It is easier than gaining or repairing legitimacy. For maintaining legitimacy, the management decides the issue may be of concern to the public in the future. Management faces challenge to maintain legitimacy as stakeholders’ needs and wants are dynamic (O’Donovan, 2002). Suchman (1995) and
reported that management should observe or predict stakeholder’s behaviour and keep relationship with stakeholders to maintain their legitimacy.

- Repairing Legitimacy: In an emergency scenario, the management reacts immediately via media report for repairing legitimacy.
- The above classified proactive and reactive common motivations are again grouped based on characteristics of the purpose of response (gain, maintain, repair legitimacy) (Column 3 in Table 1).

Financial condition

Manager’s concern is financial conditions under which the firm operates (Cormier, et al. (2004). There are two variables used to capture financial condition: return a firm earns on its assets (return on assets) and the firm’s indebtedness (debt to equity). These variables influence environmental disclosure in two ways as indicated by Cormier et al., (2004, p.149) “first, as a proxy for potential information and proprietary costs, a firm’s financial condition has a direct effect on environmental disclosure. Second, a firm’s financial condition may affect how its managers assess decision corporate concerns and hence its environmental disclosure”.

Control variable

Age of firm and firm size are related with environmental disclosure. They are included as control variable to control the possible effects of other extraneous variables that could influence the result of the quantitative analysis (Roberts, 1992; Chan and Kent, 2003 cited in Elijido-Ten, 2009). If these control variables are omitted, amount of environmental disclosures are related with managers’ interest on purpose of response and importance of stakeholder than actually exist.

HYPOTHESES

Legitimacy theory emphasizes that company’s activity should be acceptable within the bounds and norms of the society (Islam and Deegan, 2008). Legitimacy management requires heavily on communication between the organization and its various stakeholders (Elsbach, 1994; Ginzel, Kramer, &Sutton, 1992 cited in Suchman (1995).Suchman (1995) and O’Donovan (2002) indicated that purposes of organizational responses are gain/ maintain/ repair legitimacy. Based on legitimacy theory, company has to communicate its environmental performance to various stakeholders in order to ensure legitimacy (Cormier et al., 2004). Considering the above arguments following hypotheses are developed.

H1: Manager’s perception to gaining legitimacy is positively associated with the quantity and quality of a firm’s environmental disclosure.

H2: Manager’s perception to maintain legitimacy is positively associated with the quantity and quality of a firm’s environmental disclosure.

H3: Managers’ assessment to repair legitimacy is positively associated with the quantity and quality of a firm’s environmental disclosure.

Previous studies reveal a positive relationship between an organization’s level of environmental disclosure and its economic performance (Cormier and Magnan, 2003;
Roberts, 1992). In contrast, other studies discover that organizations that are less profitable tend to disclose more information concerning social responsibility to improve the firm’s corporate image (Alnajjar, 2000; Huang and Kung, 2010). Therefore, no directional predictions are made for financial condition due to the actual impact of profitability on environmental disclosure being ambiguous. The fourth hypothesis is formed as follows:

H4: There is a relationship between financial conditions and quantity and quality of environmental disclosures.

**METHODOLOGY**

In 2013, by reviewing the annual reports of 284 public companies published in 2012/2013, it is identified that 134 companies disclosed environmental information (Table 2). Out of them, 99 companies were selected by using proportionate stratified random sampling according to industry sector as a sample to carry out the study based on the table of sample size for a given population size (Krejcie and Morgan, 1970, cited in Sekaran, 2007, p.294). Further, sample size is confirmed by sample calculator in the web using 95% confidence level and 5% confident interval.

Table: 2 Population, Sample and Responds by Sector

<table>
<thead>
<tr>
<th>Type of the sector</th>
<th>No. of Companies</th>
<th>No. of companies disclosed environmental information</th>
<th>Sample</th>
<th>Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Bank, Finance and Insurance</td>
<td>61</td>
<td>33</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Beverage Food and Tobacco</td>
<td>20</td>
<td>14</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Chemical and Pharmaceuticals</td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Construction and Engineering</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Diversified holdings</td>
<td>18</td>
<td>12</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Footwear</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Health Care</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hotels and travels</td>
<td>36</td>
<td>9</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Information Technology</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Investment Trust</td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Land and Property</td>
<td>18</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>36</td>
<td>19</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Motors</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Oil Palms</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Plantation</td>
<td>19</td>
<td>16</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Power and Energy</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Services</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Stores Supplies</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Trading</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>284</td>
<td>134</td>
<td>99</td>
<td>83</td>
</tr>
</tbody>
</table>

*Source: Author constructed*
Quality and quantity of environmental disclosure, financial condition and control variables are taken from the annual report using content analysis techniques. Managers’ perception on important stakeholder and purpose of response are collected by questionnaires.

Quality of environmental disclosures is measured by using Clarkson et al. (2008) index in seven categories (Table 3). Number of sentences is chosen as the unit of measurement in this study for measuring quantity of environmental disclosures. In cases where tables or figures are provided, each figure and description is counted as one sentence.

