Environmental Disclosure Practice of Nepalese “A” Listed Companies
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Abstract: The disclosure of environment related information is an inevitable component of corporate social reporting paradigm. Due to growing awareness to protect environment, firms around the globe are supposed to be involved in activities in protection and betterment of environment. The stakeholder theory suggests for considering stakeholders while making corporate strategies and reporting them information including initiations done in behalf of environmental responsibility. This paper attempts to study the corporate environmental disclosure practice of selected 45 NEPSE “A” listed companies of Nepal. Different ten measures of this environmental theme were considered for analysis. Content analysis was applied to know the extent of disclosure practice of the companies and variance test to examine variations in environmental disclosure of the companies within seven industry types. The result of content analysis indicated that disclosure status of environment information related items is very low and there is a significant variation in environmental disclosure practice of the companies across seven industry types.

Keywords: Corporate social reporting, environmental disclosure, environmental management, content analysis, Nepalese “A” listed companies

Introduction

In recent decades Corporate social reporting and disclosure (CSRD) has caught more attention in business and academic arena. Due to the growing trend of business acidities and consumerism, many issues regarding corporate performance, corporate social responsibilities and corporate accountability have got attention. Corporate obligation of various activities in behalf of the larger society as corporate social responsibility and appropriate disclosure of the initiations of the firms nowadays are not only the ethical concerns but has risen as legal issues. Mathews and Perera (1995) define CSRD as “at the very least, means an extension of disclosure into non-traditional areas such as providing information about employees, products, community service and the prevention or reduction of pollution. Guthrie and Mathews (1985) define CSRD as “the provision of financial and non-financial information relating to an organization’s interaction with its physical and social environment.”

Organizational initiations for environmental betterment and protection activities are one of the central concerns of CSRD with responding growing stakeholder pressures. In the view of Gray et al. (1995) CSRD is- “The process of communicating the social and environmental effects of organizations’ economic actions to particular interest groups within society and to society at large. Similarly Deegan (2002) has defined corporate social responsibility disclosure as the
system of provision of information about the performance of an organization with concern to its interaction with its physical and social environment and has emphasized to Environmental performance which requires active involvement of the firms in environmental activities and disclosure which is often referred as environmental accounting.

Environmental accounting is concerned with disclosure of firm’s environment well being related actions. With increasing social focus on the environment, this accounting fills an expectation role, to measure environmental performance. It provides reports for both internal use, generating environmental information to help make management decisions on pricing, controlling overhead and capital budgeting, and external use, disclosing environmental information of interest to the public and to the financial community. Internal use is better termed environmental management accounting (Bartolomeo et al., 2000).

In the context of environmental disclosure, Mathews (1997) has proposed a regulatory framework and emphasis of the framework has focused in some crucial area like; raise awareness of environmental issues, develop guidelines to assist identification of environmental issues and evaluation and reporting of those issues provide education programs across disciplines focused on environmental issues and their accounting treatment and, develop practices of environmental accounting, with recommendations on best practices.

The corporate environmental movement and disclosure behaviors are comprised of two distinct approaches characterized by different driving forces. During the early stage, the movement was driven by the compliance-based paradigm in which legal and regulatory considerations were the primary driving forces behind corporate environmental responses (Li, 2001; Rosen, 2001). Under this approach firms wish to obey the law and avoid legal sanctions. The second approach is driven by the competitive advantage-based view, which argues that economics and ecology are compatible and superior environmental performance leads to above-average industry profits (Rosen, 2001; Russo and Fouts, 1997). As environmental issues have caught global attention, the firms engaged in environmentally friendly activities achieve more support of the larger society and then higher corporate image, which lead to competitive performance at market.

In Nepalese context, firms have shown theirs accountable behavior to take part in the activities to protect and preserve environment due to legal and ethical responsibilities in recent decade as their corporate social responsibility. The firms listed in Nepal Stock Exchange (NEPSE) as “A” category, regarded as well performers in the economy, have disclosed environmental related information in their annual reports. The main purpose of this paper is to examine environmental disclosure practice and variations of disclosing environment related information by Nepalese “A” listed companies.
Review of Literature

As business organizations consume all the required resources from the society. While conversion of resources to consumable products, different types of environmental omissions are produced. Environmental disclosure is another core area of corporate social reporting and disclosure. Basically this includes social activities aiming to reduce the negative impact of the organization's operations on the environment. Organizations have to spend certain amount for the betterment of environment and pollution control. Such activities are designed to preserve and protect the surrounding environment and natural resources. This is one of the most important aspects of CSRD due to the damages caused to the environment by water, air, soil, and noise pollution (Shaeer, 1998).

