

**A SURVEY OF THE EXTENT TO WHICH  
MANUFACTURING FIRMS IN NAIROBI PRACTICE GREEN  
MARKETING**

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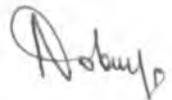
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**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN  
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR  
THE AWARD OF MASTER OF BUSINESS  
ADMINSTRATION (MBA) DEGREE, FACULTY OF  
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# DECLARATION

This management project is my original work and has not been presented for a degree in any other University

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Date: 11/11/03.

This management project has been submitted for examination with my approval as University Supervisor.

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## **DEDICATION**

Dedicated to the care of the environment, a passion that I hold very close to my heart.

## ACKNOWLEDGMENT

I am greatly indebted to many special people who played a crucial role in my completing this project.

Ms. Margaret Ombok, for her guidance, support, constructive criticism and inspiration.

My gratitude goes out to all participants in this study, especially Esther Obel, for the co-operation they accorded me.

To my wife Grace, who was very patient and understanding through out the project.

Lastly to God almighty, from whom all good things come.

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## **ABSTRACT.**

Environmental marketing has gained momentum over the years to levels beyond. Customer awareness, competition and government legislation have been key drivers of going green the world over. The main objectives of this study were two. One, to establish the extent to which manufacturing firms in Nairobi practice green marketing and two, the factors that influence the practice of green marketing.

To aid in this study, a survey of firms in Nairobi was undertaken using a questionnaire. The questionnaire was administered by a 'drop and pick later' method. The questionnaire was selected because of the low cost associated with its use compared to other methods and the high degree of anonymity it gives to respondents who consider certain responses as sensitive. The population of the study was all manufacturing firms in Nairobi, the sampling frame being provided by two directories, The Kenya Association of Manufacturers directory and Kenya Directory of Manufacturing Industries. Forty (40) firms were selected for the study. The respondents were middle level managers with responsibility in the production functions. The data collected was analyzed using descriptive statistics to make the information more understandable. The respondents were from firms that were either wholly foreign owned or largely foreign owned.

The study findings showed that the extent to which manufacturing firms practice green marketing in Nairobi is appreciable and that this concept plays a key role in driving the manufacturing processes, pricing, positioning and promotion of products. The results also revealed that customer awareness, competitive activity, government legislation, growth opportunities and the need to prepare themselves for future markets drive the greening initiatives. Management commitment is crucial in any greening activities as it is at this level that strategic decisions are made.

However, certain limitations are evident. The fact that the study was restricted to Nairobi does not provide good measure of the practice in Kenya as whole. Incidences of reluctance by prospective respondents due to certain fears also jeopardize the study. This notwithstanding there are suggestions for further research. The research focussed on manufacturers, but it would be of interest to find out what the customers themselves feel. Another area of study would be to look at locally owned firms, to find out their approach to this issue.



# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

As society becomes more concerned with the natural environment, businesses have begun to modify their behaviour in an attempt to address society's 'new' concerns. Some businesses have been quick to accept concepts of environmental management systems and waste minimization, and have integrated environmental issues into all organizational activities. Some evidence of this is the development of journals such as "Business Strategy and the Environment", "EnviroConserve Africa" and "Greener Management International," which are specifically designed to disseminate research relating to business' environmental behaviour in Australia and other parts of the world.

The last three decades have seen a progressive increase in consumer environmental consciousness, as the environment moved from a fringe, to a mainstream issue. This has been driven by a number of factors including, increased media coverage, greater awareness of environmental problems, the rise of pressure group activities, stringent legislation (both national and international) and the impact of major industrial disasters on public opinion (McIntosh, 1991; Butler, 1990; Tapon and Leighton, 1991; Charter, 1992; Wagner, 1997). Consequently, consumers have become more concerned about their everyday habits and the impact that these can have on the environment (Krause, 1993).

One business area where environmental issues have received a great deal of discussion in the popular and professional press is marketing. Terms like "Green Marketing" and "Environmental Marketing" appear frequently in the popular press. Many governments around the world have become so concerned about green marketing activities that they have attempted to regulate them (Polonsky 1994a). For example, in the United States (US) the Federal Trade Commission and the National Association of Attorneys-General have developed extensive documents examining green marketing issues (FTC 1991, NAAG 1990). One of the biggest problems with the green marketing area is that there has been little attempt to academically examine environmental or green marketing.

## 1.2 Concern Over The Environment

Concern over the environment has evolved through several distinct phases. From the 1960s ecology movement focusing on pollution and energy conservation, to the recent use of environmental issues as a source of competitive advantage in business and politics, individual and societal concerns over environmental issues have become increasingly apparent to the casual observer as the twenty-first century draws near. This evolution has resulted in an expanded list of issues that fall within the domain of environmental responsibility. With increased social and political pressure, companies have moved beyond simply addressing pollution and waste disposal to looking for alternative package composition and design, alternative product formulations, and cause-related promotion in an effort to keep in-step with the environmental movement.

Not surprisingly, the evolution of academic investigation of green issues has mirrored the evolution of environmental sensitivity in the general populace. Initial efforts of 25-30 years ago introduced the topic as appropriate for further exploration. A second wave of academic inquiry redefined the area in light of the increased environmental concern expressed in the 1980s. As with the practitioner publications, the academic literature indicated that the 1990s would see an increase in environmental concern. It was widely believed that businesses would have to become more environmentally and socially sensitive to remain competitive (e.g. Roberts, 1995; 1996a; 1996b).

Environmental activities are rarely incorporated into overall corporate evaluative criteria. Moreover, many firms use traditional business measures (profits, ROI, market share, and so on) to evaluate the success of green initiatives, although some do go green for more altruistic reasons. Few companies realize that being green gives them a strategic opportunity.

Understanding corporate motivations and pressures for greening is essential, because it shapes how green marketing is implemented throughout all organizational activities. Firms taking a strategic entrepreneurial approach see change as an opportunity to develop innovative need-satisfying products and technologies that result in a competitive advantage, rather than seeing change as a constraint requiring modifications to past actions. Toyota has established an "ecotechnologies" division not only to comply with existing regulations but also to use such pressure to shape corporate direction, such as

developing next-generation hybrid electric-combustion automobiles. The result is that Toyota is now a leader in this sector of the market, a sector that will see significant growth in the coming years.

Greening can occur as a result of external or internal pressures.

External pressures include:

- (a) Satisfying consumer demand. McDonald's replaced its polystyrene clamshell packaging with waxed paper in direct response to consumer concern over CFCs produced in making polystyrene, even though scientifically it might not have been the most ecologically responsible decision.
- (b) Reacting to a competitor's greening actions. When Starkist announced it was going "dolphin free" in making its tuna, its competitors were all forced to do the same or lose market share.
- (c) Similarly, when an Australian laundry detergent manufacturer introduced a concentrated formula, most others in the industry quickly followed suit rather than risk being left behind.
- (d) Channel/supplier requests to modify inputs. Firms that comply with ISO 14000 are required to evaluate their suppliers' environmental performance. So they are pressuring their suppliers to meet the appropriate standards, who then pressure their suppliers, and so on.

Some examples of internal pressures to green activities include:

- (a) Cost. Greening can result in greater resource efficiency and financial savings - less input is used and less waste or pollution is produced. Dow invested \$250,000 in capturing part of a waste stream at one plant for reuse in another part of the plant, saving \$2.4 million a year.
- (b) Philosophy. When firms view environmental objectives on the same level as other corporate objectives, the green issues are incorporated into the firm's strategy and then integrated into its tactical activities. Maurice Blackmore, the founder of Blackmores, the Australian nutritional supplement and healthcare product firm, made environmental issues a core focus of his company's activities in 1967 - long before it was fashionable to do so. As he stated:

*If man persists in ignoring or defying the recycling laws of Nature he will not avoid pollution, malnutrition, or starvation .... Nature does not know how to handle pollution or preserve the balance of nature in the face of it. (Blackmores 1999)*

### 1.3 The Kenyan Situation

Many industries in Kenya are facing a wide range of environmental issues. With the recent enactment of the Environment bill, these problems might aggravate to legal issues. For example KEL industries in Thika, a company that produces sulphuric acid lacked better emission controls, which resulted to emissions of sulphur trioxide, leading to acid rain. The aftermath was corrosion of iron sheets used for roofing and health problems which included, but were not limited to respiratory diseases (Kiambu District Environmental Committee, 1992). Other include the Leather tanning factory that was situated in Zimmerman, a residential area, and produced hydrogen sulphide that also causes respiratory diseases and can also result in acid rain.

