CHAPTER 1

INTRODUCTION

Natural environment management and ethics have come to be the most important issues facing businesses (Henriques and Sadorsky, 1999), a fashionable topic in academic and popular literature (Fox and McAvoy, 1991), complex and exciting (Starik and Rands, 1995) especially for the manufacturing sector (Klassen and Whybark, 1999; Starik and Marcus, 2000) for the past 35 years. Much research has been done pertaining to the natural environment and business in developed countries since then, covering big and profitable companies as well as small and non-profit companies. However, none or little research has been attempted in this area in the developing countries. Corporations in developing countries have been claimed to be more concerned with building an industrial base rather than concentrating on the aspect of the natural environment and the environmental regulations were claimed to be too weak to carry out the pollution control as there is no incentive to do so (Dasgupta et al., 2001). This is due to many pressures, and in the rush to achieve excellence in economy, the managers in developing countries concentrate more on poverty and unemployment, and less about the natural environment as compared to managers from developed countries that rank the environment aspect the top of their list (Austin, 1991). In this endeavour, this research will examine the concept of business and the natural environment, particularly the concept of environmental ethics, and specifically in manufacturing companies in the Malaysian natural environment.

This is because of the widespread concern for the natural environment, the fact that the topic has received little attention and that business literature has ignored the importance of the natural environment even though the impact could be huge and could affect the

economy in general and companies in particular (Aragon-Correa, 1998). Hart (1997) emphasizes that in the 1960s and 1970s in respect of the environmental impact, corporations were in the "denial state" although many environmental accidents appeared around the world, such as the death of Lake Erie in the United States, pollution from fire on the Rhine in Europe and mercury poisoning deaths in Japan.

Environmental concerns were detected in the 1940s and have evolved since then. In the 1940s the general concerns related to the limited natural resources, inadequate food production and depletion of non-renewable recourses. In the 1960s the general concerns of the people related to the by-products of production and consumption and centred around the issues of air and water pollution, waste disposal and chemical contamination. It was in the 1980s that global environment change was experienced with the problems of climate change, acid rain, ozone depletion, biodiversity, deforestation, water management and globalization, which persist until the present day (Impak, 2009a).

The seriousness of this matter was stimulated by Kassarjian in his 1971 article where he highlighted that people are concerned about the natural environment; his survey confirmed that air pollution was one of the most serious problems facing society back in the 70s. This can be seen in Table 1.01, which represents the most serious problems facing society, as detected in the West in the 1970s through open-ended responses.

Table 1.01

	%
Air Pollution	31.4
Vietnam War	11.6
Minority Problems (Blacks)	9.9
Inflation	8.7
Population	7.0
Crime	6.6
International Affairs	1.7
Taxes	1.7
Others/Unclear/No Opinion	<u>21.4</u>
	100

Most Serious Problem Facing Society Today

Source: Adapted from Kassarjian (1971), p. 62.

From the table, it can be concluded that the most serious problem (that affects the environment) was the concern about pollution with 31.4%. The respondents ranked environmental issues, particularly pollution, at the top of the list, as they saw that the environment was being harmed. They also identified the Vietnam war, which caused 58,000 deaths, minority problems (blacks), inflation, population, crime, international affairs, taxes and others/no opinion. This table represents the state of concern of people towards the natural environment.

Besides pollution, there are many kinds of other environmental problems. It may vary from global warming to the contamination of our air, water and land. Some of the concerns have been proposed by Krause (1993). He outlines the level of concern towards environmental issues. The concerns include hazardous waste, air pollution, lake and river pollution, ocean

dumping, solid waste disposal, ground water pollution, ozone layer, landfills and population growth, as shown in Table 1.02. Based on the average score, the highest level of concern relates to the hazardous waste.

Issue	Average Score
Hazardous waste	4.47
Air pollution	4.30
Lake and river pollution	4.23
Ocean dumping	4.07
Solid waste disposal	4.06
Ground water pollution	3.96
Ozone layer	3.86
Landfills	3.77
Population growth	3.11

Table 1.02Level of Concern about Various Environmental Problems

Source: Adaptation from Krause (1993), p.134.