Managers’ perception on important stakeholder was measured using through five-point Likert’s scale (no to maximum) where the respondents were asked to indicate their level of the importance of each stakeholder in terms of power, legitimacy and urgency (Mitchell et al, 1997). Gago and Antolin (2004) defined environmental power as capacity and ability to make the company adopt decisions in accordance with the stakeholder’s environmental demands, either by means of economic rewards or punishments, by resorting to direct force or legal action, or by influencing the company’s public image. Environmental legitimacy is a generalized perception or assumption that the actions of a stakeholder regarding environmental issues/ events are desirable, proper or appropriate within some socially constructed system of norms. Environmental urgency is the degree to which stakeholder claims regarding environmental issues/ events call for immediate attention, values, beliefs and definitions.

Managers’ perception on purpose of response was measured using five point Likert’s scale (1 - Not important, 2 - Little important, 3 - Moderate important, 4 – Important, 5 - Very important) which asked the respondents to indicate importance of each element regarding decision to report environmental information. Data were collected by questionnaire from the executives responsible for the environmental management and reporting or, in case there is no such position, the person responsible for annual report preparation/ Chief Financial Officer/ Managing Director/ CEO.

One sample t-test is conducted to assess whether the mean sample response is different from 3 (i.e. neutral) about managers’ perception on stakeholder importance. Then, another one sample t-test is conducted to assess whether the mean sample response is different from 2 (i.e. little important) about managers’ perception on corporate concern.

Correlation is carried out to find out the relationship between managers’ perception on important stakeholder and purpose of response. Another correlation is also done to identify the association between managers’ assessment of purpose of response and environmental disclosures of the companies. OLS regression is run to analyse how responding firms’ actual environmental disclosures mapped with the managers’ perception on purpose of response.

**ECONOMETRIC MODEL**

According to the previous researches (Clarkson et al., 2008; Elijido-Ten, 2006; Cormier et al., 2004; O’Donovan, 2000; Suchman, 1995) econometric model for the quality and quantity of environmental disclosure are formulated as follows.

\[
QLED/QTED = \beta_0 + \beta_1 GL_{it} + \beta_2 ML_{it} + \beta_3 RL_{it} + \beta_4 AROA_{it} + \beta_5 ID_{it} + \beta_6 LSIZ_{it} + \beta_7 AGE_{it} + \epsilon_i
\]

*Where:*

- **QLED** Total quality score of environmental disclosure for firm *i* at period *t*;
- **QTED** Total quantity score of environmental disclosure for firm *i* at period *t*;
- **GL** Managers concern to gain legitimacy of firm *i* at period *t*;
RESULTS AND DISCUSSION

The Table 2 provides the number of questionnaires collected from the sample distribution by sectors. Out of issued 99 questionnaires distributed, 83 respondents responded.

Table 3 shows that quality of environmental disclosure is 13.37 out of 88 while quantity of environmental disclosure is 65.58 with standard deviation of 72.83. Environmental performance indicators, vision and strategy claims and environmental initiatives are highly disclosed categories. However, environmental spending, environmental initiatives are least disclosed categories. An average of around 3 sentences are used to describe government structure and management systems.

ENVIRONMENTAL DISCLOSURE

Table 3: Quality and quantity of environmental disclosure

<table>
<thead>
<tr>
<th>Environmental disclosure items</th>
<th>Quality of ED</th>
<th></th>
<th>Quantity of ED</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>td.</td>
<td>mean</td>
<td>td.</td>
</tr>
<tr>
<td>(A1) Governance structure and management systems (max score is 6)</td>
<td>.13</td>
<td>.35</td>
<td>.39</td>
<td>.35</td>
</tr>
<tr>
<td>(A2) Credibility (max score is 9)</td>
<td>.24</td>
<td>.56</td>
<td>.23</td>
<td>1.35</td>
</tr>
<tr>
<td>(A3) Environmental performance indicators (EPI) (max score is 54)</td>
<td>.60</td>
<td>.03</td>
<td>0.87</td>
<td>9.81</td>
</tr>
<tr>
<td>(A4) Environmental spending (max score is 3)</td>
<td>.31</td>
<td>.70</td>
<td>.83</td>
<td>.47</td>
</tr>
<tr>
<td>(A5) Vision and strategy claims (max score is 6)</td>
<td>.59</td>
<td>.38</td>
<td>2.84</td>
<td>2.90</td>
</tr>
<tr>
<td>(A6) Environmental profile (max score is 4)</td>
<td>.65</td>
<td>.02</td>
<td>.53</td>
<td>.36</td>
</tr>
<tr>
<td>(A7) Environmental initiatives (max score is 6)</td>
<td>.84</td>
<td>.97</td>
<td>.89</td>
<td>.43</td>
</tr>
<tr>
<td>Total environmental disclosure</td>
<td>3.37</td>
<td>0.87</td>
<td>5.58</td>
<td>2.83</td>
</tr>
</tbody>
</table>

Source: Author constructed
MANAGERS’ PERCEPTION ON IMPORTANT STAKEHOLDER

According to the mean, government is most important stakeholder out of ten stakeholders for making decision to disclose environmental information (Table 4). After this, shareholder is very important to them, closely followed by environmentalists and public are important to a company. Mean value of employee, customer and media is around 3 which indicates they are moderately important to companies compared to other stakeholders. Further, it is noted that the least important stakeholders are lender, competitors and supplier for companies to make decision to report environmental information.