Pressure groups, such as The Green Belt Movement, have stepped up pressure against dangerous use of trees as raw materials owing to their impact on rain patterns and even the livelihood of wildlife, another tourist attraction that Kenya boasts. It is therefore true to argue that environmental awareness has surely increased in Africa and more so, in Kenya over the years, and is driving many business decisions. For example, Nation Media have been running advertisements for protection of the aberdare forest. Their message is meant to send a message to Kenyans and others that despite the fact that their raw material comes from trees, they do not support wanton destruction of forests. They are trying to preach responsibility.

With emerging facts on its harmful effects, cosmetic products containing hydroquinone are now being phased out of the market. The European Union, an avid consumer of foods from Kenya, has also recently become more stringent on chemical residues in agricultural products. Caltex introduced DC Tron Plus, a product which is based on mineral oil and exempt from Maximum Residue Level (MRL) restrictions. This environment friendly alternative ensured that Kenyan farmers were not cut out of the export markets, a significant part of Kenya's economy. Caltex on its part was able to price the product at a premium. Lately, Bayer has also brought in an environment friendly alternative known as Flint. The MRL regulation took effect proper, in June 2001. Kenol / Kobil have also taken the initiative to import low sulphur diesel and are positioning it as the environment friendly fuel alternative. They also introduced unleaded gasoline, which has no lead, a product that is carcinogenic, (Daily Nation 24<sup>th</sup> June 2001).

Many people feel that to continue development that cannot be sustained is a recipe for disaster (Othieno, 2003). As such industries and individual producers have begun to seek solutions based on new means of production, that is in keeping with philosophy of environmental friendliness.

Currently, manufacturers of mobile phone scratch cards, polythene bags and plastic bottles are being challenged on how to tackle pollution caused by the products as they do not decompose (Daily Nation, July 9 2003).

#### **1.4 Statement of The Problem**

Keattie (2001) suggests that firms that engage in green marketing practices have been able to carve their own niche in the market. With increased competition, and renewed focus on cost containment in terms of raw material acquisition and other operating expenses, this is desirable as unique products are the ones that will determine survival of many manufacturing firms. Growth of market share is also slowly inclining towards green products with increased customer awareness and technological development.

Industries today must attend and react to increasing economic pressures, global competition and environmental awareness. The long-term existence of industries is challenged by higher prices for raw materials and labour, as well as increased capital outlays and operational costs due to measures that aim to minimize and control pollution (Mwesigye, 2003). It is with this in mind that Kenya firms should work towards positioning themselves for the tough times ahead if they are to survive. They can only do this if they are aware of where they are now, with respect to their competitors, both local and international and the challenges that everyone else is facing in this regard.

Competitors' environmental activities pressure firms to change their environmental marketing activities (NAAG 1990). Organizations perceive environmental marketing to be an opportunity that can be used to achieve its objectives (Keller 1987, Shearer 1990). Governmental bodies are forcing firms to become more responsible (National Association of Attorneys-General 1990). Organizations believe that they have a moral obligation to be more socially responsible (Davis 1992). The various studies that connote the need for Green marketing relate to work carried out in Australia, Greece, The United Kingdom,

and The United States of America, among other countries. This data may not apply to Kenya, given the differences in environment such as the political, economic, social, technological and even levels consumer awareness.

The National Environmental Management Authority (NEMA) has put in place the Environmental Impact Assessment (EIA) regulations and guidelines. The guidelines specify the minimum standards that anybody wishing to establish a processing plant is expected to meet to protect the environment. The regulations are also meant to ensure all organizations comply with the provisions of the Environmental Management Act (Daily Nation, July 9 2003). This therefore means that environmental protection is becoming a national concern that cannot be ignored or downplayed by firms. Speedy enforcement is therefore imperative if firms are to survive, implementation and sustenance costs notwithstanding.

This research sought to answer the questions: 'To what extent do manufacturing firms in Kenya practice green marketing, and what problems are the firms facing, if any?'

### **1.5 Objectives of the study**

The objectives of this study were to:

- (a) Determine the extent to which manufacturing firms in Kenya practice green marketing, and
- (b) Determine the factors that influence the practice of green marketing.

### **1.6 Importance of the study**

The study, upon completion may be beneficial to the following:

- (a) Manufacturing firms.

In Kenya today, the consumer is getting more and more informed, which leads to rising consumption expectations. This then means that companies are challenged to exhibit certain fundamental eco-values. Deviations from stated corporate eco-values can generate negative publicity, which then results in lost consumer confidence (Polonsky, 2001). It would be of interest therefore to determine what eco-values are upheld by

various manufacturing firms in Kenya with a view to comparing them to what actually happens on the ground. This then can provide a basis of internal re-evaluation aimed at positioning the companies and their products appropriately.

While green products are often "priced" higher than traditional goods, this does not always mean they cost more, especially when one considers all associated costs. Often, green goods have higher initial out-of-pocket expenses but lower long-term costs. Long-life compact fluorescent light bulbs are much less expensive than traditional ones during their lifetime. Unfortunately, their relatively longer payback period and higher up front costs discourage their use, making it difficult for many consumers to think of light bulbs as an investment warranting life-cycle costing (Polonsky, 2001). It will also be important to demonstrate the efforts that go into setting up such products with a view to getting consumers to understand or at least appreciate the intricacies of green efforts, which play a key role in the costing of products, and which are then responsible for the long-term lowest total cost.

Firms might have products that they cannot reprocess, or materials that are not traditionally seen as having value. This view must change, because waste is a product of company activities and, like all products made, can add value. At the most basic level, firms can develop internal processes that seek to either reduce waste, which improves efficiency, or reprocess their own waste for internal use, thus reducing the use of other inputs. This is especially important now that a lot of focus has gone into reduction of production costs with margins of products thinning every other day. This is also critical following enactment of the environment bill by parliament in 2001.

#### (b) Researchers and Scholars

Prothero (1998) suggests that the future for green marketing looks set to continue with exciting avenues for new work in the field. It is envisaged that the managerialist, macro-marketing and public policy fields of inquiry will continue to develop. Future work, of which this is an integral part, will add an important contribution to the future of green marketing research and its connection with both the ecological crisis and marketing's role in risk society.

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### (c) Policy Makers

With increasing awareness on environmental issues, policy makers can no longer ignore these issues when developing policies. Findings from such research can help inform certain policy decisions. They will help them properly integrate environmental concerns into all areas of policy making in relation to economic development. This way the policies will be more wholistic and effective.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Meaning of Green Marketing

A majority of people believe that green marketing refers solely to the promotion or advertising of products with environmental characteristics. Terms like Phosphate Free, Recyclable, Refillable, Ozone Friendly, and Environmentally Friendly are some of the things consumers most often associated with green marketing. While these terms are green marketing claims, in general green marketing is a much broader concept, one that can be applied to consumer goods, industrial goods and even services. For example there are resorts in the world that are beginning to promote themselves as 'ecotourist' facilities, i.e., facilities that "specialize" in experiencing nature or operating in a fashion that minimizes their environmental impact (May 1991, Ingram and Durst 1989, Troumbis 1991).

Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet defining green marketing is not a simple task. Indeed the terminology used in this area has varied, it includes: Green Marketing, Environmental Marketing and Ecological Marketing. The American Marketing Association (AMA) held the first workshop on "Ecological Marketing" in 1975. The AMA workshop attempted to define ecological marketing as:

the study of the positive and negative aspects of marketing activities on pollution, energy depletion and nonenergy resource depletion (Henion and Kinnear 1976b).

This early definition has three components,

- (a) It is a subset of the overall marketing activity;
- (b) It examines both positive and negative activities; and
- (c) A narrow range of environmental issues are examined.

