

Managerial Attitudes towards Environmental Sustainability among SMEs in Bangladesh

*Khan Ferdousour Rahman**

Abstract

Understanding the relationship between business and environment among SMEs is very important. This paper explores the awareness and attitudes of SME managers towards environmental sustainability and their opinion on how things can be developed based on the theory of planned behavior. This study adopted quantitative technique through face-to-face interview with questionnaires containing Likert scale structured questions along with open-ended questions. The findings contend that when the institutional environment is perceived by the managers as supportive of sound natural environment management practices, the institutions are more likely to develop a positive attitude toward environmental issues and concerns. Such managerial attitudes are likely to lead to a positive and proactive orientation of their firms toward environmental sustainability. The paper concludes with some recommendations on how to improve environmental management knowledge and know-how among managers of SMEs in Bangladesh.

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* Department of Environmental Science, State University of Bangladesh. E-mail: ferdous@sub.edu.bd

1.0 Background

Environmental issues present the most complex and important managerial challenges of the 21st century (NAS 1997). With growing global concerns about the depletion of natural resources and reductions in biodiversity, understanding why and how businesses engage in environmental sustainability is of increasing interest and importance to both academics and practitioners (Dunphy et al. 2007; Laszlo 2003; Holliday et al. 2002). The small and medium enterprise (SME) sector is often described as ‘hard to reach’ and lagging behind in terms of ‘green business’ due to management and resourcing issues characteristic of SMEs. The service industries have escaped blame for environmental degradation despite representing a big part of the economy of a country. This is true particularly for SME, which in several developing countries has been highly prioritized to the extent that it has taken over from traditional economies in terms of contribution to GNP, employment and export receipts. SMEs are now expected to take explicitly into account all aspects of their performances including environmental concern. The link between attitude and action is explored in this paper through the examination of the inter-relationship between awareness of environmental impact, attitude towards environmental issues, and environmental practice adoption.

In most economies, SMEs are the largest contributors to economic activity (Brammer et al. 2012; Klewitz and Hansen 2013). SMEs in South Asia have been identified as an important catalyst for economic growth. Additionally, SMEs in Bangladesh are playing a vital role to stimulate economic development including poverty reduction through employment generation. SMEs cover a wide range of business activities some of which have negative environmental impacts. Although a single SME might not represent a substantial threat to the natural environment, given the prominence of these businesses in the economy, SMEs could have a larger collective impact on the environment than large businesses (Brammer et al. 2012). It is, therefore, just as important for SMEs to address environmental concerns.

The scope of impacts varies in urban and rural settings and is caused by many factors. These factors can be intrinsic to the enterprise itself (waste generation, pollution, land/resource degradation). However, most informal sector activities do not cause significant harm to the environment and in some cases can be very beneficial – as with waste collectors and recycling businesses. It is also important to note that many of the harmful effects can be mitigated or reduced without threatening the viability and growth of the business. In many cases increased material/production efficiency which is a key element of conservation is mutually

beneficial since it saves businesses money and increases profits. However, the business impacts on environment (air, water, land, animal, plants and habitats) is of greater importance especially if economic activities play a part in threatening rare or endangered species of flora and fauna, polluting air, water, land and destruction of habitats.

Attitude has been defined by many authors. According to Newman and Martin (1982: 47), attitudes allow a person to react to an object in a positive or negative way and that attitudes can be trained and taught. Sinnott (2003) concluded that attitude and behavior are closely related and that the former determined the latter. Therefore, to promote an interest of SMEs toward environmental sustainability, one should pay more attention to the approach in directing the managers' attitude toward environmental sustainability by explicitly showing the pros and cons gathered from actual business examples of SMEs.

Many studies have given reasons for the slow start of incorporating environmental issues in SMEs, which include lack of clear incentive to promote environmental sustainability among the SMEs, and inadequate guidelines since most of the existing guidelines are designed for large corporations. By understanding an individual's attitudes or perception towards something, one could predict individual's overall pattern of responses (Ajzen and Fishbein 1980: 1).