As such, the environmental issues stated above would have triggered most of the corporations and industries as well as individuals to start to think about environmental business ethics. The factors causing concern include the tragedy of major industries from the past such as Chernobyl, Bhopal and Exxon, which cost them a lot of money to contain the overall pollution.

Several major environmental tragedies happened in the 1980s. In 1984, a particularly tragic industrial accident occurred in a poor district of Bhopal in India, killing more than 4,000 people and injuring more than 200,000 people (Blacconaire and Patten, 1994). It resulted

from the search for lower cost, very low taxes, and less stringent safety standard requirements than were achievable in their home country (Svensson and Wood, 2004) and brought down the reputation of the entire industry (Rees 1997; King and Lenox, 2000).

Two years later in 1986, a nuclear cloud spread across Eastern Europe as a result of a nuclear accident at Chernobyl (Ottman, 1993). The explosion of the nuclear plant in Chernobyl, Russia, on 26 April 1986 was felt by the neighbouring country, Sweden. Due to this explosion 23 people were reported dead a month later due to nuclear radiation and the whole population of Chernobyl was evacuated. Due to this accident, the sale of meat was not allowed due to high radiation, which was dangerous to human health (Saifuddeen and Salleh, 1999).

In 1989, the oil tanker, Valdez ran aground spilling 11 million U.S. gallons of crude oil into Prince William Sound in Alaska (Saha and Darnton, 2005). Their attempt to seek lower cost resulted in injuries to the residents of Grand Bois (Hamilton and Berken, 2005) by the ship's captain who had a documented alcohol problem (Svensson and Wood, 2004).

In the 1990s the world also experienced several major environmental disasters. In 1998, Brazil experienced raging wildfires in Roraima, which were brought on by severe droughts that affected the northern Brazilian state. The wildfires caused hundreds of deaths and the indigenous people were threatened. It was claimed that the first fire was started because of forest clearing for agricultural land. In another part of the world, poor farming and grazing practices caused dust storms in China in 1998 and at least 12 people went missing and three construction workers were killed during the storm. Besides poor farming and grazing practices that started the dust storm, extensive deforestation and desertification in many regions have increased the occurrence of dust storms in the world (Enzler, 2006).

Due to fog and human error, in 2002 the Norwegian ship Tricolor collided with a container ship from the Bahamas in the English Channel. The Tricolor experienced a series of major explosions that caused the ship to be broken into nine pieces, and caused the company the freight value of more than 80 million euros (Enzler, 2006). Here, the role of business ethics was not taken into consideration, which later caused the life of people as well as jeopardizing the health of the natural world. These environmental disasters are all related to ethical issues that need an urgent response in order to avoid or at least reduce future environmental problems.

As a whole, the focus of this study is about business ethics and its natural environment. It is how the corporations (manufacturing companies in Malaysia) manage their environmental ethical commitment to the natural environment. It is about environmental ethics. According to Kauffman (2001) ethical managers have to evaluate the strengths and weaknesses of a decision regarding its impact on the environment because "ethics" is a discipline that deals with good and bad, thereby implying a moral duty or obligation. The manufacturing operations with regards to the environment, as emphasized in this study, create a variety of possibilities for adverse effects on humans and other living things, both directly and indirectly. Therefore, the purpose of this study is to discuss and empirically test several propositions regarding the environmental ethical commitment of the manufacturing companies in Malaysia and the contributing factors to this commitment.

1.1 DEFINITIONS OF TERMS

In this chapter, all terms will be briefly explained. Detailed definitions will be included in the literature review and theoretical development chapter.

<u>Ethics</u>: The standard of conduct that distinguishes between right and wrong, good or bad, virtue or vice, justice and injustice, praise and blame (Resnik, 1997; Andrew, 2000).

<u>Environmental ethics</u>: There are many definitions of environmental ethics. According to Thomas (2002) "environmental ethics" and "green ethics" are interchangeable terms. They relate "ethics", "standard of conduct", and "best practices" to care for and of the physical environment.