While this definition is a useful starting point, to be comprehensive green marketing needs to be more broadly defined. The following definition is much broader than those of other researchers and it encompasses all major components of other definitions;

*Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment (Polonsky 1994b).*

This definition incorporates much of the traditional components of the marketing definition that is "All activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants" (Stanton and Futrell 1987). Therefore it ensures that the interests of the organization and all its consumers are protected, as voluntary exchange will not take place unless both the buyer and seller mutually benefit. The above definition also includes the protection of the natural environment, by attempting to minimize the detrimental impact this exchange has on environment. This second point is important, for human consumption by its very nature is destructive to the natural environment. To be accurate, products making green claims should state they are "less environmentally harmful" rather than "Environmentally Friendly." Thus green marketing should look at minimizing environmental harm, not necessarily eliminating it.

It is worthy to note that no one definition has been universally accepted. This lack of consistency is a large part of the problem, for how can an issue be evaluated if all researchers have a different perception of what they are researching.

Marketers viewed this phenomenon as offering business opportunities, and a number of organizations developed and implemented long-term, proactive environmental strategies (Pujari and Wright, 1995). At the same time companies launched environmentally friendly (EF) products many of which were clothed in confusing and misleading half truths, made false and trivial promises (Davis, 1991), with some companies exaggerating or even fabricating the environmental qualities of their products (Garfield, 1991).

## **2.2 Why Is Green Marketing Important?**

The question of why green marketing has increased in importance is quite simple and relies on the basic definition of Economics:

Economics is the study of how people use their limited resources to try and satisfy unlimited wants (McTaggart, Findlay and Parkin 1992).

Thus mankind has limited resources on the earth, with which he/she must attempt to provide for the world's unlimited wants. In market societies where there is "freedom of

choice", it has generally been accepted that individuals and organizations have the right to attempt to have their wants satisfied. As firms face limited natural resources, they must develop new or alternative ways of satisfying these unlimited wants. Ultimately green marketing looks at how marketing activities utilize these limited resources, while satisfying consumer wants, both of individuals and industry, as well as achieving the selling organization's objectives.

There are several suggested reasons for firms increased use of Green Marketing. Five possible reasons cited are:

### **Opportunities**

It appears that all types of consumers, both individual and industrial are becoming more concerned and aware about the natural environment. In a 1992 study of 16 countries, more than 50% of consumers in each country, other than Singapore, indicated they were concerned about the environment (Ottoman 1993). A 1994 study in Australia found that 84.6% of the sample believed all individuals had a responsibility to care for the environment. A further 80% of this sample indicated they had modified their behaviour, including their purchase behaviour, due to environmental reasons (Environment Protection Agency - New South Wales 1994).

Given these facts, it can be assumed that firms marketing goods with environmental characteristics will have a competitive advantage over firms marketing non-environmentally responsible alternatives. There are numerous examples of firms that strive to become more environmentally responsible in an attempt to better satisfy their consumer needs.

Emerging scientific information has also contributed greatly to the efforts of green marketers. For example, in the cosmetic industry, products containing quinones and their derivatives were acceptable, but research has shown that such ingredients that are responsible for effects desired by users are actually harmful to them, long-term. In this regard, many marketers of such products have to come out clear that their products do not contain the harmful ingredients, to be able to sustain themselves in the market. Overall, marketers have now to be more aware of different products in terms of their

harmful effects, before they can accept to let them out into the market for trial, and subsequent mass sale.

### **Moral Obligation**

Many firms are beginning to realize that they are members of the wider community and therefore must behave in an environmentally responsible fashion. This translates into firms that believe they must achieve environmental objectives as well as profit related objectives. This results in environmental issues being integrated into the firm's corporate culture. Firms in this situation can take two perspectives:

- (a) They can use the fact that they are environmentally responsible as a marketing tool;
- or
- (b) They can become responsible without promoting this fact.

### **Governmental Pressure**

As with all marketing activities, governments want to "protect" consumers and society; this protection has significant green marketing implications. Governmental regulations relating to environmental marketing are designed to protect consumers in several ways,

- (a) Reduce production of harmful goods or by-products;
- (b) Modify consumer and industry's use and/or consumption of harmful goods; or
- (c) Ensure that all types of consumers have the ability to evaluate the environmental composition of goods.

Governments establish regulations to control the amount of hazardous wastes produced by firms. Many by-products of production are controlled through the issuing of various environmental licenses, thus modifying organizational behaviour. In some cases governments have introduced voluntary curbside recycling programmes, making it easier for consumers to act responsibly. In other cases governments tax individuals who act in an irresponsible fashion.

### **Competitive Pressure**

In many cases firms observe competitors promoting their environmental behaviour and attempt to emulate this behaviour. In some instances this competitive pressure has

caused an entire industry to modify and therefore reduce its detrimental environmental behaviour.

### **Cost or Profit Issues**

Cost factors associated with waste disposal, or reduction in material usage forces firms to modify their behaviour (Azzone and Manzini 1994). Disposing of environmentally harmful by-products, such as polychlorinated biphenyl (PCB) contaminated oil is becoming increasingly costly and in some cases difficult. Therefore firms that can reduce harmful wastes may incur substantial cost savings. When attempting to minimize waste, firms are often forced to re-examine their production processes. In cases they often develop more effective production processes that not only reduce waste, but also reduce the need for some raw materials. This serves as double cost savings, since both waste and raw material are reduced.

In other cases firms attempt to find end-of-pipe solutions, instead of minimizing waste. In these situations firms try to find markets or uses for their waste materials, where one firm's waste becomes another firm's input of production.

The other way in which cost or profit issues may affect firms' environmental activities is that new industries may be developed. This can occur in two ways:

- (a) A firm develops a technology for reducing waste and sells it to other firms; or
- (b) A waste recycling or removal industry develops (Yurman 1994).

For example, firms that clean the oil in large industrial condensers increase the life of those condensers, removing the need for replacing the oil, as well as the need to dispose of the waste oil. This reduces operating costs for those owning the condensers and generates revenue for those firms cleaning the oil.

"Fossil fuels provide three-quarters of the world's energy needs. They cause global warming and much of the air pollution that is responsible for half a million deaths and millions of serious respiratory illnesses. Energy demand is growing by 2 per cent a year. Clearly current energy production practices and policies are unsustainable." (UNEP, Annual Report 2001).

## 2.3 Aspects of Green Marketing

### Targeting

Although there are many ecologically minded consumers, firms would generally be ill-advised to develop products targeting them solely. Substantial numbers of consumers claim to be "green," says Ottman (1998), but it is unclear to what extent they are willing to purchase goods based solely on environmental grounds. They may expect "green" goods to be competitively priced and perform the same as others, thus using a product's greenness to differentiate two relatively equal goods. When the Kyocera Ecosys laser printer was first introduced, it was promoted as a "green" printer. This focus was later shifted to emphasize product quality as well as its being more eco-friendly and costing less to operate than competitors. Kyocera broadened its initial green appeal to a bigger cross-section of the market.

New technologies, however, may allow firms to better target existing green consumer segments. The Internet allows ecologically minded firms to target green consumers globally without developing extensive distribution networks (Polonsky 2001).

### Green Product Development

Ashley (1993) suggests that 70 percent of a product's environmental harm is designed into the product and the associated production processes. Therefore, firms need to incorporate environmental attributes into products and processes at the initial stages of new product development (NPD) along with other issues, such as quality. They can then use life-cycle analysis to evaluate a product's ecological impact for each production stage. This allows them to identify alternative methods of designing or producing goods, consequently opening up new, untapped industries and markets while cutting production costs (Polonsky 2001).

### Green Pricing

While green products are often "priced" higher than traditional goods, this does not always mean they cost more, especially when one considers all associated costs. Often, green goods have higher initial out-of-pocket expenses but lower long-term costs. Long-

life compact fluorescent light bulbs are much less expensive than traditional ones during their lifetime. Unfortunately, their relatively longer payback period and higher upfront costs discourage their use, making it difficult for many consumers to think of light bulbs as an investment warranting life-cycle costing (Polonsky 2001).