2.0 The Problem of the Study

The globalization of economic activity has led to an intensification of competition on a worldwide scale. This situation is causing companies that do not adapt to this new scenario to see reduced profit margins. They are then forced to devise strategies to achieve competitive advantages that would allow them to recover or improve their profitability. On the other hand, growing concern about environmental deterioration has resulted in pressure for companies to incorporate more respectful behavior toward the environment, and this can be used as a strategic issue for making businesses competitive. In this context, the SMEs that provide the economic and business structure of many countries play an important role. In this respect, the greater the presence of SMEs in the economy, the greater their influence is on the level of sustainable economic development (Welford and Gouldson 1993; Vargas 2000).

Compared with large businesses, SMEs operate differently and face disparate challenges towards environmental sustainability (Bos-Brouwers 2010; Brammer et al. 2012). According to Boiral et al. (2014), SMEs lack knowledge of their

environmental impacts, and their cultural disposition of resistance to self-regulation and government intervention makes them less likely to implement an environmental management system. The lack of resources in SMEs might also play a deciding role in their choosing whether or not to implement an environmental management system. Brammer et al. (2012) further suggest that their informal structure, and the fact that SMEs are owner-managed, places more emphasis on personal choice and commitment in respect of environmental management.

For SMEs, initiation of environmental concern requires a better understanding and good management. Normally, SMEs respond to only customer needs and environmental restrictions enforced by laws rather than start initiatives by themselves. However, SMEs have played a major role in employment and have had significant influences on society. Therefore, encouraging SMEs to carry out environmental management is crucial and results in tremendous impacts to the society worldwide.

3.0 The Literature

The existing literature provides numerous criteria to characterize SMEs, such as the number of employees, turnover, total assets, etc. Due to this lack of consensus, there exist differences among the characteristics of SMEs, depending on the sector in which they operate. And due to these discrepancies, researchers have applied different definitions in their studies. SME sector has the potential to quickly respond to the changes in the context of global environmental change (Shahzad et al. 2010). The term SMEs are generally determined by numbers of employees and total assets. SMEs are readily distinguishable from large corporations by their less formal structures and closer personal relationships with staff and customers (Vives 2006).

The criteria for SMEs of Bangladesh were established by the Industrial Policy of Bangladesh, 2010. According to that any firm employing more than 10 but less than 25 workers is called a micro-enterprise. If the number of workers employed remains between 25 to 99, the enterprise is identified as small. A medium enterprise employs 100 to 249 workers in Bangladesh. Based on the literature gap a study question was raised as "what are the attitudes of the managers towards environmental sustainability among SMEs in Bangladesh?"

The purpose of this paper is to examine the perceptions of managers of SMEs about the need to implement environmental measures within their companies. Thus, based on the Theory of Planned Behavior (Ajzen 1991), in which intent is

one of the best predictors of people's planned behavior, it is interesting to determine whether an SME manager intends to carry out measures to improve the company's environmental issues. Therefore, the overall objective of this paper was to test the ability of the factors proposed in Ajzen's Model (Ajzen 1991) to predict the intention of undertaking environmental measures in SMEs.

The theory of planned behavior is one of the most influential theories for explaining and predicting behavior. The theory of planned behavior (Ajzen 1991) is the successor to the theory of reasoned action, also known as the Fishbein Behavioral Intention Model (Fishbein and Ajzen 1975). Ajzen (1991) extended the theory of reasoned action to include perceived behavioral control (PBC) and to compensate for their model's limitation in accounting for behaviors where individuals lack control.

According to Ajzen (1991:181), the fundamental aspect of the theory of planned behavior is behavioral intent that has been proven to be a good surrogate for behavior. Steg and Vlek (2009) claim that the theory of planned behavior is better at explaining behaviors that have high behavioral costs or strong behavioral constraints. Another advantage of this model is its specificity (Chao 2012). In other words, the theory of planned behavior is more suited to examining specific environmental behaviors rather than a broad range of such behaviors.