Table 4- Managers’ perception on important stakeholder

<table>
<thead>
<tr>
<th>Types of stakeholders</th>
<th>Environmental Power</th>
<th>Environmental Legitimacy</th>
<th>Environmental Urgency</th>
<th>Important Stakeholder (Combining power, legitimacy and urgency)</th>
<th>Std. Dev. for important stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>4.24</td>
<td>4.17</td>
<td>4.06</td>
<td>4.16*</td>
<td>0.86</td>
</tr>
<tr>
<td>Shareholder</td>
<td>3.58</td>
<td>3.55</td>
<td>3.63</td>
<td>3.59*</td>
<td>0.95</td>
</tr>
<tr>
<td>Environmentalists</td>
<td>3.45</td>
<td>3.52</td>
<td>3.59</td>
<td>3.52*</td>
<td>1.03</td>
</tr>
<tr>
<td>Public</td>
<td>3.43</td>
<td>3.42</td>
<td>3.49</td>
<td>3.45*</td>
<td>1.01</td>
</tr>
<tr>
<td>Employee</td>
<td>.34</td>
<td>.37</td>
<td>.43</td>
<td>3.38*</td>
<td>0.88</td>
</tr>
<tr>
<td>Customer</td>
<td>.39</td>
<td>.42</td>
<td>.33</td>
<td>3.38*</td>
<td>0.86</td>
</tr>
<tr>
<td>Lender</td>
<td>2.87</td>
<td>2.88</td>
<td>2.84</td>
<td>2.86</td>
<td>1.07</td>
</tr>
<tr>
<td>Competitor</td>
<td>2.81</td>
<td>2.83</td>
<td>2.55</td>
<td>2.73*</td>
<td>0.97</td>
</tr>
<tr>
<td>Supplier</td>
<td>2.46</td>
<td>2.72</td>
<td>2.55</td>
<td>2.58*</td>
<td>0.93</td>
</tr>
</tbody>
</table>

*p < 0.01. One sample t-test is conducted to assess if the mean sample response is different from 3 (i.e. neutral) about managers’ perception on important stakeholder. Test value = 3.

Source: Author constructed

One sample t test is conducted to check whether mean value of a stakeholder is different from 3 (neutral/ moderately important) in the managers’ perception. Table 3 shows that results of one-sample t tests for stakeholders where government, shareholder, environmentalists, public, employee and customer are significantly different from midpoint 3, p < 0.01. It indicates that these stakeholders are significantly important to companies in the managers’ point of view with respect to environmental activities. However, media is not significantly different from 3 which denote that it is moderately important. Even though mean value of lender is less than 3 with 2.86, result of one sample t test reveals that it is not significantly different from mid-point which means that lender is also moderately important. On the other hand, competitor and supplier are significantly different from 3. Results of one sample t tests indicate that they are least important to companies for making decision to disclose environmental information as mean differences are negative.

Findings of this study are consistent with results of Gago and Antolin (2004) where government is the most important stakeholder, after that shareholder while least important stakeholder to make decision to disclose environmental information is supplier. Elijido-Ten
(2009) also noted government was significant stakeholder. However, shareholder was not supported by her model. But, Chatterjee and Mir (2008) identified investor was the greatest important stakeholder as they search environmentally sustainable investment whereas Cormier et al., (2004) found lender and public were most important and investor was placed in third position. In contrast, there are contrasting views shown by Islam and Deegan (2008) and Adams (2011) in investigating social and environmental reporting. Islam and Deegan (2008) reported that multinational buyers, NGOs and media are very important to stakeholder regarding social and environmental information due to multinational buyers use such information to protect themselves from global communities who buy their products. Similarly, NGOs and media focus on the information to safeguard human rights and ecological balance. Adams (2011) has shown that the most important stakeholder group is employees followed by regulators, community, consumers and government.

At this point, it is more fruitful to observe managers’ perception on purpose of response to report environmental information, which is discussed in succeeding section.

MANAGERS’ PERCEPTION ON PURPOSE OF RESPONSE/ CORPORATE CONCERN

Out of 16, five items, namely, true and fair view of operations (4.27), develop corporate image (4.22), stakeholders’ right to know (4.12), a belief in accountability to report (4.06) and competitive advantage (4.02) are rated as from important to very important based on the mean response to disclose such information (Table 5). Followed by seven which fall between moderately important to important such as strategic posture, the desire to tell people what the company has done/ achieved, impetus for internal developments, to win reporting awards, amongst others, borrowing requirements and forestall disclosure regulations are close to moderately important. Nonetheless, distract attention from other areas is the least important motive for disclosing environmental information by many companies.

