

Full Length Research Paper

Environmental management tool for plantation companies (Pulpwire)

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Much has been debated on the necessity of the better corporate disclosures on the issues affecting the stakeholders. This research provides an insight into the disclosures of plantation companies on the environmental preservation in relation to the earth, water and air (EWA). The study gauged the actual level of the corporate environmental disclosure (CERD) using National Annual Corporate Report Award (NACRA) checklist. We used the total land bank area occupied by a company to calculate the concentration of plantation activities in order to determine the extent of CERD required from the companies. This approach discards the “one size fits all” approach to solve disclosure problem. Pulpwire tool developed in this research can identify gaps in the required disclosure of the plantation companies and alert the companies to take necessary corrective actions.

Key words: Environment, environmental management tools, plantation companies.

INTRODUCTION

In the early 1980s, corporate social and environmental reporting (CSER) in Malaysia was non-existent. The foreign-owned corporations had actually triggered the movement towards social reporting in the annual reports (Teoh and Thong, 1984).

However, it took a long time for its acceptance in the corporate sector as most of the companies were reluctant to disclose more than what is mandated (Hossain et al., 1994; Tan et al, 1990). During the 1990s, concerted efforts to bring in the normative issues impact of business externalities on the society and environment into corporate disclosure took off seriously.

The Malaysian institute of accountants (MIA), the Malaysian institute of management (MIM) and the

Malaysian institute of certified public accountants (MICPA) launched the National annual corporate report awards (NACRA) to promote and enhance presentation and reporting of social and environmental information. The Kuala Lumpur stock exchange (KLSE) also initiated the KLSE corporate awards to encourage companies to demonstrate high standards of corporate responsibility.

In 2004, Association of chartered certified accountants (ACCA) survey found that there was an increasing trend of social reporting by KLSE main board listed companies as compared to 2002 and 2003. StarBiz-ICR Malaysia corporate responsibility awards is another effort which is jointly organized by Star publications (M) Bhd and the Institute of corporate responsibility Malaysia (ICRM) annually to recognise and honour companies that demonstrate outstanding corporate responsibility (CR) practices that go beyond community and philanthropic activities. The aim is to encourage responsible business practices with more focus on how business practices can be responsible in the ways businesses make their money compared to what they do with the money once they have made it. As a continuous effort to inculcate and encourage CSER among public listed companies, the government launched the ‘Silver Book’ to government-linked companies (GLCs) in 2006. It highlights seven core areas of contributions to society. These include

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Abbreviations: CERD, Corporate environmental disclosure; EWA, earth, water and air; NACRA, National annual corporate reporting award; CSER, corporate social and environmental reporting; KLSE, the Kuala Lumpur stock exchange; CR, corporate responsibility; CSR, corporate social responsibility; HHI, Herfindahl-Hirschman index; ACCA, Association of chartered certified accountants.

human rights, employee welfare, customer service, supply partnership, environmental protection, community involvement and ethical behaviour (Silver Book, 2006).

Most of the previous studies on the CSER disclosure in Malaysia are of exploratory nature. For example, ACCA (2002) looked at the annual reports, stand-alone environmental reports and internet search of all listed companies on KLSE between 1999 and 2001. It found that most companies were using annual report for communicating their environmental information to the stakeholders; however, the space given to such disclosure was less than a page. Furthermore, these companies did not indicate the impact and progress on environmental goals achievements. In a similar study, Romlah et al. (2002) also highlighted that despite the increase, the environmental information was not well reported. Sawani et al. (2009) examined the current state of environmental management practices among Malaysian ISO 14001 accredited companies.

The study showed that these companies have not yet developed a comprehensive environmental management accounting system. There are many stakeholders who use environmental and societal performance indicators to gauge the social and environmental responsiveness of corporations (Othman and Ameer, 2009); however, the most common types of responsibilities reported in the annual reports of Malaysian companies are: donation, scholarship and fund raising activities. These companies are responsible for their actions due to the implied social contract between business and society (Nawir and Santoso, 2005). One way to prove that these companies are accountable for their environmental practices is through increased reporting to the public about those activities that have an environmental impact (Othman and Ameer, 2010).