In some cases, it may be easier to demonstrate cost savings for less harmful alternatives, such as Kyocera's Ecosys laser printer. The Ecosys is competitively priced and uses less energy and toner than other comparable printers, so it is cheaper than traditional products in both the long and short terms, a benefit that can easily be demonstrated to consumers (Polonsky 2001).

### **Green Promotion**

One of the most difficult questions to address is: What environmental information should be communicated and how should it be communicated? A primary issue is that there must be something worthwhile to talk about. Before embarking on environmental promotion, the firm must consider what consumers perceive environmental information to be, and whether they actually understand what is being communicated. The EPA has suggested that such information needs to educate consumers and enable them to make more effective decisions.

Polonsky (2001) suggests that green promotion needs to communicate substantive environmental information to consumers that has meaningful links to corporate activities. As such, it is unlikely to be an effective strategic tool unless it is supported by other corporate activities. Thus, promoting some real environmental attribute of a product or firm requires a change in the product, process, or corporate focus (integration with other activities).

### **Green Positioning**

Green positioning is a question that needs to be asked early in an organization's development. In other words, what are the underlying environmental values and behaviors of the firm and its products? Truly green marketers demonstrate strategic greening by ensuring that all activities and behaviors thoroughly incorporate

environmental values into decision-making processes. Environmental criteria should be considered as important as financial criteria. Such firms are rare, although several do attempt to adopt such a position.

The performance of any company taking this stance must match its rhetoric and consumer expectations. All corporate activities must support this projected image, or the firm will be "punished" by disillusioned consumers and the media. This consideration is important, because positioning is where many firms misuse tactical greening (Polonsky 2001).

### **Green Logistics**

Distribution is a typical concern, and one of the first functions targeted to minimize environmental costs. Firms have sought to reduce raw material use by modifying packaging, which can directly and indirectly lower distribution costs as well.

Integrated transportation systems, the Internet, and other initiatives have further reduced the environmental impact of distribution activities by requiring fewer transport modes. However, the most complex advances in distribution are in the area of reverse logistics, whereby firms move packaging and "used" goods from the consumer back up the distribution channel to the firm (Polonsky 2001).

### **Marketing Waste**

Reduction is not always possible, and in some cases technology is not adequate to enable waste products to be reprocessed for original use. At present, recycled plastic drink containers cannot be used in virgin containers because of health issues. In other cases, new markets are developed for waste products, which might even involve waste suppliers being customers for the processed waste. Some U.S. wineries pay to have their post-production waste collected and then buy back the processed material as fertilizer. Alternatively, waste products may be used as inputs into other production processes or as completely new products, such as marketing compost as a natural pesticide product.



While marketing waste is potentially an important activity, it rarely requires radical shifts in corporate philosophy, so it is not necessarily strategic greening. Because it involves trying to deal with existing waste more effectively (end-of-pipe solutions) rather than cut the production of waste in the first place, the "mental" shift needed for the firm to deal with the situation is much less than a case of true strategic greening (Polonsky 2001).

### **Green Alliances**

It may not be clear whether a firm has all the necessary expertise to implement complex green marketing tactics and strategies. Therefore, as seen in the extensive green alliance research, environmental groups can be a valuable source in helping the firm understand the issues, develop appropriate solutions, and implement associated strategies and tactics.

However, green alliances do not come without potential problems, including different or conflicting objectives. It is unrealistic to expect green groups to simply "toe the corporate line," since their value is not only their expertise but their independent image as well. Any problems arising from the alliance not only decrease the firm's benefits but also tarnish its image and harm its ability to achieve long-term objectives.

### **2.4 Levels of Green Marketing**

In the field of green marketing, a number of catch phrases have been used, all of which have to do with satisfying corporate objectives and consumer needs while ensuring that the world is not made worse off. The ramifications of such an approach are substantial and require that firms think globally about their activities, minimizing environmentally harmful activities in all countries in which they operate.

Managers may ask, "How can we achieve organizational and consumer objectives in more environmentally responsible ways?" In true green marketing, environmental issues become an overriding strategic corporate focus rather than simply one strategic action. Strategic greening, then, often requires a change in corporate mindset as well as in corporate behavior (tactics).

Menon and Menon (1997) suggest that green marketing activities can occur at three levels in the firm: strategic, quasi-strategic, and tactical. In strategic greening, there is a substantial fundamental change in corporate philosophy, such as the Australian firm CarLovers designing its entire car wash process as a closed-loop, recycled-water system. Quasi-strategic greening entails a substantial change in business practices. To reduce water consumption, for example, some hotel chains have begun asking guests to indicate when they want their towels washed by leaving them on the bathroom floor or in the bathtub. With tactical greening, there is a shift in functional activities, such as promotion. In times of drought, water authorities might use promotional campaigns to encourage consumers to behave in a more responsible, water-efficient fashion.

These three levels can be used to identify the amount of change a firm requires and may reflect the degree of commitment to various environmental objectives. Take the example of a jeans manufacturer who, in the early 1990s, promoted the fact that it would donate a proportion of each sale for planting trees. Such a tactical activity might have been viewed with intense skepticism, because there is no apparent logical link between making jeans and planting trees. However, a similar program by a paper company that explains the links between its activities and the natural environment, the specific ecological issue being addressed, and how the program will assist in improving the environment would likely be seen by consumers as undertaking an appropriate tactical activity.

On the other hand, any strategic environmental activity would require an extensive long-term financial investment on the part of the firm involved. Effectively implemented, strategic greening would rarely be superficial. The German furniture manufacture Wilkhahn adopts an integrated strategic approach to greening. It designs long-lasting ergonomic products that either use recycled materials or minimize the use of virgin resources, and it manufactures them in an environmentally designed factory (Polonsky, 2001).

## **2.5 Problems Experienced By Firms Practicing Green Marketing**

No matter how a firm uses green marketing there are a number of potential problems that they must overcome. One of the main problems is that firms using green marketing must

ensure that their activities are not misleading to consumers or industry, and do not breach any of the regulations or laws dealing with environmental marketing. Green marketing claims must:

- (a) Clearly state environmental benefits;
- (b) Explain environmental characteristics;
- (c) Explain how benefits are achieved;
- (d) Ensure comparative differences are justified;
- (e) Ensure negative factors are taken into consideration; and
- (f) Only use meaningful terms and pictures.

Another problem firms face is that those who modify their products due to increased consumer concern must contend with the fact that consumer's perceptions are sometimes not correct.

When firms attempt to become socially responsible, they may face the risk that the environmentally responsible action today will be found to be harmful in the future. Take for example the aerosol industry, which has switched from CFCs (chlorofluorocarbons) to HFCs (hydrofluorocarbons) only to be told HFCs are also, a greenhouse gas. Some firms now use DME (dimethyl ether) as an aerosol propellant, which may also harm the ozone layer (Debets 1989). Given the limited scientific knowledge at any point in time, it may be impossible for a firm to be certain that they have made the correct environmental decision. This may be the reason why some firms are becoming socially responsible without publicizing the point. They may be protecting themselves from potential future negative backlash, if it is determined that they made the wrong decision in the past.

While governmental regulation is designed to give consumers the opportunity to make better decisions or to motivate them to be more environmentally responsible, there is difficulty in establishing policies that will address all environmental issues.

Reacting to competitive pressures can cause all 'followers' to make the same mistake as the 'leader.' A costly example of this was the Mobil Corporation who followed the competition and introduced "biodegradable" plastic garbage bags. While technically these bags were biodegradable, the conditions under which they were disposed did not allow biodegradation to occur. Mobil was sued by several US states for using misleading advertising claims (Lawrence 1991).