After confirming the normality of each of item, one sample t test is run to identify whether perceived importance by managers to disclose the information differs from 2 (little important), thus, each item is measured on a five points Likert’s scale (1 - Not important, 2 - Little important, 3 - Moderate important, 4 – Important, 5 - Very important). The t-test runs to recognize whether each items at least important to disclose environmental information. In Table 5, all elements are significantly different from 2 at 1% significance level except distract attention from other areas which is also near 2. It explains the level of importance of all items for making decision to disclose environmental information range from slightly important to very important from the management perspectives.

Table 5- Managers’ perception on purpose of response

<table>
<thead>
<tr>
<th>Elements (reasons) in making an environmental disclosure</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>True and fair view of operations</td>
<td>2</td>
<td>5</td>
<td>4.27*</td>
<td>0.77</td>
</tr>
<tr>
<td>Develop corporate image</td>
<td>2</td>
<td>5</td>
<td>4.22*</td>
<td>0.77</td>
</tr>
<tr>
<td>Stakeholders’ right to know</td>
<td>1</td>
<td>5</td>
<td>4.12*</td>
<td>0.82</td>
</tr>
<tr>
<td>Competitive advantage</td>
<td>1</td>
<td>5</td>
<td>4.06*</td>
<td>0.95</td>
</tr>
<tr>
<td>A belief in an accountability to report</td>
<td>3</td>
<td>5</td>
<td>4.02*</td>
<td>0.81</td>
</tr>
<tr>
<td>Strategic posture</td>
<td>1</td>
<td>5</td>
<td>3.89*</td>
<td>0.87</td>
</tr>
<tr>
<td>The desire to tell people what the company has done/</td>
<td>2</td>
<td>5</td>
<td>3.84*</td>
<td>0.99</td>
</tr>
</tbody>
</table>
achieved

Impetus for internal developments 2 5 3.71* 0.88
To win reporting awards 1 5 3.54* 1.25
Threats to the organizational legitimacy 1 5 3.39* 1.06
Borrowing requirements 1 5 3.16* 1.20
Forestall disclosure regulations 1 5 3.11* 1.25
Media attention 1 5 2.93* 1.12
Explain expenditure pattern 1 5 2.88* 1.08
Community concern with operations due to externally reported events 1 5 2.82* 0.98
Distract attention from other areas 1 5 2.04 1.02

*p < 0.01. One sample t-test is conducted to assess if the mean sample response is different from 2 (slightly important) about managers’ perception on purpose of response. Test value=2.

Source: Author constructed

Each identified reason for environmental disclosures by previous studies is vital ranging from slightly to very important to Sri Lankan companies. Although Sujeewa and Rajapakse (2011) and Rajapakse and Manamperi (2012) indicated some motives for disclosing social and environmental information by Sri Lankan companies, they did not rank those motives according to importance given by the companies’ management. But, this study has identified which factors are most importantly motivating them. Moreover, true and fair view and stakeholders’ right to know are identified as very important for reporting environmental information. This is also consistent with findings in Cormier et al., (2004) and Wilmshurt and Frost (2000).

It is imperative to look at these motives in Sri Lankan setting via legitimacy theory. It examines in the following section.

MANAGERS’ PERCEPTION ON PURPOSE OF RESPONSE WITH RESPECT TO LEGITIMACY THEORY

According to the Table 6, maintain legitimacy is the most significant purpose of responding about environmental performance to stakeholders as its mean value is the highest value (3.93). As public are aware of potential environmental issues, management should predict stakeholder’s behaviour and proactively disclose such information to maintain the legitimacy. In line with this, the following elements, true and fair view of operations, borrowing requirements, stakeholders’ right to know, competitive advantage and a belief in accountability to report contribute to maintain the legitimacy.

Table 6- Managers’ perception on purpose of response

<table>
<thead>
<tr>
<th>Purpose of response</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain legitimacy</td>
<td>2.4</td>
<td>5</td>
<td>3.93</td>
<td>0.64</td>
</tr>
<tr>
<td>Gain legitimacy</td>
<td>2</td>
<td>5</td>
<td>3.69</td>
<td>0.71</td>
</tr>
<tr>
<td>Repair legitimacy</td>
<td>1.67</td>
<td>5</td>
<td>2.98</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Source: Author constructed

Second highest mean value is calculated for gain legitimacy (3.69). In this phenomenon, management only knows about future events/ issues than stakeholders. Therefore, they proactively carry out subsequent activities: forestall disclosure regulations,
develop corporate image, strategic posture, impetus for internal developments and win reporting awards, to gain legitimacy.