This research is different from previous studies on CSER. First, none of the afore studies has focused exclusively on the palm oil plantation sector despite its national importance. Malaysia is the second -largest producer of palm oil in the world with a yearly production of more than 13 million tons of crude palm oil and plantation covering 11% of the Malaysian land area (Othman and Ameer, 2010). Secondly, these studies do not go beyond the descriptive statistics and percentages. There is no discussion on the type and extent of corporate social responsibility (CSR) reporting of companies with respect to the impact of their operations on earth, water and air (EWA). The environmental disclosures of plantation companies should cover performance related to inputs (for example, material, energy, water,) and outputs (emissions, effluents and waste). It should cover preservation of biodiversity. Most lands in the states of Sabah and Sarawak adjacent to the rainforest of Borneo were used by local people, vibrant with flora and fauna with idiosyncratic characteristics before the conversion of land into palm oil plantation fields. The extension of palm oil plantation has been considered dangerous for the survival of the animal and

plant species by the environmentalist (Koponen and Poulsen, 2008). Similarly, issue of open burning of disused plants could create environmental hazards in the country.

None of the studies provide a solution to objectively assess the environmental footprint of these companies and using this key information to determine the reasonable level of corporate environmental disclosure (CERD) expected from the corporations. We develop an interactive tool Pulpwire using the information on the land bank areas occupied by these companies. A company which has the largest land bank area (plantation area) in any state in Malaysia should have extensive CERD and contribute back to the stakeholders who reside in the state. In this regard, Pulpwire -environmental management tool can help a company to assess and evaluate how concentration of its plantation activities has (would) affect the surrounding environment and biodiversity. This stakeholders' management approach would help these companies to find sustainable solution to preservation of the EWA. It would also ensure that their vision and mission of CSR is fulfilled. We believe that plantation companies have the social obligations to disclose the impact of their operations on three important elements of the mother earth - EWA. It would help the stakeholders to engage with companies on issues related to plantation companies' operations. They are responsible for their actions because individual within them have the ability to make decisions due to implied social contract between a business and society.

RESEARCH METHODS

Annual reports of listed palm oil companies were the main source of data on the CERD and land bank area. Only those plantation companies whose audited annual reports for the fiscal year-end 2007 were available from the Bursa Malaysia website (formerly known as KLSE) were selected. The final sample consisted of 60 companies.

The methodology consisted of two steps which helped us develop the Pulpwire. First, we gauged the extent of CERD (hereafter EWA disclosure). We used National annual corporate reporting awards (NACRA) 2009 checklist, which categorized disclosure into four main items: environmental policy, measurement systems in place to measure emission of carbon dioxide, and other green house gases; energy consumption; water consumption, waster production and management; target for improvements, and impact on biodiversity. A weight was given to each item as follows: environmental policy (10%), measurement system (40%), target setting for improvements and other significant initiatives (20%), environmental impact assessment and impact on biodiversity (30%). Thus, if a company has complied with all criteria, then it would get full marks of 100% on EWA disclosure.

Second, we used the land bank area reported in the annual reports to calculate an index. This method is akin to Herfindahl- Hirschman index (HHI) widely used in economics and finance literature.

First, we calculated the concentration ratio as follows. For example, total land bank area of company A in state 1 is divided by the total land bank area of all plantation companies in state 1. There are 13 states in Malaysia; therefore we repeated this calculation for all the states for company A. Then, we squared the values for company A for each state and summed these squared

Table 1. Pulpwire report – Gap.

Bil	Company Name	Gap
1	Asiatic development Berhad	High
2	Boustead holdings Berhad	High
3	IOI corporation Berhad	High
4	Kuala Lumpur Kepong Berhad	High
5	TDM Berhad	Low
6	Tradewinds plantation Berhad	Low
7	United Malacca Berhad	Low

Table 2. Extent of required disclosures and the gap between the actual disclosures.

Gap	Not available	Required disclosure	Required high disclosure	Required medium disclosure	Total
High	18	32	5	-	55
Low	-	2	2	1	5
Total	18	34	7	1	60

values to get an index of concentration of activities for company A. The higher the value of HHI, the higher the concentration of palm oil plantation related activities of company A and therefore a high CERD is expected from this company.

We used the average of the index to find the gap between the actual and required CERD that is, if a company's index value is more than the average index value of 0.19 and its EWA score is between 0-30%; then Pulpwire system would flag the message that gap between the actual and required CERD is High. It is due the fact that a high index value means intensive plantation activities might be damaging to EWA; thus alerting the company that it has to establish environmental policy and put in place measurement system to assess its environmental impact on EWA. On the other hand, if a company's index value is less than the average index of 0.19 and its EWA score is between 60 and 100; then Pulpwire system would flag the message that gap between the actual and required CERD is medium to low. It reflects that such a company has already in place measurement system to assess its environmental impact on EWA. Table 1 provides a snapshot of Pulpwire identifying the name of the companies and the gap between actual CERD and required CERD.

