

GREEN CONSUMERISM: A WAY FORWARD IN SOUTH AFRICA?  
A CASE STUDY IN PIETERMARITZBURG

by

KWASI ADDAI-POKU

Submitted as the dissertation component in partial fulfilment of the requirements for the  
degree of  
Master of Science (in Environment and Development)  
in the  
School of Environment and Development,  
University of Natal

Pietermaritzburg

1997

## ABSTRACT

The study assessed the possible significance of Green Consumerism in South Africa. Different meanings of “green” are explained. Consumer preferences for some green products was examined. An analysis of the attitudes and actions of South African consumers to green products and services was completed in two suburbs, of Pietermaritzburg, as a case study. Though there was a significant difference in total household income between shoppers in the two suburbs there was no significant difference between their respective green expenditure. Consumers generally preferred cheaper conventional products to more expensive green products. Consumers considered price as the most important factor when making purchasing choices and the higher the price differential, the more likely consumers are to select cheaper conventional products rather than green alternatives. Public education, government intervention in the form of lower taxes or subsidies for green products and encouragement of green movements are required if Green Consumerism is to become a meaningful alternative in South Africa.

## PREFACE

The research work described in this dissertation was carried out in the School of Environment and Development, University of Natal, Pietermaritzburg, from September 1996 to March 1997, under the supervision of Dr. Duncan Reavey and Dr. Tennassie Nichola.

The study represents the original work by the author and has not been submitted in any form for any degree to any University. Where use has been made of the work of others it is duly acknowledged in the text.

---

KWASI ADDAI-POKU

## LIST OF CONTENTS

	Page
Chapter 1. INTRODUCTION.....	1
Chapter 2. WHAT IS GREEN CONSUMERISM?	
2.1 The meaning of “green” .....	3
2.2 The meaning of “Consumerism” .....	5
2.3 The meaning of “Green Consumerism” .....	6
2.4 History of Green Consumerism in a world context.....	6
2.5 The South African context of Green Consumerism (Past, Present, and Future).....	10
Chapter 3. WHO ARE THE GREEN CONSUMERS?	
3.1 The Green Consumers.....	12
3.2 Categories of Green Consumers.....	13
3.3 Attitudes of Consumers when making purchases.....	16
Chapter 4. FIELD STUDY: ATTITUDES OF PIETERMARITZBURG CONSUMERS TO GREEN PRODUCTS AND SERVICES:	
4.1 Rationale and Aim.....	18
4.2 Methodology.....	18
4.3 Results.....	19
4.3.1 Mean income and green expenditure.....	19
4.3.2 Purchases of particular products.....	21
4.3.2.1 Toilet rolls.....	21
4.3.2.2 Hair sprays.....	22
4.3.2.3 Eggs.....	22
4.3.2.4 Coffee filter paper.....	23
4.3.2.5 Tea bags.....	23
4.3.2.6 Detergents.....	24
4.3.2.7 Sanitary pads.....	25

4.3.2.8	Paints.....	26
4.3.2.9	Fuel.....	27
4.3.2.10	Vegetables.....	27
4.3.2.11	Summary of “green” product preferences.....	28
4.3.2.12	Summary: level of ignorance of “green” products.....	28
4.3.3	Age of respondents.....	29
4.3.4	Willingness to pay a premium for green products.....	31
4.3.5	Importance of different factors when purchasing.....	32
4.3.6	Price diferentials between some “green” products and conventional products.....	32
4.3.7	Index of consumer preference and the price index of products....	33
4.3.8	Some “green” products and their distinguishing features.....	34
Chapter 5. SUMMARY OF RESULTS AND DISCUSSION.....		35
5.1	Summary of results.....	35
5.2	Discussion.....	38
5.3	Conclusion.....	46
5.4	Recommendations.....	46
REFERENCES.....		48
APPENDIX 1.....		53
APPENDIX 2.....		56

## LIST OF TABLES

Table	Page
Table 2.1 Objectives of United Nations Guidelines for consumer protection.....	8
Table 2.2 Intended outcomes of the Guidelines for consumer protection.....	9
Table 3.1 Definitions of some green consumer segments.....	14
Table 4.1 Factors considered important when making purchasing choices.....	32
Table 4.2 Differences in price between “green” and conventional products and their price indices.....	32
Table 4.3 Index of consumer preference and price index of products with its extra cost (%)...33	33
Table 4.4 Some “green” products and their labelling and packaging features.....	34

## LIST OF FIGURES

Figure	Page
Fig 2.1 The many meanings of green.....	4
Fig 3.1 Consumers in relation to the environment.....	15
Fig 4.1 Green expenditure of Hayfields' consumers with respect to their income.....	20
Fig 4.2 Green expenditure with respect to income of consumers at City Centre.....	21
Fig 4.3 Purchases of bleached (normal) and unbleached ("green") toilet rolls at Hayfields and City (Capitol) Centre.....	21
Fig 4.4 Purchases of hair sprays with CFCs (normal) and without CFCs ("green").....	22
Fig 4.5 Purchases of conventionally produced eggs and free range eggs ("green") for Hayfields and City (Capitol) Centre.....	23
Fig 4.6 Purchases of bleached (normal) and unbleached ("green") coffee filter papers.....	23
Fig 4.7 Purchases of bleached (normal) and unbleached ("green") tea bags.....	24
Fig 4.8 Purchases of normal detergent and phosphate-free ("green") detergent.....	25
Fig 4.9 Purchases of chlorine-bleached and non-chlorine bleached ("green") sanitary pads.....	26
Fig 4.10 Purchases of organic-based (conventional) and water-based ("green") paints.....	26
Fig 4.11 Purchases of leaded (conventional) and unleaded ("green") fuel.....	27
Fig 4.12 Purchases of non-organically grown (normal) and organically-grown ("green") vegetables.....	27
Fig 4.13 Summary of "green" product preferences.....	28
Fig 4.14 Level of respondents' ignorance of green alternatives.....	29
Fig 4.15 Mean weekly green expenditure of Hayfields' consumers.....	29
Fig 4.16 Mean weekly green expenditure of City (Capitol) Centre consumers.....	30
Fig 4.17 Mean weekly green expenditure of Hayfields' and City Centre (Pooled).....	31

## ACKNOWLEDGEMENTS

I would like to express my appreciation to the following people without whom my studies for this degree would not have been as fruitful nor as enjoyable as they have been: I am very grateful to Dr. Duncan Reavey, the first Coordinator of the School of Environment and Development, University of Natal, Pietermaritzburg and Dr. Tennassie Nichola, Lecturer, Department of Economics for accepting to be my supervisors and then for their continued support and suggestions throughout the study.