However, repairing legitimacy is least important to Sri Lankan companies to make decision to disclose the information as lowest average score (2.98) comparing with other purpose of responses. This result is obtained due to less environmental incidents occurred by the Sri Lankan public companies.

**FINANCIAL CONDITION AND CONTROL VARIABLE**

Table 7: Descriptive statistics: Financial condition and control variables

<table>
<thead>
<tr>
<th>Detail</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on Assets (%)</td>
<td>(9.58)</td>
<td>88.51</td>
<td>9.11</td>
<td>13.30</td>
</tr>
<tr>
<td>Debt to Equity (%)</td>
<td>-</td>
<td>293.02</td>
<td>55.10</td>
<td>73.23</td>
</tr>
<tr>
<td>Natural log income</td>
<td>14.82</td>
<td>25.14</td>
<td>21.58</td>
<td>2.03</td>
</tr>
<tr>
<td>Income (million)</td>
<td>2</td>
<td>82,770</td>
<td>8,645</td>
<td>14,725</td>
</tr>
<tr>
<td>Age (year)</td>
<td>5.00</td>
<td>147.00</td>
<td>34.05</td>
<td>21.83</td>
</tr>
</tbody>
</table>

*Source: Author constructed*

Average return on assets and average debt to equity are 9.11% and 55.10% respectively (Table 6). Although income is taken to analyze as natural log, income is shown as million to better understand the income dispersion among the companies easily. Age of firm ranges from 5 to 147 years.

**Correlation analysis between important stakeholders and purpose of response**

Table 8 provides information about Pearson’s correlation between managers’ perception on important stakeholder and purpose of response relating to environmental information. Gaining legitimacy is moderately correlated with all stakeholders except shareholder and customer at level of 0.01. Government, environmentalists and employee are greatly related with gaining legitimacy for getting legitimate approval from them as potential environmental events/ issues of company are known only by management. However, customer is weakly correlated with gaining legitimacy (r = 0.239) at 0.05 significance level.

As far as maintaining legitimacy is concerned, media and environmentalist weakly associate and rest of the stakeholders excluding government are moderately correlated with it. When it is focused stakeholders wise, shareholder, lender, customer, supplier, competitor, and public mostly correlated with maintain legitimacy than gain and repair legitimacy.

Repairing legitimacy is not associated with shareholder, government and customers while it is correlated with other stakeholders. It is also noted that lender, employee and supplier are weakly correlated with repair legitimacy. Furthermore, the study shows interesting finding that competitor and media are highly correlated with repairing legitimacy. When the companies’ activities affect the environment, immediately media reports the news to public. Therefore, this is true in case of repairing legitimacy, managers perceive media more important stakeholder.
Table 8: Correlation between important stakeholders and purpose of response, environmental disclosure

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Gain legitimacy</th>
<th>Maintain legitimacy</th>
<th>Repair legitimacy</th>
<th>Quality Disclosure</th>
<th>Quantity Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder</td>
<td>0.082</td>
<td>0.243*</td>
<td>-0.099</td>
<td>0.124</td>
<td>0.221*</td>
</tr>
<tr>
<td>Lender</td>
<td>0.438**</td>
<td>0.518**</td>
<td>0.294**</td>
<td>0.239*</td>
<td>0.217*</td>
</tr>
<tr>
<td>Government</td>
<td>0.373**</td>
<td>0.196</td>
<td>0.151</td>
<td>0.057</td>
<td>-0.018</td>
</tr>
<tr>
<td>Employee</td>
<td>0.431**</td>
<td>0.412**</td>
<td>0.293**</td>
<td>0.19</td>
<td>0.165</td>
</tr>
<tr>
<td>Customer</td>
<td>0.239*</td>
<td>0.310**</td>
<td>0.196</td>
<td>0.233*</td>
<td>0.201</td>
</tr>
<tr>
<td>Supplier</td>
<td>0.351**</td>
<td>0.386**</td>
<td>0.246*</td>
<td>0.212</td>
<td>0.107</td>
</tr>
<tr>
<td>Media</td>
<td>0.374**</td>
<td>0.290**</td>
<td>0.383**</td>
<td>0.135</td>
<td>0.091</td>
</tr>
<tr>
<td>Environmentalists</td>
<td>0.305**</td>
<td>0.248*</td>
<td>0.301**</td>
<td>0.085</td>
<td>0.002</td>
</tr>
<tr>
<td>Competitor</td>
<td>0.377**</td>
<td>0.455**</td>
<td>0.435**</td>
<td>0.237*</td>
<td>0.184</td>
</tr>
<tr>
<td>Public</td>
<td>0.331**</td>
<td>0.385**</td>
<td>0.336**</td>
<td>0.116</td>
<td>0.029</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Source: Author constructed

Correlation analysis between important stakeholders and disclosures

Correlations between stakeholders and quality or quantity of disclosures are weak. Of various stakeholders, only few of them, namely, shareholder, lender, customer and competitor are poorly correlated with the level of disclosures at significance level 5%. This result is expected as Cormier et al. (2004) pointed out that it is nonsensical to compare perceived important stakeholders with level of environmental disclosures. Therefore, corporate concern was inserted as intervening variable in between above two variables.