The push to reduce costs or increase profits may not force firms to address important issue of environmental degradation. End-of-pipe solutions may not actually reduce the waste but rather shift it around. While these may be beneficial, it does not necessarily address the larger environmental problem, though it may minimize its short-term effects. Ultimately most waste produced will enter the waste stream, therefore to be environmentally responsible organizations should attempt to minimize their waste, rather than find "appropriate" uses for it.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Research Design

This was a survey aimed at determining the extent to which manufacturing firms in Nairobi practice green marketing. The survey design was selected because:

- (a) Cost is low compared to other methods.
- (b) Biasing error is reduced because interviewer characteristics or techniques do not influence respondents.
- (c) Questionnaires provide a high degree of anonymity for respondents. This is especially important when sensitive issues are involved.
- (d) Questionnaires provide wide access to geographically dispersed samples at a low cost (Frankfort-Nachmias and Nachmias 1996).

#### 3.2 Population

The population of the study consisted of all manufacturing firms in Nairobi. The choice of Nairobi as the area of focus for the study was mainly due to the fact that it would provide a good variety of industries.

#### 3.3 Sampling Frame

A List of manufacturing firms in Nairobi was obtained from Kenya Association of Manufacturers directory of 2003, and Kenya Directory of Manufacturing Industries, 3rd Edition of 1997 from Kenya Industrial Research and Development Institute (KIRDI) (See Appendix 1). There were a total of 426 firms altogether, of which about 200 are based in Nairobi.

#### 3.4 Sampling Plan

A sample of 40 manufacturing firms was used. Considering the diverse distribution and nature of manufacturing firms in Nairobi, random sampling was used.

### **3.5 Data Collection**

The main instrument used in the collection of data for this study was a questionnaire. The respondents were middle level managers or above. It was semi-structured and subdivided in four parts as follows:

Part 1 consisted of open-ended questions aimed at obtaining demographic data.

Part 2 and 3 consisted of Likert five part questions for obtaining data on the extent to which firms practice green marketing in production, pricing, positioning, and promotion.

Part 4 had semi-structured questions focussing on the problem areas.

The questionnaires were administered on a "Drop and Pick-up later method". Twenty-four (24) of the forty (40) questionnaires were completed. This represents a response rate of 60%. This was considered suitable for the purpose of the study.

### **3.6 Data Analysis Techniques**

The data was be analyzed using descriptive statistics that are indicative of green marketing practices from the manufacturing firm's perspective. Descriptive statistics enable the researcher to summarize and organize data in an effective and meaningful way. They provide tools for describing collections of statistical observations and reducing information to understandable form (Frankfort-Nachmias and Nachmias 1996). Examples include, mean median and mode (measures of central tendency), variance, standard deviation and range (measures of variation), kurtosis and skewness (measures of spread). Likert attitude scales and percentages were also used (Cooper and Emory 1995).

## CHAPTER FOUR

### DATA ANALYSIS

#### 4.1 Profile of Respondents and Ownership of Firms

It was necessary to determine the period of service of the respondents as this was indicative of the level of understanding of the operations or processes in a particular firm. It was also important to classify the firms in a way that would give us an understanding of the spread or distribution of firms in terms of ownership. This was deemed vital in determining whether there exist differences in processes, based on ownership. This is as shown on table 1.

**Table 1: Profile of Respondents and Ownership of Firms.**

RESPONDENTS PROFILE		
PERIOD WITH FIRM	FREQUENCY	PERCENTAGE
2 - 5 YEARS	16	66.7%
5 - 10 YEARS	5	20.8%
ABOVE 10 YEARS	3	12.5%
OWNERSHIP OF FIRMS		
OWNERSHIP OF FIRMS	FREQUENCY	PERCENTAGE
WHOLLY FOREIGN OWNED	11	45.8%
WHOLLY LOCALLY OWNED	9	37.5%
JOINTLY OWNED	4	16.7%

Source: Response Data.

A large proportion of the respondents to the survey were middle level managers mostly handling the operations side of the business in the various manufacturing firms. They accounted for 79.2% of the respondents. The other respondents were senior managers who made up the 20.8% balance. The respondents had stayed with the firms for different periods of time. 66.7% of the respondents had stayed with the firms between 2 to 5 years, 20.8% for between 6 to 10 years and 12.5% above 10 years. This implies that the respondents were knowledgeable about the operations within their respective firms.

As illustrated in table 1, there were three ownership forms of the firms surveyed. There were firms that were wholly foreign owned, those that were wholly locally owned and then there were those that were jointly owned by both, foreigners and locals. For those that were jointly owned, all were largely foreign owned.

#### 4.2 Age and size of the Firm

Age and size of the firm are important factors in establishing the learning curve of firms with respect to the environment in which they operate. Table 2 attempts to bring out these features as shown below.

**Table 2: Age and Size of Firms.**

AGE OF FIRMS		
YEARS OF OPERATION	FREQUENCY	PERCENTAGE
Over 20 Years	10	41.68%
10 - 20 Years	7	26.16%
Under 10 Years	7	26.16%
SIZE OF FIRMS (BY NO. OF EMPLOYEES)		
NO. OF EMPLOYEES	FREQUENCY	PERCENTAGE
51-100	8	33.3%
Above 100	16	66.7%

Source: Response Data

From table 2 above, the firms that participated in the survey were of various ages. The findings were that 41.68% had been in existence for more than 20 years, 26.16% for between 10 and 20 years and another 26.16% had been in existence for less than 10 years. Of these firms, 66.7% had over 100 employees and 33.3% had 51-100 employees. No respondents had less than 50 employees.

#### 4.3 Manufacturing Processes

The respondents were all involved in processes that involved handling of products with a potential toxic capability at some stage of the process or those that posed a present danger depending on the manner in which it was handled by the workers. The firms spanned a



wide range which include, beverage manufacturers, dairy processors, confectionery manufacturers, iron sheet manufacturers, tinned food processors, home care product manufacturers and chemical derivatives manufacturers.

This section sought to establish the extent to which firms adhered to green procurement and handling of raw materials in the manufacturing process. The respondents were required to state whether their firms undertook the processes to a large extent, above average, fair, below average or did not consider them. The results are as represented on table 3 below.

**Table 3: Extent of conformance to green manufacturing processes (Response in Absolute Nos.)**

	Large Extent	Above average	Fair	Below Average	Not considered
The raw materials used are Obtained from reputable firms	12	8	4	0	0
Raw materials meet the specifications required	15	9	0	0	0
Raw materials are stored in a manner that ensures the quality is maintained.	11	10	2	1	0
Employees are well trained on the nature and effects of the raw materials	9	6	9	0	0
Necessary protective gear is provided to employees in direct contact with raw material	7	10	6	1	0
There exists an internal system of emergency response if any staff is exposed to toxic substances	5	9	10	0	0
The employer ensures that a regular check on employee health is undertaken	2	7	12	3	0
The manufacturing process involves long hours of exposure	0	0	3	7	14
The manufacturing process does release toxic fumes/effluent to the environment	0	2	5	12	5
The work environment is very well managed in terms of waste containment and disposal	8	8	8	0	0
The products manufactured may harm the environment if not handled appropriately.	4	2	3	13	2
Methods of proper use and disposal are clearly marked / indicated	14	6	3	0	1
The company has a recycling programme of its waste products	7	6	4	2	5
The company has a recycling programme of waste that is generated by its customers	2	5	9	6	2
<b>TOTALS</b>	96	88	78	45	29
<b>MEAN SCORE (%)</b>	28.57	26.19	23.21	13.39	8.64

Source: Response Data

The mean scores show that 28.6% of the firms conformed to a large extent with green procurement and raw material handling issues while 26.2% are above average in this exercise. These total up to 54.8%, implying that majority of companies surveyed are making a significant effort to conform to green issues.

#### 4.4 Pricing

In this section the survey sought to assess, firms philosophies with regard to pricing with special emphasis on environmental issues.

**Table 4: Pricing Characteristics**

Pricing Characteristics	Large Extent	Above average	Fair	Below Average	Not considered
The products manufactured are soberly priced in view of the costs incurred to produce them.	5	12	7	0	0
The attributes are clearly outlined in a manner that is demonstrable and hence justify the price.	6	8	10	0	0
The products are such that they last the stipulated period if properly used.	9	9	3	0	3
Money back guarantees are available for products failing to meet customer expectations.	5	5	4	5	5
<b>TOTALS</b>	<b>25</b>	<b>34</b>	<b>24</b>	<b>5</b>	<b>8</b>
<b>MEAN SCORE (%)</b>	<b>26.04</b>	<b>35.42</b>	<b>25.00</b>	<b>5.21</b>	<b>8.33</b>

Source: Response Data

Table 4 shows the philosophies of the respondents firms with regard to pricing. From the data it is clear that in pricing 35.4% of the respondents are above average when it comes to green pricing and that only 26% are depicted as practicing green pricing to a large extent. This then means that over 60% of the respondents consider themselves as pricing fairly to the market. Of interest, however is the fact that 8.3% do not consider green issues when it comes to pricing.