RESULTS AND DISCUSSION

Our findings show that out of 60 companies, for 18 companies no CERD gap could be calculated due to non availability of their land bank area information. This is surprising that because we believe at the very least, these companies should disclose the size and location of their plantation areas. 42 companies were then categorized into required disclosure; required medium disclosure, and required high disclosure, based on their land bank area concentration in Malaysia. Table 2 shows the required disclosures and the gap between the actual disclosures.

“Required high disclosure” companies

Companies which are categorized as “required high disclosures” have high concentration of plantation activities in Malaysia. Due to the size of the plantation area, they pose higher risk to the EWA in Malaysia, which is why they are expected to disclose to a greater extent of the impact of their operations and initiatives taken to improve the current situation. There are 7 companies that are required to have high CERD: Asiatic development Berhad, Boustead Holdings Berhad, IOI corporation Berhad, Kuala Lumpur Kepong Berhad, TDM Berhad, tradewinds plantation Berhad and United Malacca Berhad. Table 3 shows the required high disclosures companies and the gap.

As shown in Table 3, only 2 companies have low gap. This means that the companies (TDM Berhad and Tradewinds Plantation Berhad) have managed to disclose nearly all the items that are required of them. The other 5 companies did not satisfactorily disclose their environmental policies, impact of their activities as indicated by the “high” gap.

The following are the extracts from TDM Berhad and Tradewinds Plantation Berhad 2007 annual reports in relation to their environmental policies, measurement system and target for improvement.

Environmental policies

Tradewinds Plantation Berhad group mentions in its environmental, health and safety report, in its annual report:

Table 3. Pulpwire report – “Required high disclosure companies” and the gap.

Bil	Company Name	Gap
1	Asiatic development Berhad	High
2	Boustead holdings Berhad	High
3	IOI corporation Berhad	High
4	Kuala Lumpur Kepong Berhad	High
5	TDM Berhad	Low
6	Tradewinds plantation Berhad	Low
7	United Malacca Berhad	High

The group is committed to environmental sustainability and makes concerted efforts to ensure that all activities carried out are in harmony with the environment and community we serve in. We remain steadfast in our efforts to protect, conserve and improve the state of the environment in the course of all our operations and development. (Tradewinds Plantation Bhd Group, Annual Report, 2007).

TDM Berhad in its Annual Report 2007 discloses:

Our environment, that is, the EWA where we live and work. Society includes our staff, business partners, suppliers, contractors and the public with whom we interact. Our shareholders, who would expect to see sustainable growth, financial excellence and strong corporate governance.

TDM Berhad has also stated that its plantation division has a commitment to manage investments by taking care of the condition of the soil; complying with existing laws; providing economic resources such as infrastructure, employment and livelihood; contributing to plantation workers' education and welfare; developing surrounding communities; and protecting the environment. The company has also disclosed the plantation division's initiatives toward protecting the environment such as practicing a 'zero burning' policy for clearing of rainforest and further plantation.

Measurement systems

The second item examined was whether a company had measurement systems in place to measure emissions of carbon dioxide and/or other greenhouse gases, energy consumption, water consumption, waste production and management.

TDM Berhad is practising an integrated pest management (IPM) system to ensure the pest population remains below the economic injury-causing level. Our food division's efforts towards protecting the environment include conformation to the standard requirements of the Malaysian environmental department. This involves the recycling of

processed plant waste, compliance with hazard analysis and critical control points (HACCP) rules and compliance with bio-security. (TDM Berhad, Annual Report, 2007).

Tradewinds Plantation Berhad Group has implemented pollution control measures to ensure that all their eight palm oil mills comply with the Department of Environment's (DOE) requirements in terms of effluent discharge, air emission, scheduled waste disposal and noise exposure. (Tradewinds Plantation Berhad Group, Annual Report, 2007)

Targets for improvement

Targets for improvement focus on whether the company has set targets for improvement and/or significant initiatives have been taken to reduce the EWA contamination. We found that most companies made such disclosures sparingly.

Tradewinds Plantation Berhad Group, for example, states in its annual report of 2007:

We also allocated capital expenditure for land irrigation which uses the treated effluent from our two mills in Sabah onto the estate lands. This avoids the direct discharge of the treated effluent into the river and helps to further reduce pollution and protect the environment. (Tradewinds Plantation Berhad Group, Annual Report, 2007).