Correlation analysis between purpose of response and disclosure

Pearson’s correlation is shown in the bottom left matrix of Table 8. According to Table 8, Pearson’s correlation between quality and quantity of total environmental disclosures is 0.87 at significance level 0.01. It indicates that there is high association between the quality and quantity of environmental disclosures. Gain and maintain legitimacy moderately correlated with quality of total environmental disclosures at 1% significance level while they are weakly correlated with quantity of environmental disclosures. However, there is a lack in the relationship between repairing legitimacy and quality or quantity of environmental disclosure.

Furthermore, this study reports strong positive correlation between quality and quantity of environmental disclosures as like Elijido-Ten (2009) found strong positive relationship between them.

Table 8 reveals that there are no correlations above 0.9 between independent variables. This suggests that there is no unacceptable multicollinearity existing between predictors.
Table 9: Correlation matrix: Dependent and independent variables in regression

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gain Legitimacy</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Maintain Legitimacy</td>
<td>0.515**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Repair Legitimacy</td>
<td>0.469**</td>
<td>0.481**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Return on Assets</td>
<td>-0.133</td>
<td>-0.146</td>
<td>-0.211</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Debt to Equity</td>
<td>0.162</td>
<td>0.088</td>
<td>0.173</td>
<td>-0.235*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Natural Log Income</td>
<td>0.261*</td>
<td>0.127</td>
<td>0.057</td>
<td>0.146</td>
<td>0.109</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Age</td>
<td>-0.028</td>
<td>-0.028</td>
<td>-0.152</td>
<td>0.267*</td>
<td>-0.002</td>
<td>0.109</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Quality of Total ED</td>
<td>0.311**</td>
<td>0.330**</td>
<td>0.028</td>
<td>-0.089</td>
<td>-0.053</td>
<td>0.288**</td>
<td>0.16</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9. Quantity of Total ED</td>
<td>0.278**</td>
<td>0.287**</td>
<td>-0.014</td>
<td>-0.088</td>
<td>-0.047</td>
<td>0.268*</td>
<td>0.112</td>
<td>0.866**</td>
<td>-</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed). 1 if direction is observed right side it is one tailed (positive relation is observed between purpose of response and environmental disclosure).

* Correlation is significant at the 0.05 level (2-tailed).

Source: Author constructed

Testing mediator relationship for environmental disclosure in conceptual framework

The mediated regression approach follows the guidelines as outlined by Baron and Kenny (1986). Their analysis requires three separate equations needing to be estimated. The first equation involves with regressing the mediator variable on the predictor variable. The second equation entails with regressing the criterion variable on the predictor variable. Finally, the third equation involves with regressing the criterion variable concurrently onto the predictor variable and the mediator variable. Furthermore, Baron and Kenny (1986) outline four conditions that must be met;

Condition 1: the predictor variable must be significantly related to the mediator variable.
Condition 2: the predictor variable must be significantly related to the criterion variable.
Condition 3: the mediator variable must be significantly related to the criterion variable.
Condition 4: the effect of the predictor variable must be less in equation 3 than in equation 2 significantly related to the mediator.

Table 10: Summary of Regression analysis for testing mediator relationship (N 83)

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1/ Condition 1</td>
<td>Step 2/ Condition 2</td>
<td>Condition 3</td>
<td>Step 3/ Condition 4</td>
</tr>
<tr>
<td></td>
<td>E B</td>
<td>B SE B</td>
<td>B SE B</td>
<td>B SE B</td>
</tr>
<tr>
<td>Constant</td>
<td>.08***  (beta = .25)</td>
<td>1.29  5.78</td>
<td>-5.58  7.50</td>
<td>-7.27  7.74</td>
</tr>
<tr>
<td>IS</td>
<td>.44*** (beta = .07)</td>
<td>3.68*  1.72</td>
<td>0.23  0.27</td>
<td>1.85  2.04</td>
</tr>
<tr>
<td>PR</td>
<td></td>
<td>5.36*  2.09</td>
<td>0.27  0.21</td>
<td>4.12  2.50</td>
</tr>
<tr>
<td>R²</td>
<td>0.297</td>
<td>0.053  0.075</td>
<td>0.084</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>34.28***</td>
<td>4.55**</td>
<td>6.53**</td>
<td>3.67**</td>
</tr>
</tbody>
</table>

DV: Dependent Variable

* p<0.1  ** p<0.05  *** p<0.01
QLED  Total quality of environmental disclosure
IS  Important stakeholder for environmental disclosure
PR  Purpose of response for environmental disclosure
QLED= β₀ + β₁ISᵢ + β₂PRᵢ + eᵢ

Step/ Equation 1: PR = 2.08 +0.44IS + eᵢ
Step/ Equation 2: QLED = 1.29 + 3.68IS+ eᵢ
Step/ Equation 3: QLED = -7.277 + 1.85IS + 4.12PR + eᵢ

According to Table 10, four conditions for testing mediator relationship were met. Effect of important stakeholder (predictor variable) is less (1.85) in equation 3 than in equation 2 (3.68). Therefore, it is concluded that purpose of response is mediator variable between important stakeholder and environmental disclosure as shown in conceptual framework.

