

PROPOSING A STUDY ON GLOBAL WATER SUSTAINABILITY REPORTING

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ABSTRACT

This paper offers a study on the sustainability reporting which focus on the water used by agricultural company. Using the positivist quantitative empirical paradigm this study intends to explore the extent of water sustainability reports of the global top 500 agriculture companies in several countries by using quantitative empirical study. A large scale dataset will be used for statistical analysis and hypotheses testing based on legitimacy theory tenets which will be employed in this research. Bearing in mind that this paper is a part of upcoming research, thus no result will be presented at this stage.

Keywords: Water sustainability, disclosure, legitimate theory

INTRODUCTION

Water resources take an essential role for many key economic sectors for example agriculture, industry and tourism (UNEP 2005). Based on prior research, the percentage of a country's total water supply used for irrigated agriculture is about 70% (UNESCO, 2006). About 86% of the total freshwater worldwide is utilised by agriculture (Hoekstra and Chapagain, 2007). For instance, the irrigation sector in Australia consumes two thirds of all water (Ahmad, Tower, Plummer and Aripin, 2010). The impact of the agricultural sector upon the global water condition cannot be underestimated.

On the other hand, the impact of organizational activities on social and environmental aspect including water sustainability has attracted global concern (see for example Larrinaga-Gonzales and Perez-Chamorro 2008). The fundamental for corporate transparency and accountability which is water sustainability disclosures provides better information about the companies' activities concerning water use to stakeholders. Although there has been more attention in the environmental disclosure literature in the area of some industries (see for example Nurhayati et al. 2006; Cho and Patten 2007; Aerts and Cormier 2009; and Rankin et al. 2011), not many research has been conducted on water sustainability disclosure worldwide due to the limited information provided by companies concerning the total available water inflows and outflows of their entire water cycle (Ahmad, Tower, Plummer and Aripin, 2010).

In recent years, some researchers have discussed the theoretical framework of legitimacy theory for Corporate Social Responsibility Disclosure (CSR) practices (see for example Wilmshurst and Frost 2000; Islam and Deegan 2008). According to Branco (2006), the legitimacy theory is established as a result of social contract which implicitly exists between business and society. This theory posits that companies should provide adequate social information which is balanced and suitable to the social values embodied in their activities and the norms of society (Lindblom 1983, quoted in Guthrie and Parker 1989, 344).

According to the legitimacy theory, the sustainability disclosure which is adopted by companies can be used to legitimate their activities when the business entities do not meet expectations of society (Deegan, 2002). Based on legitimacy theory, this proposed study will explore the extent of water sustainability reports in agriculture companies globally.

Four hypotheses based on legitimacy theory can be purposed in this study. They are:

1. **H1:** The companies that have voluntarily implemented an environmental management system (EMS) are more expected to disclose water sustainability in their annual reports.
2. **H2:** There is a positive association between the presence of a corporate social responsibility (CSR) committee and the extent of the water sustainability disclosure in their annual reports.
3. **H3:** There is a positive correlation between the size of a company and the extent of the water sustainability disclosure in their annual reports.
4. **H4:** There is a positive correlation between the profitability of the company and the extent of the water sustainability disclosure in their annual reports.

Two research questions can be proposed in this study. Those are (1) What is the extent of water sustainability disclosure across the sample? (2) What are the factors that influence water sustainability issues to their stakeholders?

This study is relevant for two reasons. First, obtaining a better understanding of the agricultural sector massive use of worldwide water resources is crucial for societal welfare. Second, it contributes to future research and development by testing legitimacy theory to better understand water reporting. Finally, the purposes of this study are to measure to what extent agriculture companies provide water sustainability disclosures in their annual reports globally based on legitimacy theory.

METHODOLOGY

This study is a cross sectional study which uses top 500 agriculture companies around the world as the sample set. Data for all variables are gathered from the year 2014 annual reports. The dependent variable in this study is a benchmark disclosure index composed of 21 key water disclosure items which are based on the United Nation System of Environmental and Economic Accounting for Water (UN SEEAW) framework as the influential reference guide to explore transparency of financial reporting about the various concepts of accounting for water (Ahmad, Tower, Plummer and Aripin, 2010).

The independent predictor variables of this study based on legitimacy theory are:

1. The present of environmental management system (EMS). EMS is defined as “*systematic planning, implementation and control activities in order to achieve continual improvement of corporate environmental performance*” (United Nations 2001, p.176). Consistent with Rankin et al. (2011), it is measured by categorical variable; 1 is awarded for firms which have EMS and 0 for firms with no EMS.
2. The presence of a CSR committee (Adams 2002). This variable is determined by a dummy variable that takes the value of 1 if the company has a CSR committee and 0 else.
3. The firm size. This variable is generally used as a substitute for public view that is measured by whole assets.
4. The profitability. The net profit to sales ratio will be used as the measures of profitability.

Two control variables will be engaged in this study. The first control variable is corporate governance mechanisms which will be determined by the percentage of independence directors to total directors. The second control variable is ownership structure which will be measured as the level of ownership concentration.

SUMMARY

This paper proposed a study to examine the extent of agriculture companies worldwide in disclosing water sustainability in their annual reports. The legitimacy theory will be used to examine the report through four independent variables. Those are the presence of EMS, the presence of CSR committee, the firm size and the profitability. Statistical analysis will be employed to analyse a large scale dataset of the global top 500 agriculture companies worldwide.

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