For a long time the economic and productive activities of humankind have had a strong relationship with the environment until recently the society has become concerned about the negative effects about it. In the past the business activity was considered a closed system in itself, where economic agents, consumers or producers behaved in rational ways, seeking to maximize their welfare, without taking into account the impact of their actions on the social and physical environment. So while in the past there was no need to worry about possible environmental damages because nature itself solved the majority of the problems arising from production processes, distribution and consumption through recycling and biological processes, the situation has changed significantly. Recent social and institutional concerns about environmental deterioration have produced pressures on companies to introduce more respectful behavior toward their natural environment.

Nevertheless, before introducing these new environmental perspectives into the business, one should be aware that the environment has three significant functions (Common 1988). First, it is the fundamental source of resources, as the environment is a supplier of the natural inputs for the production process. Second, nature provides recreational services related to enjoying the

environment, such as scenic beauty, clean air, etc. And finally, the natural environment assimilates the waste and residues generated in this production and consumption. However, it must be acknowledged that only when the amount of waste discharged into the environment is within the limits set by its assimilative capacity can nature maintain its role as a repository of this waste.

Traditionally, businesses and the environment have been, and in certain aspects continue to be, conflicting elements: all business organizations, regardless of their size, activity or scope, generate environmental problems to a greater or lesser degree, and environmental concern presents obstacles to business development and job creation. The business organization must meet the challenge of complying with the requirements of the natural environment in which they operate. In recent years, however, this opposition has been overcome, while the concept of sustainable development has been imposed. Now businesses and the environment are destined to understand each other: the company plays a leading role in investigating and contributing technological solutions for environmental problems; and for the company, the environment constitutes a rapidly expanding market, a business opportunity, and an opportunity to create employment.

The SMEs now need to adapt to the existing situation by adopting certain ecological principles. This adaptation process will generally require a transformation of the companies, their products, their production systems, and their management practices (Shrivastava 1995), which will translate into a reduction in companies' impact on the natural environment. In short, the environment has become a strategic issue for businesses, and it requires constant attention and a suitable integration of all its aspects in the company's strategy. As a result, SME managers must take steps to bring about environmental improvements.

The fact that not all individuals behave in the same way in similar situations implies that their behavior is influenced by internal variables. Managers are no exception; therefore, they do not all have the same willingness to undertake certain actions to pursue a specific purpose.

4.0 Study Design and Methodology

An empirical analysis was carried out in purposively selected SMEs located under Dhaka North City Corporation (DNCC), whose high energy consumption or high waste production could cause major environmental problems in their daily management. This is important to emphasize that the managers who were

chosen as the object of this study were in charge of SMEs whose activity causes significant environmental problems. The empirical study was limited to SMEs under DNCC in order to ensure that the collected data were meaningful and accurate. In order to study this issue, the article aims to provide answers to questions such as: (1) do the SME managers understand the meaning of environmental sustainability? (2) how do they view the marketability of practicing environmental sustainability? (3) how do they view the practicality of adopting environmental sustainability? (4) what are their current environmental practices (if any)? and (5) what can be done to encourage business environmentalism in the SMEs?

In this study, the method used to obtain the necessary information to fulfill the stated objectives was a survey whose basic instrument was a questionnaire. The questionnaire based interviews were carried out by interviewers who contacted the managers directly (who had agreed to participate in the study). Questionnaire responses were obtained from 201 (including non-response) purposively selected SMEs (Table 2). The sample error was 6.6%, with a confidence level of 95%. Total population was 2007. The SMEs studied were vehicle repair shops, carpentry businesses, retailers, bakeries, hospitality and restaurants.

Table 1: Research Factsheet

Aspects of the Research	Description
Methodological procedure	Survey
Question Types	Categorized
Spectrum	SMEs with problematic environmental issues
Geographical scope	Area under Dhaka North City Corporation (DNCC)
Data collection method	Questionnaire survey carried out by interviewers
Population Size	2007
Sample size	201 Companies
Confidence level	95%, p=q 50%
Sample error	6.6%
Date of completion of the pretest	February 2017
Date of completion of the fieldwork	June 2017

To measure the different constructs, a quantitative approach (using Likert scale) was used. 5-point Likert scale (ranging from 1 = strongly agree to 4 = strongly disagree, and 5 = no opinion) were used to elicit the required information. The questionnaire sought information about the existing environmental practices of the participating SME (if any) and their opinion on further drivers required to encourage the adoption of environmental management among SMEs.