**OLS regression: managers’ perception on purpose of response on quality of environmental disclosure**

Table 11 shows around 27% variation in quality of environmental disclosure can be explained by managers’ perception on purpose of response and other included independent variables while 73% of variation in dependent variable is not explained by the model. It is also noted in the model 1 (Column 2) that probability of both results of maintain legitimacy and size of company occurring by chance is less than 0.05 and probability of other results relating to gain and repair legitimacy occurring by chance is around 0.10. It also indicates that managers’ perception on maintaining legitimacy is improved by a unit leads to enhance quality of environmental reporting by 4.8 level.

Table 11: OLS estimate of managers’ perception of purpose of response in decision to disclose quality/ quantity of environmental information

<table>
<thead>
<tr>
<th>Variable</th>
<th>Quality of environmental disclosure</th>
<th>Quantity of environmental disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>β₀</td>
<td>-34.694***</td>
<td>-218.779***</td>
</tr>
<tr>
<td>GL</td>
<td>3.102*</td>
<td>20.411</td>
</tr>
<tr>
<td>ML</td>
<td>4.840**</td>
<td>29.804**</td>
</tr>
<tr>
<td>RL</td>
<td>-3.243*</td>
<td>-25.773*</td>
</tr>
<tr>
<td>AROA</td>
<td>-0.142</td>
<td>-0.899</td>
</tr>
<tr>
<td>ID</td>
<td>-0.021</td>
<td>-0.122</td>
</tr>
<tr>
<td>LSIZ</td>
<td>1.250**</td>
<td>7.950**</td>
</tr>
<tr>
<td>AGE</td>
<td>0.081</td>
<td>0.357</td>
</tr>
<tr>
<td>R²</td>
<td>0.268</td>
<td>0.226</td>
</tr>
<tr>
<td>F</td>
<td>3.932***</td>
<td>3.126***</td>
</tr>
</tbody>
</table>

*p<0.1  **p<0.05  ***p<0.01

*Source: Author constructed*
Table 11(Column 3) shows that around 23% variations in quantity of environmental disclosures can be explained by managers’ concern on purpose of response and other independent variables. Furthermore, it indicates that if managers’ perceptions on maintain legitimacy rise by a level (example, from important to very important), quantity of environmental disclosure will be increased by about 30 sentences. When size of company is increased by a log level, quantity of environmental disclosures will be enhanced by about 8 sentences. But, age is not a significant influence on quantity of environmental disclosures \( p < 0.05 \).

**Hypothesis testing**

H1: Managers’ perception to gain legitimacy is positively associated with the quality and quantity of a company’s environmental disclosure.

Managers’ perception to gaining legitimacy is statistically significant positive correlation with the quality \((r = 0.311, p<0.01)\) and quantity \((r = 0.278, p<0.01)\) of a company’s environmental disclosure in bivariate (Table 9) and gaining legitimacy is positive sign with quality of environmental disclosure in multivariate analysis (Table 11) at \( p < 0.1 \) whereas quantity of environmental disclosure is not significantly related with gaining legitimacy. It is concluded that managers’ assessment to gain legitimacy is positively associated with the quality of a company’s environmental disclosure.

O’Donovan (2002) noted when the management tried to improve the level of gaining legitimacy they use legitimacy tactic concerning attempt to alter social values or shape perceptions of the organization. Result of this study is also consistent with the result of O’Donovan (2002). That is why, to gain legitimacy, management has to disclose more quality and quantity of environmental information.

H2: Manager’s perception to maintain legitimacy is positively associated with the quantity and quality of a company’s environmental disclosure.

Managers’ perception to maintaining legitimacy has consistently revealed significant positive association with the quality \((r = 0.330, p<0.01)\) and quantity \((r = 0.287, p< 0.01)\) of a company’s environmental disclosures both bivariate (Table 9) and regression analysis (Table 11) at significance level 5%. It shows that importance perceived by management about maintaining legitimacy is positively associated with the quality and quantity of a company’s environmental disclosure.

This finding is clearly related with finding of O’Donovan (2002) as he found that avoiding disclosure is not appropriate and they ought to report the environmental information to stakeholder for maintaining legitimacy.

H3: Managers’ assessment to repair legitimacy is positively associated with the quantity and quality of a company’s environmental disclosure.