The stakeholder theory is a leading framework that suggests why firms obligate their social and environmental responsibility disclose to their various stakeholders. As stakeholders provide all the inputs needed and consume outputs of a business system, the prime responsibility of all organization is to satisfy stakeholder interests and their pressures to be environmentally friendly. Act responsibly to the recognition of stakeholders who demand social information, together with the impact of activities that are harmful to the environment, have created a favorable context for the disclosure of data which respect the interaction between the company and the environment. The progressive increase in the number of obligatory rules worldwide has also contributed towards the creation of this situation (Tilt, 1994). According to the premises of stakeholder theory, management supplies information designed to satisfy the stakeholders, fundamentally the most relevant (Roberts, 1992).

Regarding related studies, Adhikari and Tondkar (2005) studied environmental disclosures and found they encompass items as; waste management programs, emissions levels and controls, environmental impact assessments, fish-stocking programs, energy conservation activities, landscaping activities, electromagnetic radiation monitoring systems etc.

The result s of the analyses into environmental disclosure carried out in earlier works can be summarized as follows:

The environmental data provided are essentially qualitative (Adams et al., 1995; Hackston and Milne, 1996) and positive (Guthrie and Parker, 1990; Deegan and Gordon, 1996). This fact could be related to the perception on the part of management that the data are linked to the image of the company (Jaggi and Zhao, 1996). The main consequence is that users perceive the need to introduce obligatory standards (Deegan and Rankin, 1997).

There are significant differences between industries in both the quantity and quality of environmental information reported (Adams et al., 1995; Gamble et al., 1995; Jaggi and Zhao,
Thus, there is a significant relationship between the sectors with the greatest polluting potential and a high level of disclosure (Freedman and Jaggi, 1996).

There has been a positive evolution in the quantity of social and environmental information reported as a response to the pressure exerted by stakeholders (Gamble et al., 1995; Niskala and Pretes, 1995; Deegan and Gordon, 1996).

Methodology and Hypothesis

Methodology

The population of this study comprised a total of 112 NEPSE “A” listed companies and among them 45 within them were selected randomly. For content analysis purpose, a total of 135 annual reports of 45 these companies within seven clusters were selected as unit of observation. The annual reports of the companies from 2012/13 to 2014/15 were analyzed. Content analysis is a prime research method used in this study. It has been applied in order to depict the existing trend and pattern of environmental information disclosure practice followed by these companies. This method is commonly used in assessing the quantity of environmental disclosure. Contents related to environmental disclosure within the annual reports were located, verified, recorded and analyzed as per pre-established metrics.

For content analysis purpose, altogether ten measures were used to assess environmental disclosure status of the companies. These measures are; Environmental policy and company concern for environment, compliance with pollution laws and regulations, prevention or repair environmental damage, conservation of natural resources, using recycled materials/Waste management programs, receiving awards, emissions levels and controls, environmental impact assessments, energy conservation activities, and others. The disclosure status of the companies regarding these measures has been remarked on the basis of consistency in disclosing the items.

To analyze research question—whether Nepalese companies across seven industry types disclose environmental information in same or different extent? The following alternative hypothesis was postulated to examine the question;

H1 (1) There are significant differences in disclosing environmental information across Nepalese “A” listed companies across seven industry types.
**Result and Interpretations**

**Environmental Disclosure Practice of the Companies**

Table 1 depicts some descriptive statistics of the environment related information theme as disclosed by Nepalese companies in their annual reports.

Table 1

*Descriptive Statistics of Environmental Disclosure Items*

| Measures of environmental theme | Disclosed Number | Mean   | Std. Deviation | Rank |
|---------------------------------|------------------|--------|----------------|------|
| 1. Environmental policy and company concern for environment | 3                | 0.0667 | 0.25226        | 6    |
| 2. Compliance with pollution laws and regulations | 2                | 0.0444 | 0.20841        | 7    |
| 3. Prevention or repair environmental damage | 9                | 0.2000 | 0.40452        | 1    |
| 4. Conservation of natural resources | 5                | 0.1111 | 0.31782        | 3    |
| 5. Using recycled materials/ Waste management programs | 2                | 0.0444 | 0.20841        | 8    |
| 6. Receiving awards | 4                | 0.0889 | 0.28780        | 4    |
| 7. Emissions levels and controls | 3                | 0.0667 | 0.25226        | 5    |
| 8. Environmental impact assessments | 0                | 0.0000 | 0.00000        | 9    |
| 9. Energy conservation activities | 8                | 0.1778 | 0.38665        | 2    |
| 10. Environmental others | 0                | 0.0000 | 0.00000        | 10   |
As per the results, among ten measures used to assess environmental concern and disclosure status of the companies, preservation or repair environmental damage has found as most disclosed item (with highest mean value: .20). Nepalese companies have disclosed their energy conservation activities (mean value: .1778) after environment prevention activities. The third more disclosed item was conservation of natural resources (mean value: .1111). In addition, other environmental measures - award received in the field for contribution in environment field, attempts done in maintaining and control of emission levels, and environment policy and company concern for environment, compliance with pollution laws are very less disclosed items. Further more, two of the items-environmental impact assessment and environmental others were not disclosed by these companies.