#### 4.5 Positioning

In this section the survey sought to assess, firms philosophies with regard to positioning with special emphasis on environmental issues. Of importance was to test if firms are making any deliberate attempt to portray themselves in a particular way through their products. This is elucidated on table 5.

**Table 5: Positioning Characteristics**

Positioning Characteristics	Large Extent	Above average	Fair	Below Average	Not considered
The products are positioned based on their environmental values.	6	7	9	0	2
Company activities also support the projected image in positioning.	5	8	7	3	1
<b>TOTALS</b>	<b>11</b>	<b>15</b>	<b>16</b>	<b>3</b>	<b>3</b>
<b>MEAN SCORE (%)</b>	<b>22.92</b>	<b>31.25</b>	<b>33.33</b>	<b>6.25</b>	<b>6.25</b>

Source: Response Data

As for the positioning aspect, 33.3% regard themselves as positioning the product in line with how they want to be perceived by the customers. About another 31.3% consider themselves above average in this area, with 23% considering that they undertake green issues to a large extent. 6.25% of the sample also reveal that such considerations are not at play when considering their product or corporate positioning.

#### 4.6 Promotion

In this section also the survey sought to assess, firms philosophies with regard to promotion of their products with special focus on environmental or green issues. Table 6 below shows the trends as received from the respondents.

**Table 6: Promotion Characteristics**

Promotion Characteristics	Large Extent	Above average	Fair	Below Average	Not considered
The products are promoted based on the environmental values.	7	6	3	5	3
The information provided is educative and/or informative.	7	7	10	0	0
The promotion is in harmony with corporate activities.	6	8	7	0	3
Packaging is critically considered in the promotion.	6	7	5	2	4
TOTALS	26	28	25	7	10
MEAN SCORE (%)	27.08	29.17	26.04	7.29	10.42

Source: Response Data

In considering promotional activities the results suggest that 29% of the sample are above average when aligning the activities to green issues. 27% also do the same, but to a large extent. A further 10% are deemed not to make these considerations when undertaking their activities. The balance of 7% is considered to undertake the activities with their considerations of green issues being below average.

#### 4.7 Management Commitment & Challenges

In this section the survey sought to look at management commitment and any challenges that they are facing in undertaking green issues, if any. From the results it is clear that of all the respondents, only seven (7) undertake any form of advertising, which represents 29.17% of the sample. Of these, only three (3) or 12.5% of the sample direct their advertisements towards environmental concerns.

**Table 7: Management Perspectives**

Management Perspectives	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree
Our products are preferred due to customer Belief in our processes	9	15	0	0	0
Our products are positioned based on their Safety features / aspects	10	10	0	4	0
Increased demand for our product(s) are Driven by their safety features	3	7	0	9	5
The company focuses its marketing activities Around safe and responsible use of its products	8	9	0	5	2
We believe marketing with an environmental Focus has a niche in this economy and is the Way of the future	10	12	0	2	0
<b>TOTALS</b>	<b>40</b>	<b>53</b>	<b>0</b>	<b>20</b>	<b>7</b>
<b>MEAN SCORES (%)</b>	<b>33.33</b>	<b>44.17</b>	<b>0</b>	<b>16.67</b>	<b>5.83</b>

Source: Response Data

From the analysis on table 7, it is evident that top management in 44% of the sample agree that processes and product safety play a crucial role in customer tastes and preferences. A further 33% actually agree strongly. In total about 78% of the total sample are inclined to quality as the key driver in their business. No management team was indifferent to the survey, but it also emerged that while it is true that going green is important, many businesses still reckon that factors other than processes drive the bulk of the businesses today.

Of the total sample only four (4) of the manufacturing firms have any form of quality certification. This represents only 16.67%. Most respondents claim that their in-house quality control procedures are adequate and that these serve them adequately as they have invested heavily in quality control points along the production lines.

Of those that are certified, they indicate that certification is quite a task. It involves a significant amount of time and resources for modifications and/or improvements so that the processes conform to standards as elucidated by the certification bodies. Such certification

include ISO 9001, ISO 9002, ISO 14000 offered by the International Standardization Organization (ISO) for both manufacturing and environmental quality management, and Hazard Analysis and Critical Control Points (HACCP) certification DS 3027 offered by *Societe Generale de Surveillance*, International Certification Services (SGS-ICS) and Bureau Veritas Quality International (BVQI).

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### DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

The research presented here was designed to investigate two main issues. First, was the extent to which manufacturing firms in Nairobi practice green marketing. Second, we aimed to examine the factors that influence the practice of green marketing.

Issues such as raw material procurement, the manufacturing process, packaging and storage, pricing, positioning and promotion were pertinent in assessing the extent of a firm's green marketing efforts. The study focussed on determining the extent to which firms adhere to green marketing practices during these processes.

#### 5.2 Discussion

Looking at these objectives the results provided considerable support in terms of the key drivers of the green marketing process. The manufacturers are aware of the fact that customers are getting more and more informed. Many ailments are being continually linked to the work environment and/or consumption habits. Of the firms sampled the indication was that there is an appreciable extent to which green marketing is being adopted in Nairobi.

In considering the manufacturing processes, it is evident that the largest proportion of manufacturing firms considers green marketing issues seriously, the underlying drivers notwithstanding. From the mean scores it is also evident that these issues play a role in the pricing, positioning and promotion decisions. There exists a category of manufacturers who hold the opinion that green issues should enable them carve their own niche in the market, and as such the products are highly priced. This in itself creates a contradiction between having green products and pricing green. However, the argument is that customers might not believe the green positioning given the perception that going green is an expensive affair. Others maintain a standard pricing policy, and the issue of product category is not considered. A significant group of manufacturers argued that they have been able to realize lower production costs after streamlining their



operations, and this has enabled them to produce quality products at lower costs. They add that this has been instrumental in making them competitive in the market.

Management commitment has also been significant in many firms going green. First, from the sample, firms were either wholly foreign owned or largely foreign owned. This has had the effect of establishing firms with strict adherence to home country ethics. Other firms have foreign mother companies and which have resolved to set the same standards in every environment of their operations. The desire to expand business horizons has also given impetus the initiatives by many firms to go green. Many managers indicated that they could not compete for businesses in Europe on the basis of price alone. They were forced to make the expensive decision of seeking certification so that the quality of their products was undoubted.

There are numerous factors that influence the decision to go green. With a dynamic market one must plan ahead. Many firms choose the 'do it now' approach to preempt the last minute rush. Some manufacturers attribute their market position to the fact that they undertook greening issues early and were able to single themselves out to customers.

Competition based on price alone is fast becoming a thing of the past. In the market today, many managers suggest that in a particular industry, the base costs are very similar. The only difference is in the operating expenses. These differences are only manifest in processes. It is for this reason that many firms have opted to incur short-term costs for long-term gains.

In summary, the study seems to incline itself to the fact that extent to which firms in Nairobi have gone green cannot be ignored and that the key drivers of this change are clear, ranging from government legislation to customer awareness. It has also shown that no management is indifferent to this important issue even though they might attribute their success to factors other than going green.

### **5.3 Conclusion**

The present study's findings are largely consistent with the literature in that we are seeing a scenario where manufacturers are reshaping their business practices in line with green marketing practices for various reasons:

- a) Many are succumbing to governmental pressure, given the enactment of new legislation.
- b) We are also seeing a situation where pressure to be competitive is driving the greening process. For example, many certified firms concede that they had to get the certification in order to be considered for business by European firms that hold the certification in high esteem.
- c) Customer demand has also played a key role in the move taken by manufacturing firms. For example, bad publicity has made some firms to redefine themselves so that they can win back favour and preference from customers.
- d) Some firms, though citing high costs of implementation, have had to improve their operations so as to position themselves strategically in the market. This is in recognition of the fact that as customers get more informed, they demand more from manufacturers in terms of quality that is sustainable. The firms therefore have to incur short-term costs for long-term gains.