Managers’ perception on repairing legitimacy is not significantly correlated with the quality \((r = 0.028, p>0.05)\) and quantity \((r = -0.014, p>0.05)\) of a company’s environmental disclosure in bivariate (Table 9) analysis. However, when regressions run exclusively repair legitimacy with quality or quantity of environmental disclosure, results of regression show
that repair legitimacy relates insignificant positive and negative relationship with quality or quantity of environmental disclosure, respectively (not tabulated) at p>0.05. But, repairing legitimacy is significant negative relationship in overall regression analysis at p<0.05. It shows that managers’ assessment to repairing legitimacy is negatively correlated with the quantity and quality of a company’s environmental disclosure.

O’Donovan (2002) strongly suggested company has to report in case of repairing legitimacy while the result of this study are contradictory to his findings. As the Sri Lankan government implemented strong environmental regulations, companies did not pollute the environment by substantial amount and not lose their legitimacy. Because of that, companies did not place much importance on repairing legitimacy via disclosure. In addition, it was not observed that there was any notable incident in companies’ annual report by reviewing. Therefore, perfect conclusion could not be taken in respect of repair legitimacy. It should be inquired in further studies how executives repair legitimacy in case of losing their legitimacy.

H4: There is a relationship between financial conditions and quantity and quality of environmental disclosures.

Even though bivariate (Table 9) and multivariate analysis (Table 11) show negative sign between average return on assets and quality or quantity of environmental disclosures (r = -0.089 or -0.088, p>0.05) as well as negative sign between debt to equity and quality or quantity of environmental disclosures (r = -0.053 or -0.047, p>0.05), the relationships are not statistically significant at 0.05 level.

**Control variables**

Control variables, age of firm and firm size, are included to control the possible effects of other extraneous variables that could influence the result of the quantitative analysis. Result shows that only size of the firm is supported as influencing the model and age is not an influence in the decision to disclose environmental information. Finding of this study relating to size is associated with findings of Clarkson et al. (2008), Gupta (2008), Patten (2002) and Roberts (1992). However, Clarkson et al. (2008) measured size in terms of total assets. But, finding of size is opposite to Al-Tuwaijri et al. (2004) where they measured size in terms of natural log of market value of common equity. Furthermore, result of age is similar to Elijido-Ten (2009).

**CONCLUSIONS**

The study examines how managerial perception on various stakeholders and purpose of response relate with actual environmental disclosure. Quality and quantity of environmental disclosure, financial condition and control variable were measured from annual reports of companies whereas managerial perceptions of stakeholder and purpose of response were collected via questionnaires. The study shows that importance of each stakeholder to make a decision to report environmental information varies where government is the most important stakeholder. After this, shareholder is very important to them, closely followed by environmentalists and public are important to company while competitor and supplier are least important to them for making such decision.

True and fair view of operations, develop corporate image, stakeholders’ right to know, a belief in accountability to report and competitive advantage are rated as very
important motives for disclosing environmental information by the companies. Nonetheless, distract attention from other areas is least important.

There are moderate associations between the managers’ perception on various stakeholders and purpose of response. Government, environmentalists and employees are greatly related with gaining legitimacy for getting legitimate approval from them while shareholder, lender, customer, supplier, competitor, and public highly correlated with maintain legitimacy. The study also shows that competitor and media is highly correlated with repairing legitimacy.

Further, results reveal that core purpose of disclosing environmental information by companies is maintaining legitimacy than gaining or repairing legitimacy. Around 27% and 23% of variation in dependent variables quality as well as quantity of environmental disclosures could be explained by encompassing all independent variables respectively. Results reveal that managerial perception on various stakeholders regarding environmental performance is reflected on companies’ environmental disclosure for maintaining legitimacy and achieving social recognition.

FUTURE RESEARCH

Environmental information of the study was measured from annual reports. However, companies report environmental information through other communication media like website, press release etc. as similar study could be undertaken by incorporating environmental information from other media. Comparative studies could be carried out to investigate the significant differences between developing and developed countries regarding motives of environmental reporting using the conceptual framework. Although stakeholders are demanding environmental information from companies, level of importance given by managers to each stakeholder varies according to the managers’ purpose of response towards environmental reporting. Therefore, it is necessary to explore the nature of the environmental expectations and pressures imposed upon the Sri Lankan public companies by stakeholders, and how those expectations and pressures are managed by the companies via the provision of environmental disclosures in order to have comprehensive insights of Sri Lankan corporate environmental reporting phenomenon.

IMPLICATIONS OF THE STUDY

According to the findings, in order to ensure the legitimacy, companies have to identify their important stakeholder prior to report environmental information. Further, companies have to formulate proper policies about environmental management system and disclosures. It is observed that there is a low credibility of reporting and variation in reporting pattern among the companies. Therefore, government could set environmental accounting standards regarding how environmental performance should be measured and reported. Moreover, stakeholder could use the environmental disclosure index to assess company position of environmental performance and disclosures.
REFERENCES


Ernst and Young and GreenBiz (2011) From CFO involvement to employee engagement: six key trends in corporate sustainability, USA: Ernst and Young