My heartfelt thanks also goes to Faye Riley, Centre Manager of Hayfields' Mall Shopping Centre and Kay Govender, Public Relations Officer of Capitol Shopping Centre, Pietermaritzburg for providing space for me to conduct the research at their shopping centres. I also thank Ross Clinton, Manager of Hayfields Pick'n Pay Supermarket and Craig Tapping, Manager of City (Capitol) Centre Pick'n Pay Supermarket for also giving me permission to conduct the research in their shops.



## Chapter 1

### INTRODUCTION

Consumers are well aware of all kinds of environmental degradation with all kinds of causes - increasing concentration of carbon dioxide in the atmosphere, depletion of the ozone layer, deforestation, pollution of oceans by oil spills, encroachment of agriculture into areas of pristine wilderness and so on (e.g. Peters 1991, Prokop 1992, Graves and Reavey 1996) and just as clear is the increasing amount of waste generated by excessive packaging and by excessive lifestyle (Elkington and Hailes 1988). A new generation of consumers in countries such as USA and UK has grown up at a time of increasing concern about the damage we are doing to our local environment and to the planet. In such countries the idea that we can use our everyday consumption decisions to influence the world we live in is not new, but the power of the Green Consumer to push industry in a more environmentally acceptable direction is greater than ever before (Elkington and Hailes, 1988). The Green Consumer normally wants consumable goods, for example, to be organically produced without any chemical input like fertilizers, pesticides or synthetic chemical additives that may be harmful to people or the environment.

Green Consumerism involves the idea that a pressure group, manufacturers or a government protect and promote consumers' interest in "green" products and services which are environmentally acceptable and use resources in a sustainable way. Rousseau (1991) described consumerism as the voicing by consumers of discontent and the furtherance of corrective action. Maynes (1990) viewed consumerism as a social movement, seeking to augment the rights and power of buyers over those of sellers. Consumer rights according to The United Nations Guidelines for Consumer Protection (1985) and Du Plessis, Rousseau and Blem (1990) include the right to be informed, the right to choose from alternatives, and the right to a clean environment. Elkington and Hailes (1988) agreed that consumers have the power to change the trend of environmental degradation by buying products that are biodegradable and manufactured without cruelty to animals. They stressed that every day, whether we are shopping for simple necessities or for luxury items, we are making choices that then affect environmental quality of the world we live in. Those who are environmentally aware and environmentally concerned therefore look for "green" products and services which cause

less or no damage to the environment either in the course of their production or usage or disposal. However, many people are confused with what “green” really means and what constitute green products.

This study assesses the possible significance of Green Consumerism in South Africa. The term “green” is explained and consumer preference for some green products is examined. The extent to which South Africans attach value to green products is examined both among consumers and among manufacturers. A key question is whether consumers are likely to choose relatively costly green products rather than less expensive non green products. Using Pietermaritzburg as an illustration, this study explores the possibility of a growing significance of Green Consumerism taking off at this stage of the country’s history.

## Chapter 2

### WHAT IS GREEN CONSUMERISM?

#### 2.1 The meaning of “green”

There is indiscriminate use of the term ‘green’. In nature green is chiefly conspicuous as a colour of growing vegetation. When applied to herbage, Simpson and Weiner (1989) in the Oxford English Dictionary explains that the designation often implies some additional sense: unripe and immature; young and tender; full of vigorous life and flourishing; retaining traces of newness; perceptibly fresh or recent. However, the label ‘green’ is an extraordinarily elastic one that has been applied to, or appropriated by, all manner of environmental and political positions over the past decade (Eckersley 1992). McDonagh (1994) examines the meaning of ‘green’ within the context of advertising, and concludes that for different people ‘green’ will relate to one or more of a variety of components (Fig 2.1)

Kilbourne (1995) argues that there are at least five different types of green, comprising environmentalism, conservationism, human welfare ecology, preservationism and ecologism. To Kilbourne, the terms ecology, environment, and green appear synonymous. In developing clearer distinction between environmentalism and ecologism, he developed a framework within which the nature of green can be established. He then distinguished two dimensions for the green concept - the political and the positional (that is the positions of humans in nature) and labelled them as environmentalism and ecologism. Ecologism seeks qualitative change in the systems of thought that have structured the consciousness of Western industrial society for the past three centuries (Pirages 1977, Cotgrove 1982). Zinkhan and Carlson (1995) represent ecologism as a change in consciousness rather than a change in behaviour. While Kilbourne (1995) points out that the difference between the two types of green can also be described as anthropocentric green and eccentric green, Dobson (1990) refers to the two respectively as green with a “little g” and Green with a “capital G”.

For the political dimension, Eckersley (1992) expresses the point of view of participants in the Green movement and Green political parties that the word green represents a distinctive body of ideas and a new political force. He adds that it evolved out of deficiencies of social and political theory development. These are deficiencies in distributional justice and democratic

participation. Porritt and Winner (1988) explains that the most radical Green aim is nothing less than a non-violent revolution to overthrow our whole polluting, plundering and materialistic industrial society and, in its place, to create a new economic and social order which will allow human beings to live in harmony with the planet.