### **5.4 Recommendations**

The challenge that still remains is mainly waste management. This one area that needs a lot of emphasis because from the study, it emerged that it was suffering so considerable neglect. Many manufacturers allude that the government should drive this part of the greening process. This mainly due to reluctance by some manufacturers to ensure that emissions and effluents entering the mainstream are not overly polluted.

Another area of concern is focus on price rather than product attributes. Many firms claim that the market is such that it is very difficult to forecast with any meaningful level of accuracy so they prefer to make the money now. Incurring costs for long-term gains is not a viable option for such firms. They therefore do very little if anything to safeguard health of employees and this may extend to the quality of the products that they produce.

## LIMITATIONS OF THE STUDY

1. The major limitation of this study was time thus restricting the study to Nairobi only. With increased vigilance from government labour officials and recent unrest by unionisable workers in manufacturing firms, coupled with inherent fears of industrial espionage and Kenya Bureau of Standards inspectors another major limitation of this study was the refusal by some manufacturers to participate in the study, mainly due to suspicion.
2. Given the level of detail required to effectively bring out the green marketing efforts, the questionnaire was a little too long and thus tedious to complete. Most of the prospective respondents were middle to senior managers who were simply overwhelmed by duty and did not have time to complete the questionnaire on time, if at all. As a result some respondents were reluctant to fill in the questionnaire.
3. Another limitation is the fact that the study was limited to manufacturing firms only thus cutting out contributions from other respondents who could be undertaking different forms of green marketing, say in non-manufacturing concerns.

## SUGGESTIONS FOR FURTHER RESEARCH

1. Green marketing is undoubtedly getting more and more popular as the consumers gets to be better informed on various consumption and service needs. It would therefore be important to expand the study beyond manufacturing firms in Nairobi, and more so to service delivery concerns.
2. From the design of the study, the respondents were giving a manufacturer's perspective. It is recommended that further research should be done in the following areas:
  - a) The extent to which customers perceive a firms' efforts as green.
  - b) Green Marketing - A short term or long term strategy?
  - c) Green marketing efforts in small enterprises, following non-response from this group in this particular study.
3. Another interesting aspect would be a look at look at green marketing efforts by locally owned firms.

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## APPENDICES

### APPENDIX 1: LIST OF MANUFACTURING FIRMS

NAME OF FIRM	NAME OF FIRM
Afri International	Abdul Quaid Framers
African Highlands Produce	Afri Packaging
Africana Manufacturers	Afro Plastics Ltd
Ajay Garments Ltd	Afro Press Ltd
Anffi Ltd	Allied Electronics
Associated Steel Ltd	Associated Battery Manufacturers
Avon Rubber Co.	Athi River Mining
Aziz Din Nabi Bux	Aurora Baking Co. Ltd
Bamburi Cement	Autoparts E.A Ltd
Beta Healthcare International	B.A.T (K) Ltd
Bizari Industries	B.D.F (E.A) Ltd
Brother Shirts Factory	B.O.C (K) Ltd
C. Dormans Ltd	Bachelors Bakery Ltd
CPC (K) Ltd	Banbros Ltd
C.P.C Industrial Prod.	Basco Paints Co.
Car & General Automotives	Bhupco Textile Mills
Carbacid (CO <sub>2</sub> ) Ltd	Bonar (EA) Ltd
Carbon Brushes	Booth Manufacturers
Central Glass Works	Brollo Eng. Fabs
Chai Ltd	Brother Knitwear Factory
Charger Engineers	Brush Manufac. Ltd
City Engineering Works	Burns And Blane Eng.
Concrete Pipes And Products	Cadbury Schweppes
Cosmic Megaplast	Canvas Man. Ltd
Cosmos Ltd	Ceramic Manufacturers
Datini Mercantile	Chandaria Ind.
Denamal Garments Fact.	Clay Works Ltd
Diamond Concrete	Coates Bros (EA) Ltd
Dogra Engineering	Coca Cola Bottling Co. Ltd
E. A. Spectre Ltd	Colas (EA) Ltd
East Africa Paper Bag Manufact (Closed)	Colgate Palmolive
Eldema (K) Ltd	Colour Printers
Ellam Products	Combined Industries Ltd
Elliots Bakery	Cosmos Plastics
Elson Plastic (K) Ltd	Crescent Investments
Ely's Chem. Industries	Crown Berger Paints
Emco Steel Works (K) Ltd	Cussons (Pz) & Company
Empire Match Co.	D. L. Patel Press
Euromica Ltd	Dawa Pharmaceuticals Ltd
Evangel Publishing	Delta Radiators Ltd
Firestone (E. A.) Ltd	Didy Pharmaceuticals
Fulchand Manek & Bros	Dipco Garments
Furniture International	E. A. Cables
General Motors	E. A Leather Factory



General Plastics	E. A. Metal Works
Glaxo Smithkline (K) Ltd	E. A. Optical Co.
Gopitex Knitwear Mills	E. A. Packaging Industries
Haco Industries (K) Ltd	East Africa Portland Cement
Haria Cash Store	Eastern Rift Saw Mill
Harries LG & Co.	Elephant Soap Factory
Hartz And Bell	Elgeyo Saw Mills
Hira Industries	Eveready (K) Ltd
Intern Flavours	Ezzi Vinyl Products
Interconsumer Products	Farmers Choice
Intersilk Garments	Fine Spinners Ltd
J. D. Sharma & Sons	Fine Wood Works
Jaydee Knitting Factory	Galaxy Paints Co.
Johnson & Johnson	Galsheet (K) Ltd
Johnson Wax (EA) Ltd	Ganjivani Screw & Fasteners
K.C.C.	General Printers
K.P.C.U.	H. Young Ltd
Kamco Eng. Works	Hari Singh Gill
Karibu Timber	Harman Singh & Bros
Karirana Estate Ltd	Henkel (K) Ltd
Kartasi Industries	House Of Manji
Kenpoly Manufacturers	Hymel Meters
Kenya Engineering Ind.	Impala Glass Industries
Kenya Litho	Insteel Ltd
Kenya Sunshine Produce	International Distillers
Kenya Tents Ltd	Ital Products
Kenya Tread Ltd	Jakaria Packers
Kenya Canvas Ltd	Jagat Singh & Sons Ltd
Kerbrook Garment Manufacturers	Jamanadas Ramji & Co. (Closed)
Khetshi Dharamshi	Jambo Biscuits (K) Ltd
Labchem Ltd	Jambo Manufacturers
Laboratory & Allied Ltd	Kapa Oil Refineries
Leather Industries Of Kenya	Kehar Singh & Co Ltd
Life Clothing Factory	Ken Wesfal Works Ltd
London Distillers (K) Ltd	Kenchic Ltd
M/S Patco Industries	Kenya Breweries Ltd
Madhupaper Ltd	Kenya Industrial Plastics
Malva Furniture	Kenya National Fed Of Co-Op
Mamson Hart (K) Ltd	Kenya Paperbags Mnfrs
Manchester Outfitters	Kenya Sweets Ltd
Mann Manufacturers	Kanya Trout & Salmoa Files
Mareba Enterprises	Kenya Uniforms Ltd
Marshall Fowler Eng.	Khimji Clothwear
Mecol Ltd	Kiwi Brands Ltd
Metroxide Ltd	Labh Singh Harnam Singh
Midco Textiles (EA) Ltd	Longhorn (K) Ltd
Mrao Ltd	Malva Furniture House
Nairobi Home Bakery	Maridadi Fabrics
Nairobi Trousers & Shirts	Mastermind Tobacco (K) Ltd