The sample in this study consisted of 201 purposively selected SMEs located under DNCC. These SMEs are susceptible to having major environmental problems. Some SMEs were not included as their characteristics had no significant environmental problems and, consequently, do not need to implement environmental measures. As a result, footwear and textile companies and small bazaars were not included, but vehicle repair shops, bakeries, carpentry workshops etc. were included.

5.0 Sample Description

The majority of the respondents (76.6%) were males. More than half (52.8%) of the respondents had a post-secondary qualification and had been running their businesses for more than 5 years (50.8%). In terms of the number of employees, 55.2% employed up to 9 employees, 26.4% employed between 10 and 24 employees, 7% employed between 25 and 49 employees, and 8% employed 50 and more employees.

Regarding the activity sectors, 6 categories were established: food, automobile repair and maintenance, wood and metal industry, hospitality and restaurant, other small industries (printing, paint factories, industrial hygiene, etc.) and retailers. The highest percentage of business owners surveyed belonged to the food sector (22.4%), and the lowest to the wood and metal industry (10.9%). As per the legal setup is concerned 57.2% SMEs are limited companies and 16.4% are self-employed.

Table 2: Demographic Table

Gender	Frequency	Percent	Valid Percent	Studies	Frequency	Percent	Valid Percent
Male	154	76.6%	76.6%	Primary or no studies	45	22.4%	23.4%
Female	47	23.4%	23.4%	Secondary	45	22.4%	22.6%
Total	201		100.0%	Vocational or technical education	53	26.4%	27.0%
				Under Grade degree	51	25.4%	26.0%
Experience	Frequency	Percent	Valid Percent	Postgraduate degree	2	1.0%	1.0%
Less than 5 years	90	44.8%	46.9%	Total	196		100.0%

Gender	Frequency	Percent	Valid Percent	Studies	Frequency	Percent	Valid Percent
Between 5 and 10 yrs.	40	19.9%	20.8%	Missing (from Total)	5	2.5%	
Between 11 and 15 yrs.	47	23.4%	24.5%				
More than 15 years	15	7.5%	7.8%	Activity Sector	Frequency	Percent	Valid Percent
Total	192		100.0%	Food	45	22.4%	23.4%
Missing (from Total)	9	4.5%		Automobile	29	14.4%	15.1%
				Wood and metal	22	10.9%	11.5%
Size	Frequency	Percent	Valid Percent	Hospitality and restaurant	26	12.9%	13.5%
Less than 10 employees	111	55.2%	57.2%	Other small industries	32	15.9%	16.7%
Between 10 and 24 employees	53	26.4%	27.3%	Retailers	38	18.9%	19.8%
Between 25 and 49 employees	14	7.0%	7.2%	Total	192		100.0%
50 and more employees	16	8.0%	8.3%	Missing (from Total)	9	4.5%	
Total	194						
Missing (from Total)	7	3.5%		Legal Set-Up	Frequency	Percent	Valid Percent
				Self-employed	33	16.4%	17.3%
				Limited companies	115	57.2%	60.2%
				Anonymous companies	43	21.4%	22.5%
				Total	191		100.0%
				Missing (from Total)	10		

Source: Fieldwork, 2017

Table 3: Respondents' Opinion about Sustainability

Item	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)	No Opinion (5)
SMEs having social obligation to society to be environmentally friendly	57.2%	24.1%	11.3%	-	7.4%
SMEs need to be environmentally friendly	42.2%	38.2%	13.2%	-	6.4%

Item	Strongly Agree	Agree	Disagree	Strongly Disagree	No Opinion
SMEs engaged in environmental management will be more attractive to the clients	60.3%	31.2%	3.2%	2.1%	3.2%
Environment-friendly SMEs would perform better than their competitors who did not do so	41.0%	28.2%	19.6%	3.3%	7.9%
Environmental management could reduce the operational costs of SMEs	18.6%	7.9%	45.9%	12.3%	15.3%

Source: Fieldwork, 2017

Overall responses on the SMEs social obligation to the society to be environmentally friendly

The Likert scale questions on SMEs having social obligation to the society to be environmentally friendly show that the majority (81.3%) of the respondents were positive (scoring on either “agree” or “strongly agree”) that SMEs had a social obligation to society to be environmentally friendly and they viewed that SMEs need to be environmentally friendly (80.4%).