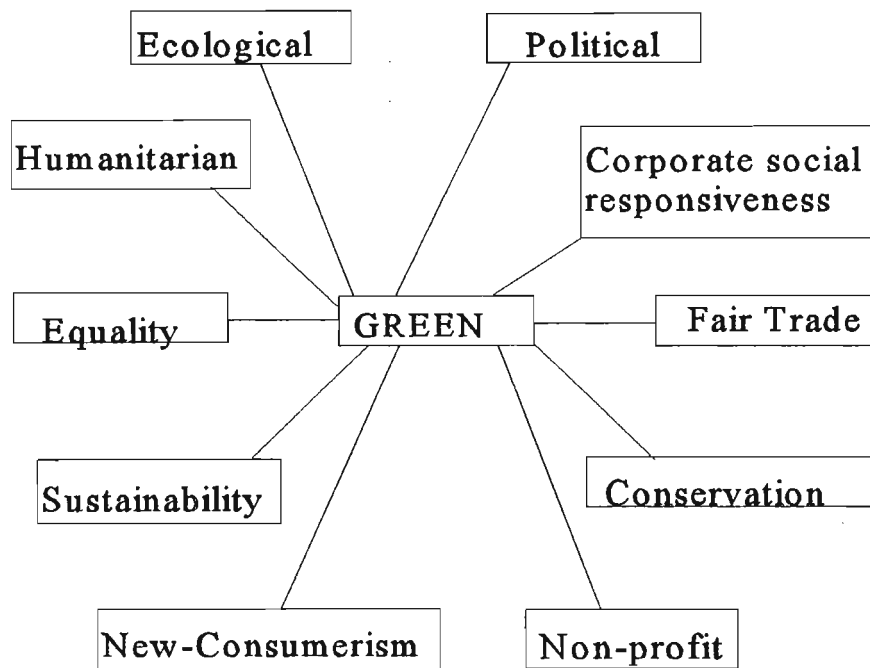


Fig 2.1

The many meanings of green.

Adapted from McDonagh (1994) and Peattie (1995)

Shrum, McCarty and Lowrey (1995) indicate that the term “green” is typically used interchangeably with “proenvironmental”. However, because of differences in definitions of “environment”, the term is necessarily imprecise. Shrum *et al* (1995) refer the use of the term “green” to indicate concern with the physical environment (air, water and land). Banerjee, Gulas and Iyer (1995) classified different shades of green. They explained that, for consumers, being green involves a lifestyle that has a minimal adverse effect on the biophysical environment. In choosing to minimize adverse environmental effects, the consumer is faced with a variety of consumption choices. They cited, for example, that the act of choosing a

particular type of transportation can be influenced by environmental concerns. An individual may choose to drive a smaller, more fuel-efficient car, or may choose to ride a bicycle instead of driving a car to minimize environmental pollution. Choosing to drive a smaller car may reflect a shallower involvement in a green lifestyle than choosing to ride a bicycle. In the same vein, selecting a detergent packed in recycled paper over one that is not, or switching to a brand of detergent that contains less toxic chemicals are other examples of pursuing a green lifestyle. Banerjee *et al* assert that such choices represent different degrees of greenness, but they all involve (1) assessment of the environmental impact of product/service choices and (2) behavioural change in purchasing, consuming and disposing of product. They conclude that being green is not one part of dichotomous state. Instead, greenness should be conceptualized as a continuous variable with shallow and deep involvement as the two extremes.

Whether, the word “green” is used in the context of consumerism, party politics, humanitarianism or corporate social responsiveness, it gives the idea of avoiding the thoughtless use of natural resources in order to maintain newness or originality of the environment. Prokop (1992) explains that, within an organisation, “going green” means that all parts of the organisation accept social and environmental responsibilities. An organisation’s greenness can be determined from its policies and decision making process. An organisation may decide to select suppliers based in part on the suppliers’ environmental responsiveness. This kind of green organisation could provide recycling centres to which employees and community residents could bring recyclable paper, glass or aluminium, or it could share environmental awareness by ensuring that its employees are aware and informed Green Consumers.

## 2.2 The meaning of “Consumerism”

“Consumerism” identifies the contemporary consumer movement, that arose in the mid-1960s. It encompasses the evolving activities of government, business, independent organizations and concerned consumers to protect and enhance the rights of consumers. In other words, it is the voicing of consumer discontent and the furtherance of corrective action (Rousseau 1991). Thus, the consumer movement is an important potential influence on the marketing of almost any product. Maynes (1990) viewed consumerism as a social movement, seeking to augment the rights and power of buyers over those of sellers. The United Nations Guidelines for Consumer Protection (1985) include the rights to be informed, to choose from

alternatives, to be heard (that is to redress), to safety and health in consumption of products and to a clean environment.

### 2.3 The meaning of “Green Consumerism”

Green Consumerism therefore involves the idea of protecting and promoting consumers’ interest in green products and services which are sustainable and environmentally acceptable through the interactions of both consumers and producers. It is not only seen in the buying power of consumers or consumer boycott but the consumption behaviour and attitude of consumers, the environmental policies of a government and that of manufacturing industry. Green consumerism embodies pressures, movements and policies of government, industry and the consumer to control their consumption patterns and lifestyle in order to prevent degrading the environment. All are consumers, whether government, industry or ordinary people. The growing core of green manufacturers and green retailers are also essential part of the mix (Elkington and Hailes 1988). Thus, green consumers are only part of the equation and the effects of government, industry and the individual consumer together contribute to the green consumer equation and make Green Consumerism a reality.

### 2.4 History of Green Consumerism in a world context

Concern about the impact of economic activity on the environment has been an issue of varying importance on society’s agenda over many centuries. Taking the United Kingdom as an example, Lowe and Goyder (1983) identify four peaks in environmental concern before the present day: the 1880s, the 1920s, the late 1950s and the early 1970s. They explain that these episodes can be viewed individually or seen as part of gradual process of deepening environmental concern. Each peak coincides with the end of a period of sustained growth. At such times the environmental consequences of growth are most obvious and the tendency to react against materialist values is at its strongest (Peattie 1995).