Environmental ethical commitment: According to Henriques and Sadorsky (1999) what a company is actually doing or has done with reference to environmental issues can describe its commitment to the natural environment.

Ecological concern: Ecological concern is aimed at mitigating a firm's impact on the natural environment (Bansal and Roth, 2000).

<u>Ethical climate</u>: A work climate is defined as perceptions that are psychologically meaningful molar descriptions that people can agree characterize a system's practices and procedures (Schneider, 1975).

<u>Self-efficacy</u>: Self-efficacy is a person's expectancy about whether she or he can successfully perform the behaviour in question (Bandura, 1997).

<u>Financial cost</u>: Economic motivations and outcomes are most often the focus of strategic decision making studies (Illnitch and Wicks, 1996). Flannery and May (2000) emphasize that this aspect is confirmed by the managers, and that it might also influence their intentions regarding the environmental issues and according to them, the study's practicality would be diminished if it did not acknowledge the influence of the cost considerations.

<u>Personal moral obligations</u>: Personal feelings of moral obligation or responsibility to perform or to refuse to perform a certain behaviour (Ajzen, 1991).

<u>Stakeholders</u>: According to Valor (2005), stakeholders were originally defined in the Stanford Research Institute Internal Report in 1963 as "those groups without whose support an organization would cease to exist". The definition is also extended from Freeman landmark book in 1984 as "any group or individual who can affect or is affected by the achievement of the organizations' objectives". It is also defined as groups or individuals who "have an interest in the actions of an organization and....the ability to influence it" (Savage et al., 1991).

<u>Regulations</u>: Government regulation is often said to be intrusive or inefficient and it can frequently be subverted (Caincross, 1993).

1.2 PROBLEM STATEMENT

"The world has come to an end". "People are getting richer but the environment is getting poorer". Global warming, animal extinction, deforestation and the death of rivers and oceans, all these are problems affecting the planet (Ohara, 1998). The world also experiences floods, tsunamis, land erosion and earthquakes. The problem of environmental degradation initiated by the business corporations is a major problem faced by developing countries in respect of environmental ethics (Shrivastava, 1995a; Klassen, 2000). Continuous effort to increase environmental ethics awareness and commitment become meaningless if the commitment is not felt by all organizations.

The issue of environmental degradation is not new to humankind. Currently, the issues of ethics and the natural environment spread quickly and are rated as the most talked about issue by the public. The problem arises when companies wish to satisfy the objective of increasing their profitability at the expense of its environmental performance. This causes major environmental disasters around the world, which captured the eyes of the public in the 1980s when the world experienced Chernobyl (Saifuddeen and Salleh, 1999), Bhopal (Rees, 1997) and Exxon (Hamilton and Berken, 2005) causing the loss of life, ruining the image of the companies, damaging the reputation and incurring a lot of money to contain the overall pollution. These environmental disasters are commonly linked to human activities, greed, development, deforestation and human neglect towards the harmony of the natural environment (Saifuddeen and Salleh, 1999; Rees, 1997; Hamilton and Berken, 2005).

Although Malaysia has never experienced a major environmental disaster the potential consequences are equally appalling. The potential environmental issues in Malaysia include industrial activities, motor vehicles, burning of fossil fuels and biomass, acid rain, uncontrollable usage of pesticides, toxic waste, heat pollution, nuclear waste, oil spill and hazardous waste. These potential harms have resulted in Malaysia experiencing environmental problems, death, disability and disease, deforestation, toxic waste accumulation and disposal, animal extinction and severe pollution of the land and rivers (Wah, 1982; Lubis, 1998; Mohd Ariff, 2004).

According to Fishbein (1980) and Knapp (1999), human activity is influencing and directing human attitudes towards the natural environment. Unfortunately, in academic writing, the interaction of business (human activities) and the natural environment has not been investigated thoroughly and does not manage to catch the interest of many researchers. It was claimed to be relatively brief (Starik and Marcus, 2000), young as a discipline (Harrison and Freeman, 1999), has been given little attention and ignored the importance of the natural environment (Aragon-Correa, 1998). In terms of the interaction of business and the natural environment, we are said to commit biocide (Ives, 2000) by living in a superheated pressure cooker (Skillman, 1998) where the earth we live in is being beaten and poisoned to death (Rowe, 1990).