Nanak Body Builders	Mini Bakeries
Nightrose Cosmetics	Mughal Eng.
Nova Chemicals	Mwea Rice Mills
Orbitsports Ltd	Nairobi Bottlers Ltd
Oven Door Bakeries	Nairobi Flour Mills
Packaging Africa Ltd	Nation Printers
Paper Converters Ltd	National Concrete
Pelican Signs Ltd	Nestle Foods (K) Ltd
Pigeon Slide Zippers	Optical Manufacturers
Pleated Industries	Orbit Chem. Industries
Polythene Industries	Pan African Enterprises
Prudential Printers	Paper Bags Ltd
Refactories Ltd	Phillips E. Lamps
Regal Printers	Premchand Mepa & Co. Ltd
Ritz Enterprises	Premier Flour Mills
Rolmill (K) Ltd	Premium Drums
Rose Brothers Wholesalers	Project Furniture Ltd
Rubani Eng. Works	R. H. Devani Ltd
Rubber Products	Razco Food Products
San Pack Ltd	Reckitt Benckiser
Santowels Ltd	Regal Pharmaceuticals (Nrb)
Shamco Industries Ltd	Sadolin Paints Co.
Shanty Perfumery	Sarco Co.
Signode Packaging Systems Ltd	Seracoatings (EA) Ltd
Silentflow Exh. Manu.	Setlact Manufacturers
Singh Retread Ltd	Shah Timber Marts
Slabs Systems Ltd	Silentnight (K) Ltd
Solai Mawa Factory	Sotik Highland Tea Estate
Standard Ltd	Stainless Steel Products
Tarpo Industries Ltd	Sunflag Spinning Mills
The Paper House	T.S.S. Spinning & Weaving
Tigra-Knit	Taws Ltd
Timesales Ltd	Tee Pee Industries
Tobina Ltd	Teita Estate (1972) Ltd
Troika Ltd	Treadsetters Ltd
Trox Garments Mnfrs	Trufoods
Twiga Stationers & Printers	Twiga Chemical Industries
Umoja Rubber Manufacturers	United Chemical Industries
Unga Feeds Ltd	Universal Garments Factory
Unga Ltd	Venpro Ltd
Uniplastics	Virani Curry Powder
Uzuri Manufacturers	Warren Eng.
Vacuulug Tyre	Wananchi Clothing
Vajas Manufacturers	Werrot & Co.
Virji Vishram Patel And Sons	Wire Products
Vitafoam Products	Wood Cham
Wambari Saw Mill	Wyco Paints
Westland Bakery	Wriggley (E. A) Ltd

## APPENDIX 2: LETTER OF INTRODUCTION

P. O. BOX 16761,  
00620, MUTHAIGA,  
NAIROBI.

Dear Sir / Madam,

### RE: RESEARCH ON A SURVEY OF THE EXTENT TO WHICH MANUFACTURING FIRMS PRACTICE GREEN MARKETING

I am a student at the University of Nairobi pursuing my postgraduate degree in business administration (MBA). I am undertaking the subject project as part of the academic requirements towards completion of the course. You are kindly requested to spare sometime and complete the attached questionnaire.

All the information you volunteer will be treated in strict confidence and at no time will your name or that of the firm be mentioned in the report, whatsoever. However, the findings of the research can be availed to you upon completion.

Your co-operation will be highly appreciated.

Thank you.

Yours faithfully,

Evans Obuya  
MBA STUDENT

**APPENDIX 3: QUESTIONNAIRE**  
**GREEN MARKETING SURVEY**  
**SECTION A**

**PART I: GENERAL/RESPONDENT INFORMATION**

NAME OF ORGANIZATION: \_\_\_\_\_

1. Title or position of the respondent in the firm \_\_\_\_\_

2. How long have you been with this firm? \_\_\_\_\_

**PART II: ORGANIZATION DATA**

How would you classify your firm in regard to ownership?

Wholly foreign owned [ ]

Wholly locally owned [ ]

Jointly owned [ ]

If your firm is jointly owned between foreign and local investors, what is the proportion of ownership?

Largely foreign owned [ ]

Largely local owned [ ]

Equally owned [ ]

For how long has your firm been in existence?

Less than 5 years [ ]

Between 5 and 10 years [ ]

More than 10 years [ ]

Indicate the total number of employees in your firm

0 - 50 [ ]      51 - 100 [ ]      Above 100 [ ]

What is your Company's turnover annually (You may give Approximate figures in KSh.)?

\_\_\_\_\_

## SECTION B

### 1. MANUFACTURING PROCESSES

To what extent do the following statements conform to the manufacturing process(es) as undertaken within your firm?

Key:	Large extent	5
	Above average	4
	Fair	3
	Below Average	2
	Not Considered	1

	5	4	3	2	1
The raw materials used are obtained from reputable firms	[ ]	[ ]	[ ]	[ ]	[ ]
Raw materials meet the specifications required	[ ]	[ ]	[ ]	[ ]	[ ]
Raw materials are stored in a manner that ensures the quality is maintained.	[ ]	[ ]	[ ]	[ ]	[ ]
Employees are well trained on the nature and effects of the raw materials	[ ]	[ ]	[ ]	[ ]	[ ]
Necessary protective gear is provided to employees in direct contact with raw material.	[ ]	[ ]	[ ]	[ ]	[ ]
There exists an internal system of emergency response if any staff is exposed to toxic substances	[ ]	[ ]	[ ]	[ ]	[ ]
The employer ensures that a regular check on employee health is undertaken.	[ ]	[ ]	[ ]	[ ]	[ ]
The manufacturing process Involves long hours of exposure	[ ]	[ ]	[ ]	[ ]	[ ]

The manufacturing process does release toxic fumes/effluent to the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The work environment is very well managed in terms of waste containment and disposal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The products manufactured may harm the environment if not handled appropriately.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Methods of proper use and disposal are clearly marked / indicated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The company has a recycling programme of its waste products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The company has a recycling programme of waste that is generated by its customers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION C**

**PRICING, POSITIONING AND PROMOTION**

To what extent do the following statements describe your firm's philosophy in terms of product pricing, postioning and promotion?

Key: As in SECTION B.

<b>PRICING</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
The products manufactured are soberly priced in view of the costs incurred to produce them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The attributes are clearly outlined in a manner that is demonstrable and hence justify the price.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The products are such that they last the stipulated period if properly used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Money back guarantees are available for products failing to meet customer expectations.

### **POSITIONING**

The products are positioned based on their environmental values.

Company activities also support the projected image in positioning.

### **PROMOTION**

The products are promoted based on the environmental values.

The information provided is educative and/or informative.

The promotion is in harmony with corporate activities.

Packaging is critically considered in the promotion.

## **SECTION D**

### **MANAGEMENT COMMITMENT & CHALLENGES**

1. Does your company undertake any form of advertising?

Yes  No  (if NO please ignore question 2.)

2. Does the advertising focus on anything to do with environmental conservation?

Yes  No

3. Does your company get involved in any activities that focus on giving back to society (Corporate Social Responsibility)?

Yes  No

**To what extent do you agree with the following statements:**

Key: Strongly Agree 5  
 Agree 4  
 Indifferent 3  
 Disagree 2  
 Strongly Disagree 1

	5	4	3	2	1
Our products are preferred due to customer belief in our processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Our products are positioned based on their safety features / aspects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased demand for our product(s) are driven by their safety features	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The company focuses its marketing activities around safe and responsible use of its products.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We believe marketing with an environmental focus has a niche in this economy and is the way of the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Is your Company ISO 9001 certified?

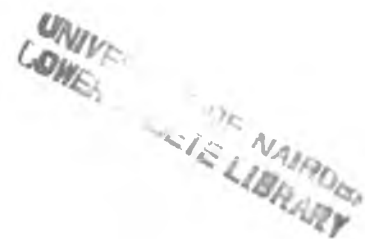
Yes  No

Is your Company ISO 14000 certified?

Yes  No

Does your Company have any other form of certification?

Yes  No





Nature of certification

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What are the key success factors that your company has experienced in implementing the existing processes?

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What problems has your company experienced in implementing the existing processes?

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Any additional information:

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**THANK YOU VERY MUCH FOR YOUR VALUABLE TIME.**