With the tempo of activity in the consumer movement and its impact having increased throughout the 1930s, Hermann (1982) writes that consumerism undoubtedly would have gained even greater influence in the following years had it not been the coming of the World War II that diverted attention to the problem of national survival. Hermann (1982) adds, however, that consumer movements continued to grow rapidly during the 1950s. The “counterculture” of the late 1960s and the early 1970s challenged many of the underlying

values and assumptions within industrialized society (Peattie 1995). This was also a time when many of the effects of the decades of environmental neglect began to manifest themselves; and predictions of an impending environmental crisis were widely debated and addressed as a significant item on the business agenda for the first time. This was largely prompted by the publication of books such as Paul's *Population Bomb* in 1969 and the Club of Rome's *Limits to Growth* in 1971. These drew attention to the fact that we live in a finite world in which continuous and uncontrolled economic growth and population expansion would eventually exhaust the natural resources and the systems upon which we depend. The reaction of companies, governments and academics to such gloomy environmental prophecies varied widely.

Gloomy environmental predictions were generally forgotten in the economic chaos that followed the oil crises of 1973 and 1978 and the *Limits to Growth* predictions appeared to be discredited. Peattie (1995) holds that environmental concern during the 1970s was very much an avenue for self actualization among an intellectual elite, but during the 1980s it became increasingly clear that green issues drove certain needs at all levels of society. However, environmental regulation, like all others, was attacked as a hindrance to economic development. This was reflected in the UK government publications with emotive titles such as the 1985 Department of the Environment White Paper, *Building Businesses Not Barriers*, and the 1986 Department of Employment White Paper, *Lifting the Burden*. However, the majority of environmental legislation and energy saving measures which were the legacy of 1970s environmental concern remained in place and this ensured that the 1980s industrial growth was not accompanied by a proportional rise in energy consumption and pollution. A number of published analyses of the environment appeared during the late 1980s and early 1990s including the World Watch Resources Institute's *State of the World Reports*, *World Resources Reports* and the *Environmental Almanacs*, the Organization for Economic Cooperation and Development's *State of the Environment Report* and the Second Report of the United Nations Environment Programme.

Elkington and Hailes (1988) point out that the environmental lobby was relatively weak in the 1950s and the World Wildlife Fund was not launched until 1961. Environmental groups like Friends of the Earth and Greenpeace were products of the late 1960s and early 1970s. However, the total membership of Britain's environmental and conservation organisations had subsequently grown to around 3 million while Green peace' worldwide membership jumped

by about 400,000 during the 1960s and early 1970s. With increasing public concern about environmental issues European Union legislation imposed new standards for products in Europe. This sort of legislation has meant that many products are 'greened' without the average consumer ever being aware of the fact. Elkington and Hailes (1988) wrote the *Green Consumer Guide* in 1988 to encourage consumers to consciously seek out and buy green products and services.

The 106th Plenary Meeting of the United Nations in 1985 adopted the United Nations' Guidelines for Consumer Protection. This was devised to address needs of consumers in all countries, particularly those in developing countries. Its objectives are listed in table 2.1. Intended outcomes are listed in table 2.2.

---

Table 2.1 Objectives of United Nations Guidelines for consumer protection

---

- (a) To assist countries in achieving or maintaining adequate protection for their population as consumers;
- (b) To facilitate production and distribution patterns responsive to the needs and desires of consumers;
- (c) To encourage high levels of ethical conduct for those engaged in the production and distribution of goods and services to consumers;
- (d) To assist countries in curbing abusive business practices by all enterprises at the national and international levels which adversely affect consumers;
- (e) To facilitate the development of independent consumer groups;
- (f) To further international co-operation in the field of consumer protection;
- (g) To encourage the development of market conditions which provide consumers with choice at lower prices.

---

From *Report of the United Nations Guidelines for Consumer Protection (1995) Workshop* presented by SA National Consumer Union (SANCU) 31st March 1995, Pretoria.



---

Table 2.2 Intended outcomes of the Guidelines for consumer protection:

---

1. The protection of consumers from hazards to their health and safety;
  2. The promotion and protection of the economic interests of consumers;
  3. Access of consumers to adequate information to enable them to make informed choices according to individual wishes and needs;
  4. The right to consumer education;
  5. The right to availability of effective consumer redress
  6. Freedom to form consumer and other relevant groups or organizations and the opportunity of such organizations to present their views in decision-making processes affecting them.
- 

From *Report of the United Nations Guidelines for Consumer Protection (1995) Workshop* presented by SA National Consumer Union (SANCU) 31st March 1995, Pretoria.

Moolman (1995) indicates that governments felt the need for assistance with respect to the implementation of the guidelines. The International Organisation of Consumer Unions (IOCU) [now called Consumers International (CI)], held Regional Conferences and IOCU Regional Offices were established. However, major problems were identified, including

- ▶ The lack of consumer protection legislation and adequate resources for enforcement thereof
- ▶ Lack of a clearly identified consumer protection authority
- ▶ Problems related to reliance on imported goods
- ▶ Inadequate labelling of goods
- ▶ Problems related to hazardous wastes and dangerous and defective goods
- ▶ Pricing of goods
- ▶ Lack of redress systems
- ▶ Lack of testing facilities
- ▶ Inadequate knowledge and training in consumer issues

Moolman (1995) reported that various consumer groups the world over confirmed that their countries are considering consumer protection legislation based on the Consumer Protection

guidelines. The most recent *Report of the United Nations Guidelines for Consumer Protection Workshop* from the South Africa National Consumer Union (1995) summarises what has been done on a worldwide scale through agencies of the United Nations:

1. The World Health Organization (WHO) has set appropriate standards for the use of pharmaceuticals, water, basic sanitary services and drinking water quality.
2. The International Labour Organisation is active in standard setting for occupational safety and health.
3. The Food and Agricultural Organization of the United Nations (FAO) and the United Nations Environment Programme (UNEP) monitor harmful chemicals and pesticides to consolidate information on products harmful to health and the environment. They also monitor disposal of hazardous waste and transboundary movements.
4. The FAO and WHO's - *Codex Alimentarius Commission* was established in 1962 to protect consumers to ensure fair food trade practices, food safety, pesticides and residues in food additives and contaminants.
5. FAO promotes agricultural marketing activities to facilitate production and distribution patterns responsive to the needs and desires of consumers and to allow consumers the choice of products at lower prices.
6. The World Intellectual Property Organization (WIPO) is concerned with trademarks patent to protect against unfair competition.