Therefore, there is a need for businesses to have the commitment to preserve the natural environment. Therefore, it is the aim of this study to outline the factors of the research area, the so called environmental ethical commitment (EEC), as businesses have the responsibility to produce safe products and services that will

save the natural environment, and the advantages that EEC could bring if companies are committed as this would save the natural world (Kasiola, 2003) or at least reduce the rate of degradation. It is the responsibility of the businesses to produce to those needed but their commitment towards the natural environment makes them responsible for the natural degradation that causes pollution and global warming.

The above issues have triggered the researcher to pursue the study of environmental ethical commitment (EEC) as the core theme, where environmental ethics are claimed to have the responsibility to solve the present ecological crisis (Werhane and Freeman, 1999; Ouis, 2002; Kasiola, 2003). In addition, it gives companies competitive advantage, saves money, reduces the need for new resources and offers companies the opportunity to compete in the global arena (Saha and Darnton, 2005; Starik and Marcus, 2000).

It is also the attitude and behaviour of the manufacturing corporations towards the environment that would determine the long-lasting consequences in the industry (Buchholz and Rosenthal, 1988). Despite the growth of initiatives concerning the environment and the environmental laws and regulations, research indicates that manufacturing companies in Malaysia have been slow to progress from a reactive to a proactive response to environmental pressure (Said et al., 2003). The attitude and behaviour of the manufacturing corporations towards the environment would determine the long-lasting consequences in the industry (Buchholz and Rosenthal, 1988).

1.3 RESEARCH QUESTIONS

In short, the research attempts to answer one major research question: What is an environmental ethical commitment (EEC) framework? The study also attempts to answer several other research questions:

- 1. What are the factors that determine EEC?
- 2. What is the relationship between EEC and the eight independent variables?
- 3. How important is each source of stakeholder' information and stakeholder' pressure to the companies?
- 4. What is the level of the companies' perception towards the importance of environmental issues?

1.4 THE OBJECTIVES OF THE STUDY

The main objective of the study is to understand and explain the role of environmental ethics in conjunction with the commitment of the corporations. It concerns the manufacturing companies listed in the FMM Directory 2005, Malaysian Industries, 36th Edition. In general this research is carried out in order to fill the gap of "scarcity" in the research arena as the research in environmental ethics has been claimed in the literature to be relatively brief, young as a discipline and received little attention. The main objective of the study is to develop an EEC framework that can be used to empirically test the importance of several possible factors as having an influence on firms' EEC. Specifically, the objectives of the study are:

 To identify the factors contributing to Malaysian manufacturing companies' EEC to the natural environment.

- 2. To assess the impact of the factors under study towards the environmental ethical concept.
- To measure the importance of each source of information and the importance of each source of pressure to Malaysian manufacturing companies.
- 4. To measure the perception of companies towards environmental issues.

This study tries to analyse the role of environmental ethics commitment by the manufacturing companies in Malaysia with regards to the natural environment. In order to better understand the factors that lead to the firm's classification of its environmental commitment, this research will employ a set of environmental ethical commitments to the natural environment that consists of seven items as the dependent variable construct, as proposed by Cordano and Frieze (2000).

1.5 SIGNIFICANCE OF THE STUDY

The importance of this study is that it is a pioneer being the first in Malaysia and possibly perhaps the first of its type in any developing country. Consequently, there is a limited amount of literature available on business, ethics and the natural environment in developing countries, and, hence, it lacks an empirical base (Zabid and Alsagoff, 1993). There is scarce literature since it is based on subjective evaluation, what more on EEC in Malaysia. This may be due to the fact that EEC is a recent phenomenon, which has not been examined in the Malaysian context. This study will contribute to the literature with a better understanding of the EEC concept in developing countries.