Overall responses on the marketability of environmental management

The respondents were overwhelmingly positive about the fact that SMEs that engaged in environmental management would be more attractive to the clients (91.5%). They also agreed that environment-friendly SMEs would perform better than their competitors who did not do so (69.2%) but a smaller numbers were of the opinion that environmental management could reduce the operational costs of SMEs (26.5%).

6.0 Discussion

The findings of this study revealed that the majority of the respondents were in agreement regarding the need to move towards environmental sustainability. This paper emphasizes the close relationship between businesses and the environment. In fact, businesses undoubtedly have an impact on the environment. The results showed a high level of ‘green’ attitudes amongst the managers of the SMEs, but no significant relationship between attitudes and SMEs’ actual performance. This paper constitutes a step toward better understanding of the importance of the factors in Ajzen’s Model in explaining SME managers’ intentions to carry out environmental actions. Here the theory of planned action is validated in the

context of environmental intentions, resulting in an instrument with the potential to improve the environmental management of SMEs.

From a practical point of view, in a socially aware society that considers the environment important, it is likely that both the manager and the people around him/her will positively assess the performance of this type of action, thus increasing the manager's intention to carry out these actions. Therefore, beyond the legal requirements that SMEs may have to follow, it is necessary to encourage environmental awareness in the society, which can help managers of SMEs to display more proactive behavior that can improve the SMEs' environmental performance, make it more socially responsible, and create value.

Economic, technological and knowledge resources are not sufficient if the person who manages the SME does not have a positive attitude and the capacity to carry out the necessary actions. Furthermore, in SMEs, concern for the environment is usually not a high priority, so that any action designed to improve this type of management is beneficial. In this sense, encouraging the environmental training of managers of SMEs can ensure that these individuals feel able to successfully develop activities that improve the environmental performance of their businesses; thus, increasing their intentions to carry out such actions.

The lack of economic resources is one of the clear determinants in consideration of SMEs that they cannot carry out certain activities. Therefore, if society desires SMEs to invest money in making them more environmentally responsible, they can choose between two different routes. The first would be to motivate them to undertake this type of measures by providing the SMEs with economic or technical aid; the second would be to create more awareness about this issue. Although the former would have faster results that would be easier to measure, the latter option, in spite of taking longer to produce results, would be more efficient and save the expenditure in the long run. Thus, an interesting strategy would be to deploy a combination of both measures. In an initial phase, and in order to start a tendency, the first route would be used. In the following phases, the money invested in the first route would be gradually reduced in order to increase the allotment for the second route for achieving better results.

7.0 Conclusion

The findings of this study indicate that SMEs are generally positive about the relevance of environmental issues in their operations and their role in it. However, their generally positive responses cannot be taken as indicative of their actual business practices. Increased concern about the natural environment has

put pressure on all businesses to reduce their environmental footprint. This has prompted many businesses to achieve environmental sustainability. Given the prominence of SMEs in most economies, and their potential environmental footprint, it is important to examine the factors that lead these businesses towards environmental sustainability. However, study focused on understanding why SMEs adopt such systems is lacking. An important starting point for SMEs to adopt environmental sustainability is the psychological predispositions of their managers. Given the fact that attitude towards environmental sustainability significantly influences the intention to adopt such a system, it is recommended that individuals or organizations that advocate for environmental sustainability highlight the positive outcomes that such issue could have on SMEs. In other words, the implementation of environmental sustainability should be seen as a personal and moral obligation, and thus as vital to the legitimacy of SMEs. Thus, this paper adapted the theory of planned behavior to explain the attitude of the managers of SMEs towards environmental sustainability.

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