## 2.5 The South African Context of Green Consumerism (Past, Present and Future)

Tager (1995) states that South African Consumers have been known for their apathy and inaction and for their lack of assertiveness; this is still the case. The absence of a strong consumer movement in South Africa has to be seen against the background of the country's history. The harsh and devastating effects of apartheid were such that people were intimidated and dared not speak as consumers. Apartheid denied people fundamental human rights. A consumer did not have rights under such a system. Tager (1995) notes that consumer affairs were not a priority and that there was a notable absence of interest in consumer affairs. Presently, with the changes in Government attitude, the participation of the nine provinces in consumer affairs, and a political freedom which has brought freedom of the individual, Tager (1995) expresses greater hope for the development of a dynamic consumer movement.

The South African National Consumer Union was established in 1961 as a voluntary

autonomous body. It now claims to represent millions of consumers of all races. According to Myburgh (1995) its membership extends from the grassroots support of women's organisations through to bodies such as the Public Servants Association of South Africa, the South African Nursing Association and the South Africa Agricultural Union and so on. Consumers take their complaints to the appropriate organizations. The Consumer Union believes that by creating and maintaining a strong, responsible, organised consumer voice, taking its place alongside the other pillars of the economy ( industry, commerce and agriculture); it can help to build a strong economy and a more prosperous nation. As a pioneer of consumer education, the Consumer Union distributes consumer information, monitors local and overseas consumer trends, exerts influence on commerce and industry to inform the consumer better and maintains close, personal contact with consumers. The Consumer Union also investigates anything that is of concern to consumers with regards to fitness of purpose, quality, design, safety, health and hygiene, weights, sizes and packaging, and price for quality. The Consumer Union works in close conjunction with government bodies and manufacturers in the interest of consumers. Its recommendations are considered by the specification committees of the South Africa Bureau of Standards (SABS). The Consumer Union advises consumers to give preference to goods bearing the mark of the SABS. When a consumer is dissatisfied with a product or service, it is the consumer's right and duty to express this dissatisfaction to the dealer or manufacturer so that the latter can rectify or resolve the issue satisfactorily. After all efforts to reach satisfactory arrangement have failed one can then approach the right channels through a member organization of the South Africa National Consumer Union.

---

31th March 1995 was declared Consumer Rights Day by the South Africa National Consumer Union. Considering the position in South Africa, the Union approached the South African Government to become signatory to the United Nations Guidelines for Consumer Protection. A Consumer Affairs Act is envisaged which will regulate national co-ordination as well as inter-provincial and inter-governmental co-operation to stop fragmentation of consumer protection legislation (Moolman 1995).

## Chapter 3

### WHO ARE THE GREEN CONSUMERS?

#### 3.1 The Green Consumers

During the late 1980s the term 'Green Consumer' became part of the business vocabulary in recognition of the fact that actions and decisions of many consumers were increasingly influenced by environmental issues (Peattie 1995). The Green Consumer is one who is concerned about the environment. He is careful in his buying activities and consumption with the view that he should not do anything that would degrade the environment, for example, by avoiding purchase of products that contain CFCs that contribute to the depletion of ozone layer, minimising the use of fossil fuels, and by selecting products that do not pollute rivers and lakes. The Green Consumer is also careful not to choose alternatives with a lot of packaging that increases waste and demand more use of new resources in its production. Hernion II (1982) refers to Green Consumers as ecologically concerned consumers - the subset of the population that producers of environmentally beneficial products seek to reach. In his view, the ecologically concerned consumer is a person whose values, attitudes, intentions, or behaviours reflect a relatively consistent and conscious concern for the environmental consequences which are related to the purchase, ownership, use, or disposal of particular products or services. Examples of other definitions of the Green Consumer include: "a person who knows that the production, distribution, use and disposal of products lead to external costs, and who evaluates such external costs negatively, trying to minimize them through his or her own choices" (Balderjahn (1986) cited in Peattie (1995)) Rolston and di Benedetto (1994) defines the green consumer as a person who, in his or her consumption behaviour, consciously attempts to have a neutral or positive effect on the earth, its environment, and its inhabitants. Elkington and Hailes (1988) explain the consumption behaviour pattern of the green consumer as one who avoids products which are likely to:

- endanger the health of the consumer or of others
- cause significant damage to the environment during manufacture, use or disposal
- consume a disproportionate amount of energy during manufacture, use or disposal
- cause unnecessary waste, either because of over-packaging or because of very short life
- use materials derived from threatened species or from threatened environments

- involve the unnecessary use or cruelty to animals - whether toxicity testing or for other purposes
- adversely affect other countries, particularly in the Third World

Zinkhan and Carlson (1995) suggested that Green Consumers are concerned about the production processes, in terms of scarce resources consumed, and they are concerned with product disposal issues (for example, recycling).