This study will also be of value for academics and practitioners. From an academic perspective, this study is expected to contribute to the lack of an existing body of research. The major focus of this study is to examine the impact of environmental ethics on manufacturing companies. Therefore, from a practitioner perspective, it is hoped that environmental ethics will contribute factors for consideration by managers in creating greater moral value. This will enable corporations to supply goods and services that contribute to building a more affluent society while reducing the burden on the natural environment.

1.6 SCOPE OF THE STUDY

This study focuses on the manufacturing companies in Malaysia and only concerns those companies based on the listing of the FMM Directory 2005 Malaysian Industries 36th Edition. Specifically, managers in these companies are open to the environmental issues and they are normally confronted with many difficult decisions in implementing policies to protect the natural environment. Furthermore, when confronted with difficult decisions concerning the protection of natural resources, these managers may find it useful to remember the concepts of environmental ethics as a state of harmony between the land and humankind (Kauffman 2001).

These companies (150 companies) represent various fields or characteristics in Malaysia. If this study could reveal a significant relationship between good ethics and the consequences of the decision made on the natural environment, the results of this study would be able to be a referent and practice for various other industries in Malaysia. This is because companies that champion the natural environment tend to encourage other companies to preserve the environment and also compete in the global business arena. This study attempts to highlight that the element of environmental ethics is important as there is mounting evidence that improved environmental performance can have a positive effect on the bottom line with companies beginning to recognize the relationship between environmental quality and opportunities for economic growth (Corbett and Cutler, 2000).

This study also assumes that most companies in Malaysia are not aware of environmental ethics, and, if they are, the awareness is at a slower pace (Yaacob et al., 2003). This is because, according to Andersson and Bateman (2000), environmental issues are often difficult for managers to comprehend for various reasons:

- 1. It is hard to detect and calculate environmental ethics issues as they are complex and termed in scientific language (trapped in difficult technical language).
- 2. It is difficult for managers to identify the fault and change their business systems in order to counter the detrimental effects of their products and processes in response to the environmental issues pertaining to industrial activities.

This situation could be altered if corporations are serious in integrating environmental ethics concepts within their existing corporate cultures. This will enable the companies, especially the manufacturing companies, to be aware of the potential of having a high environmental image, thus enabling them to increase the number of people interested in the activities of the companies and thereby promising them success in the world of high competition.

1.7 LIMITATIONS OF THE STUDY

The problems that were encountered while conducting this study include:

- 1. The scarcity of published research concerning business, ethics and the natural environment in developing countries, which has reduced the size of the theoretical part of the study. Most of the research done on environmental ethics is in large and successful (industrialized) countries, such as by Andersson and Bateman (2000), Cordano and Frieze (2000), Flannery and May (2000), King and Lenox (2000) and Bansal and Roth (2000) to name a few. Thus, the descriptive studies are needed in the literature on EEC in Malaysia. It is also hoped that this study can contribute towards a better understanding of the EEC in developing countries such as Malaysia.
- 2. This study is restricted to the manufacturing companies listed in the FMM Directory 2005, Malaysian Industries, 36th Edition. It does not cover other sectors such as construction, trading and services or finance. Environmentally successful companies that are not listed are excluded because of the difficulty in obtaining information and cooperation. Due to a limited budget, time-constraints and non-accessibility to the data on other manufacturing companies, a comprehensive in-depth study of other unlisted manufacturing companies in Malaysia was not undertaken.
- 3. Although the researcher stressed the confidentiality of the information being obtained, some companies refused to participate in answering the questionnaires during the data collection period. The difficulty in getting cooperation from

selected respondents was due to several respondents expressing their unwillingness to disclose information, being busy, the sensitivity of the topic and fear of the authorities. Therefore, much consideration was given to gathering the data, to ensure the success of answering the research objectives.

4. This study is limited to the behavioural aspects of Malaysian managers' commitment towards the natural environment. The survey was carried out on companies listed in FMM; as such, the validity of the findings made is limited to the listed companies.

The above stated problems will be addressed throughout the study with the hope that statistical analysis will not be biased. Earlier precautions will be taken, as it is understandable that the study may face such a problem.