TDM Berhad also mentions this as part of its initiatives in protecting the environment in its annual report of 2007:

Minimum use of herbicides to achieve equilibrium in weed and ground coverage when establishing a desirable vegetation species under oil palm, under our weed management policy. (TDM Berhad, Annual Report, 2007)

“Required medium disclosure companies”

There is only one company which is required to have

Table 4. Pulpwire Report - "Required Disclosure Companies" and the gap.

Bil	Company Name	Gap
1	Astral Asia Berhad	High
2	BLD plantation Berhad	High
3	Cepatwasan group Berhad	High
4	Chin Teck plantations Berhad	High
5	Ekran Bhd	High
6	Far East holdings Berhad	High
7	Glenealy plantations (M) Berhad	High
8	Harn Len corporation Bhd	High
9	IJM plantations Berhad	Low
10	Inch Kenneth Kajang Rubber PLC	High
11	Jaya Tiasa	High
12	Kim Loong resources Berhad	High
13	Kluang Rubber company (Malaya) Berhad	High
14	Kretam holdings Berhad	High
15	Kulim (Malaysia) Berhad	High
16	Kurnia Setia Berhad	High
17	Kwantas corporation Berhad	High
18	Ladang Perbadanan-Fima Berhad	High
19	Malpac holdings Berhad	High
20	MHC plantations Berhad	High
21	Multi vest resources Berhad	High
22	Negri Sembilan oil palms Berhad	Low
23	NPC resources Berhad	High
24	Rimbunan Sawit Berhad	High
25	Riverview Rubber Estates Berhad	High
26	Sarawak plantations Bhd	High
27	Sarawak oil palms Berhad	High
28	Subur Tiasa	High
29	Sungei Bagan Rubber company Berhad	High

medium disclosure, United plantation Berhad. This company has low gap between the required and the actual CERD. The company did not detail out its policy and measurement system but describes its target for improvement as stated as follows.

United Plantations Berhad in its annual report 2007, includes this statement in its environment section of the Statement on CSR:

Climate change and global warming have become a worldwide concern today due to the uncontrolled emissions of greenhouse gases. We obtained certification for carbon emission reductions (CERs) for the before mentioned projects from the Clean Development Mechanism Board (CDM) under the Kyoto protocol. (United Plantations Berhad, Annual Report, 2007)

"Required Disclosure Companies"

There are 29 companies required to have low disclosure

as shown in Table 4. Out of these 29 companies, only 2 companies have low gap between the required CERD and the actual disclosure.

These are evidenced in their 2007 annual reports. The companies are IJM Plantations Berhad and Negri Sembilan oil palms Berhad.

In terms of measurement system, Negri Sembilan oil palms Berhad discloses that:

Our palm oil mills adhere to strict compliance with the environmental laws governing mill operations, maintenance and improvements in areas relating to environmental standards, emission standards, noise level management and treatment of effluents and waste disposal. The visiting engineer will also look into environmental issues and compliance. Appropriate recommendations are made and necessary actions are taken for further improvement in compliance with environmental and related standards (Negri Sembilan Oil Palms Berhad, Annual Report, 2007).

In terms of environmental impact, the annual report of IJM Plantations Berhad, mentions about the monitoring of the impact:

The Group continues to monitor its impact on the environment and aims to develop partnerships to conserve resources and biodiversity . . . (IJM Plantations Berhad, Annual Report, 2007)

In summary, the findings magnifies the scale of problem in terms of lack of transparency and the accountability of these companies which we believe previous studies have been able to identify using the annual reports data. We are able to use the data on land bank area in a unique way to highlight these gaps at the same time highlighting where the problem lies such as no articulation of environmental policy and absence of the measurement systems to assess the environmental impact on EWA.

Conclusion

This research provides insight on the plantation companies' disclosures on environmental preservation in relation to the EWA. We gauged the actual level of the CERD using NACRA checklist. We used the total land bank area occupied by a company to calculate concentration of plantation activities to determine the extent of CERD required from the companies. Our findings show that some companies have not yet embarked on transparency and accountability in their CERD while others have taken concrete steps towards enhancing the extent of their CERD. We argue that with the inception of round table on sustainable palm oil (RSPO), Malaysian palm oil companies would have to move towards obtaining RSPO certificate; this certificate would give them an edge in the global markets as well as enhance their corporate reputation. Pulpwire tool developed in this research can identify gaps in the required disclosure of the plantation companies and alert the companies to take necessary corrective actions. We propose that using the Pulpwire as additional objective assessment tool, companies would be able to satisfy multiple stakeholders demand for objectivity in their CERD disclosure.

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