### 3.2 Categories of Green Consumers

There are different shades of green. As the number of green consumers grow, organizations recognize them to be cohesive enough to create a large and feasible market segment (Zinkhan and Carlson 1995). Coddington (1993) feels that the best known segmentation of consumers' environmental attitudes was developed in 1990 by The Roper Organisation for the consumer goods company S.C. Johnson & Son, Inc. The Roper/S.C. Johnson segmentation identified five categories of consumer:

1. *True-Blue Greens* are the most actively green consumers. Their actual behaviour is consistent with very strong concerns about the environment. They could be considered the leaders of the green movement among the general population.
2. *Greenback Greens* are characterised by the fact that their commitment to the environment is mainly manifested by their willingness to pay substantially higher prices for green products.
3. *Sprouts* show middling levels of concern about the environment and equally middling levels of behavioural response.
4. *Grouzers* consistently rationalize their lack of proenvironmental behaviour by offering all kinds of excuses and criticizing the poor performance of others.
5. *Basic Browns* simply do not believe individuals can make a difference in solving environmental problems; and they do not want to make effort.

Table 3.1 provides an overview of the most important green consumer segments according to a number of other authors.

Table 3.1 Definitions of some green consumer segments

Company	Segment	Definitions
Cambridge Reports	Green Consumer	Strongly identify with term environmentalist and support environmental organisations.
FIND/SVP	Dedicated	Bring environmental concerns to bear on most or all purchase decisions.
	Selective	Engage in environmentally aware shopping on a selective basis, isolating specific products and companies for scrutiny.
	Impulsive	Engage in green shopping on a stimulus-response basis.
J. Walter Thompson	Greener-than-Green Green	Make many sacrifices for the environment. Concerned about environment but make only some sacrifices.
	Light Green	Concerned but not willing to make any personal sacrifices.
Roper/S.C. Johnson	Un-Green	Plainly do not care about the environment.
	True-Blue Greens	Actual behaviour is consistent with very strong concerns about the environment.
	Greenback Greens	Commitment to the environment mainly manifested by willingness to pay substantially higher prices for green products.
	Sprouts	Show middling levels of concern about the environment and equally middling levels of behavioural response.
	Grouzers	Consistently rationalize their lack of proenvironmental behaviour by offering all kinds of excuses and criticizing the poor performance of others.
Green Market Alert	Basic Browns	Do not believe individuals can make a difference in solving environmental problems, and do not want to make a difference.
	Visionary greens	Have embraced the "paradigm shift". Green is a way of life for this group, not a shopping style. Passionately committed to environmental change.
	Maybe-Greens	Express high degrees of environmental concern but act on those concerns only irregularly.
Simmons Market Research Bureau	Hard-core Browns	Indifferent or implacably antienvironmentalist. Tend to have lower incomes and educational levels.
	Premium Green	Sophisticates, totally committed, in word and deed, to protecting planet Earth. Willing to spend more, do more, vote more.
	Red, White & "Green"	Traditionalists, equally committed to the environment, but think more in terms of their own turf and their beloved outdoors.
	No-Costs Ecologists	Sound like dedicated ecologists, but less likely to commit actions and money, unless it's the government's.
	Convenient Greens	Environmental attitudes strong, but actions are motivated by convenience in lifestyle.
	Unconcerned	

From Coddington W. (1993)

Peattie (1995) on his part points out that green consumption has two key dimensions: the intent to buy as sustainably and socially responsibly as possible and the socio-environmental impact of the actual purchases. Plotting these two dimensions on a two by two matrix, four categories of consumers in relation to the environment are identified:

1. Grey consumers;
2. Economical consumers ;
3. the doubtful and confused;
4. Green consumers. (Fig 3.1)

Peattie (1995) argues that consumers who consider themselves deeply green will, by accident or design, purchase many products which are less sustainable and less socially responsible. Conversely, the most environmentally-sceptical and economically-minded consumers may still use, for example, lead-free fuel or grow their own largely organic produce because they find it economical or enjoyable. The vast majority of people, if offered credible green products with similar prices and technical performance to conventional products, would discriminate in favour of the green product (Peattie 1995). This means that the basic difference between people whose consumer behaviour tends towards the Green Consumer box (Fig 3.1) and the other categories of consumers is that they have a belief in both the problems caused and the solutions offered by purchasing and consumption from the market system.

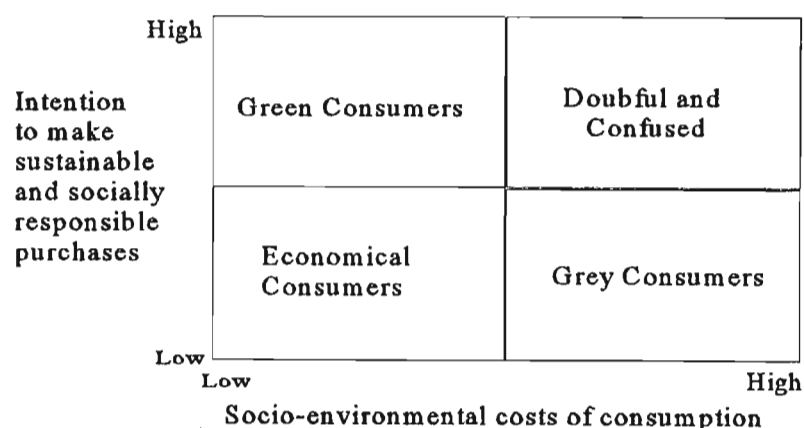


Fig 3.1 Consumers in relation to the environment (from Peattie 1995)

### 3.3 Attitudes of Consumers when making purchases

When it comes to green marketing, consumers have been known to say one thing and do another and hence there appears to be a gap between consumer intent and consumer action (Winski 1991). Several factors may affect a family's green expenditure. Easterling, Miller and Weinberger (1995) explain that there are several aspects of family resources that serve as constraints upon environmentally friendly consumption behaviour, notably family time, family income and family location. Time perceptions are likely to have some impact upon environmentally friendly consumption behaviour because there are also time costs associated with developing an awareness and familiarity with products. Then there are time costs associated with comparing prices between green and non-green products. Many products may also require additional time in use (such as refilling bottles) or in disposal (sorting, storing, and transporting). Time taken to sort waste into recyclable categories or to refill a bottle may be perceived as significant. Thus, for some it may actually be a time-related phenomenon and not a financial one that determines green consumption behaviour. However, financial considerations may represent additional constraints.