The mean value of the environmental theme is .0800 with standard deviation .15166 suggests that this item is least disclosed. The disclosure tendency of companies is highly varied since standard deviation is higher even than of the mean value.

**Nature/Mode of Environmental Disclosure**

Table 2 depicts the nature or mode of the disclosure applied by the companies for disclosure of environment related activities done by the companies in their annual reports.

Table 2

| Nature of Environmental Disclosure |
|-----------------------------------|
| Company Type | Narrative | Narrative and Monetary | Narrative, Monetary and Quantitative | Nothing Disclosed | Total |
|---------------|------------|------------------------|--------------------------------------|-----------------|------|
| Commercial Bank | 4 | 2 | 0 | 3 | 9 |
| Insurance Company | 0 | 0 | 0 | 6 | 6 |
| Development Bank | 1 | 1 | 1 | 13 | 16 |
| Finance Company | 1 | 0 | 0 | 10 | 11 |
| Hotel | 1 | 0 | 0 | 0 | 1 |
| Hydropower | 1 | 0 | 0 | 0 | 1 |
The result suggests that majority of the companies (8 in number and 17.8% in total) have disclosed their environment concerned information in narrative way. Similarly three companies comprising 6.7% have used narrative and monetary mode for the disclosure. In total two companies holding 4.4% in total have used narrative, monetary and quantitative mode for the disclosure. The result shows that Nepalese companies preferred the subjective based narrative disclosure to report their environment related concerns.

Environmental Disclosure across Industry Types

Figure 1 reports the various level of environmental information disclosure done by the companies within seven industrial settings.

![Graph showing environmental disclosure across industry types](image)

**Figure 1.** Environmental Information Disclosure Status of Nepalese Companies across Industry Types

According to the means plot presented above, the companies within seven industry settings have disclosed environmental related information in their annual report in different extent. As per the result, the company under others group (Nepal Telecom) has highest means in environmental disclosure and hotel group has second highest means indicating more disclosure of environmental information than of others. Similarly companies under commercial bank, development bank and hydropower groups have disclosed such information moderately.
However the companies under insurance company and finance company group produced lowest means representing very low disclosure of environmental items in their annual reports.

Table 3 reports the test results in order to examine the variations in reporting practice of environment related information disclosure across seven industry types of the companies.

Table 3

| Distance       | Sum of Squares | d.f. | Mean Square | F-statistic | Sig. p-value |
|----------------|----------------|------|-------------|-------------|--------------|
| Between Groups | .477           | 6    | .079        | 5.645       | .000         |
| Within Groups  | .535           | 38   | .014        |             |              |
| Total          | 1.012          | 44   |             |             |              |

The results indicate significance variations in disclosure of environmental items between groups (SS-.477) and within the groups (SS-.535). Since the model has produced F-value of 5.645 (P value 0.000) is statistically significant.

**Conclusion**

Due to more concern of larger society about environmental issues, more companies tend to disclose information about their environmental performance in response to stakeholder demands of environmental accountability. The environmental disclosure practice the firms provide a comprehensive picture of firm’s environmental management initiatives. As Nepalese economy is developing and in transition phase, Nepalese companies This study has revealed some facts and patterns regarding the disclosures of environmental management practices being exercised by Nepalese “A” listed companies. The results suggest that Nepalese companies have disclosed information related to nine area of environment including; environmental policy and company concern for environment, compliance with pollution laws and regulations, prevention or repair environmental damage, conservation of natural resources, using recycled materials/ Waste management programs, receiving awards, emissions levels and controls, environmental impact assessments, and energy conservation activities to some extent only.

In respect to disclosure mode or pattern, majority of Nepalese companies have disclosed environmental disclosure in narrative way. Besides narrative mode some of them have used the
combination disclosure of narrative and monetary information regarding environmental initiations. Furth more few of them have applied narrative, monetary and quantitative disclosure of the theme. However, the scarce presence of quantitative, financial and non-financial information, similar to that found in other related studies (Guthrie and Parker, 1990; Adams et al., 1995; Hackston and Milne, 1996; Deegan and Gordon, 1996; Liena and Moneva, 2000) revealed in the context of Nepal.

The study has analyzed the variations of disclosure practice of environmental disclosure across seven industrial settings of the companies as; commercial bank, insurance company, development bank, finance company, hotel hydropower and others clusters. The companies from others cluster (Nepal Telecom) has highest disclosure rate of environmental information among all. The companies within hotel and commercial banking industries have disclosed such information moderately however finance companies and insurance companies have lower disclosure rate. The hypothesis test has exposed a significant difference in environmental disclosure practice of the companies from seven industry clusters.

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