Commitment to green lifestyles can entail family financial hardships (Wang 1990). As an illustration of how economic conditions affect environmentally friendly consumption behaviour Wang found that a green lifestyle costs more. Wang (1990) found that greener products were priced generally higher than the conventional products. However, the authors presented no data to illustrate this. Easterling *et al* (1995) indicate that the location of a family's residence may directly impact their environmentally friendly consumption behaviour. A prerequisite is that green products must be available and accessible.

Pollack (1995) writes that Green Consumerism is a phenomenon which has been experienced mainly in the industrialized countries and has primarily affected retailers and manufacturers of consumer goods. However, the depth of Green Consumerism and the issues which concern shoppers continue to vary. Many believe that as the World recession has deepened, the Green Consumer has become a rare species. Pollack contends that the Green Consumer cannot be ignored whether or not Green Consumerism is currently experiencing a peak or a trough. For it has been demonstrated that when mobilized, Green Consumers can provide a lucrative new market (such as "green batteries in the UK) or can cause the collapse of a market such as aerosol cans containing chlorofluorocarbons (CFCs). While differing views are expressed about whether the Green Consumer exists or not, Green Consumerism is



certainly not a myth (Pollack 1995).

Literature on Green Consumerism in South Africa is very limited. Few studies have addressed the issue directly. However, Green Consumerism is now coming to the fore in this country resulting in the emergence of an increasing number of discerning and demanding customers. In a survey of a cross-cultural sample of 2462 respondents (Whites, Blacks, Coloureds and Asians) Miller and Hirschowitz (1990) reported that freshness, price, quality and appearance were the main criteria for purchasing of fresh vegetables and fruit; for the black household price was the most important factor and choice of stores depended on price and freshness. More than half (52.8%) of the white respondents purchased 50% or more of their fresh produce at hyper and supermarkets. In the metropolitan areas of South Africa, 45% of the white respondents, and 52.9% of Asian respondents wished to be better informed on the cultivation and treatment of fresh produce as far as it involves health risks. Clever (1991) noted that aspects such as price formation, the price of the final products, quality and nutritional value of food were becoming increasingly important to consumers and they wished to be informed on these matters.

Outside South Africa research indicates that consumers are concerned enough to consider paying more for environmentally friendly products. In a 1990 poll by the J. Walter Thompson advertising agency, for example, 82% of the respondents said they would pay at least 5% more for a product that was environmentally friendly, up from 49% the previous year (Levin 1990). An Advertising age poll conducted by Yankelovich Clancy Shulman found that for 70% of the respondents, purchase decisions were at least influenced by environmental messages in advertising and product labelling (Chase and Smith 1992). Due to the changing attitudes of consumers about purchasing of green products there is always the need to study changing attitudes of the Green Consumer.

## Chapter 4

### FIELD STUDY: ATTITUDES OF PIETERMARITZBURG CONSUMERS TO GREEN PRODUCTS AND SERVICES

#### 4.1 Rationale and Aim

In Chapter 3, it was shown that there are no studies that provide even a preliminary analysis of the attitudes and actions of South African consumers to green products and services. In this chapter, a preliminary study carried out in Pietermaritzburg in 1996 is described. Two Pick'n Pay supermarkets - at Hayfields and in the City Centre of Pietermaritzburg - were chosen for the study of their consumers. These Pick'n Pay supermarkets both sell green products. Hayfields is a suburb of Pietermaritzburg and was selected as one of the wealthier residential areas with fewer lower-income shoppers. The mean household income per week for Hayfields was expected to be different from the City (Capitol) Centre where the supermarket is within the reach of many lower-income consumers. Secondly, the two centres were chosen to give a mix of all kinds of people - urban and rural-dwellers (who come to the City), low- and high-income groups.

Several factors may affect a family's shopping habits. Easterling *et al* (1995) consider that there are several aspects of family resources that serve as constraints upon green consumption behaviour, notably family time, family income and family location. Here I consider these and other factors that could affect green expenditure. While these underlie shopping choices, it is clear that, individual preferences with less rational bases complicate the picture.

#### 4.2 Methodology

A random survey of consumers was conducted at Pick'n Pay Supermarket, Hayfields, Pietermaritzburg and at Capitol Pick'n Pay Supermarket, Longmarket Street, central Pietermaritzburg. At each supermarket 100 consumers were interviewed using both random sampling and judgemental sampling. The correct sample size for social research is dependent upon the nature of the population and the purpose of the study. According to Bailey (1978) around 30 cases seems to be the minimum for studies which are to be statistically valid. However, many researchers regard 100 cases as the minimum sample size for social research (Bailey 1978)

Of consumers who shopped at these supermarkets twenty to twenty-five respondents were interviewed per day using a detailed questionnaire (Appendix 1). Interviews took place between 28 September and 11 November 1996.

Only adults were interviewed. Each respondent was asked to speak on behalf of the whole household. I explained what green products are, using pictures and actual products to provide clarity to consumers and illustrate points during the interview. In my list of green products, I included

- toilet roll - (non-chlorine bleached)
- hair sprays - (containing no CFCs)
- egg - (free-range eggs)
- coffee filter paper - (unbleached)
- tea bag - (unbleached)
- detergents - (phosphate-free)
- sanitary pads - (non-chlorine bleached)
- paints - (water-based )
- fuel - (unleaded)
- vegetables - (organically grown)

The particular products on which the questionnaire focuses were chosen on the basis that they could easily be categorized into green and non green alternatives and their availability at shopping centres and fuel-filling stations for the case of fuel. Products are termed “green” if they are viewed to cause less or no damage to the environment either in the cause of their production or usage or disposal.

Following an initial contact by telephone, 15 major manufacturers/producers were also approached to solicit their views on green products via a mailed questionnaire (Appendix 2).

## 4.3 Results

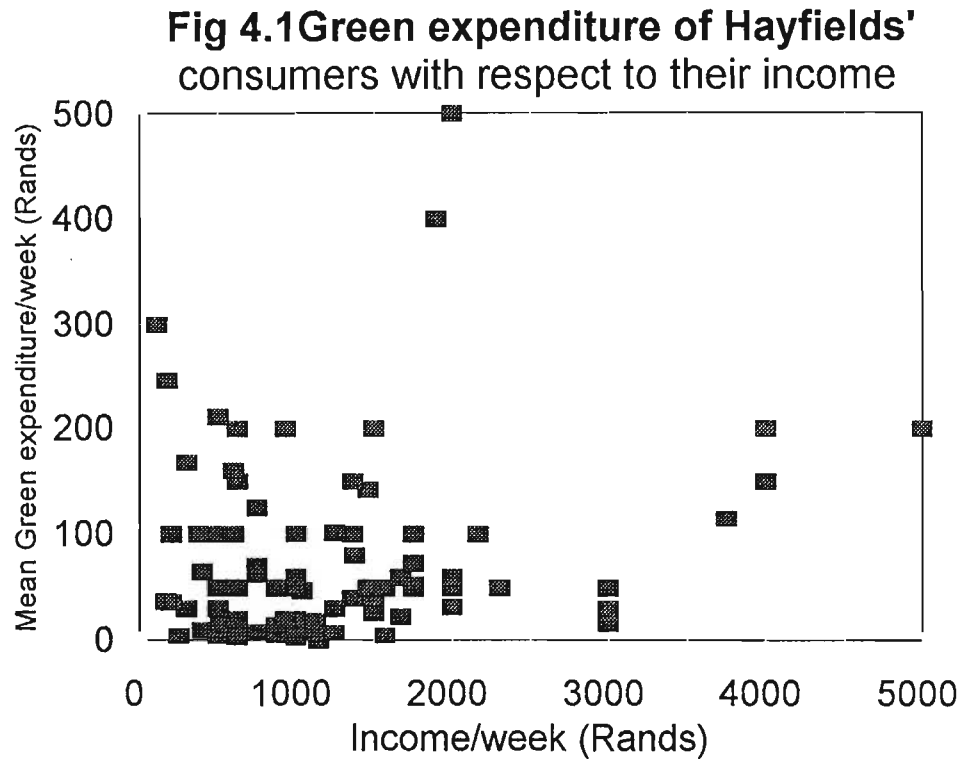
### 4.3.1 Mean income and green expenditure

There was a significant difference in total household income between shoppers in the city (mean income R853 per week) and Hayfields (mean income R1298 per week) ( $t = 2.60$ ,  $df = 196$ ,  $P < 0.05$ )

For green expenditure there was no significant difference between shoppers in the city (mean expenditure R84 per week) and Hayfields (mean expenditure R92 per week) ( $t = 0.10$ ,  $df =$

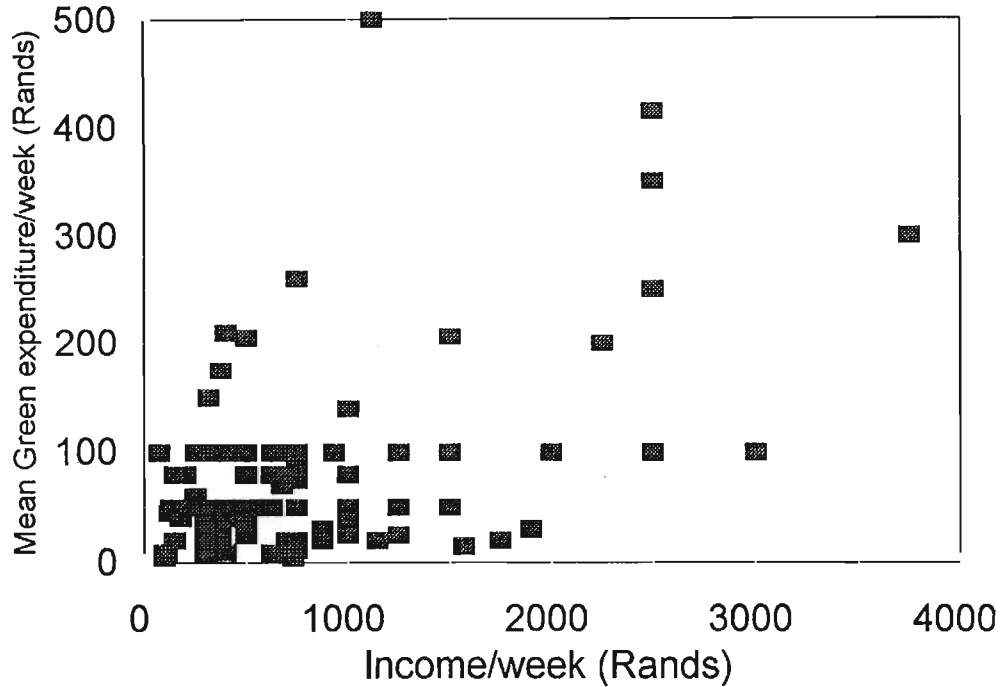
152, n.s)

There is a weak correlation between the incomes of Hayfields' shoppers and their green expenditure (Fig 4.1) ( $r = 0.2167$ ,  $P < 0.05$ ).



There is, however, a stronger correlation between incomes of City (Capitol) Centre shoppers and their green expenditure ( $r = 0.55704$ ,  $P < 0.01$ ) (Fig 4.2). Green expenditure increases with higher income for the range of incomes analysed. When the data were pooled, there was no stronger correlation between incomes and green expenditure of Hayfields' and City (Capitol) Centre shoppers ( $r = 0.29898$ ,  $P < 0.05$ )

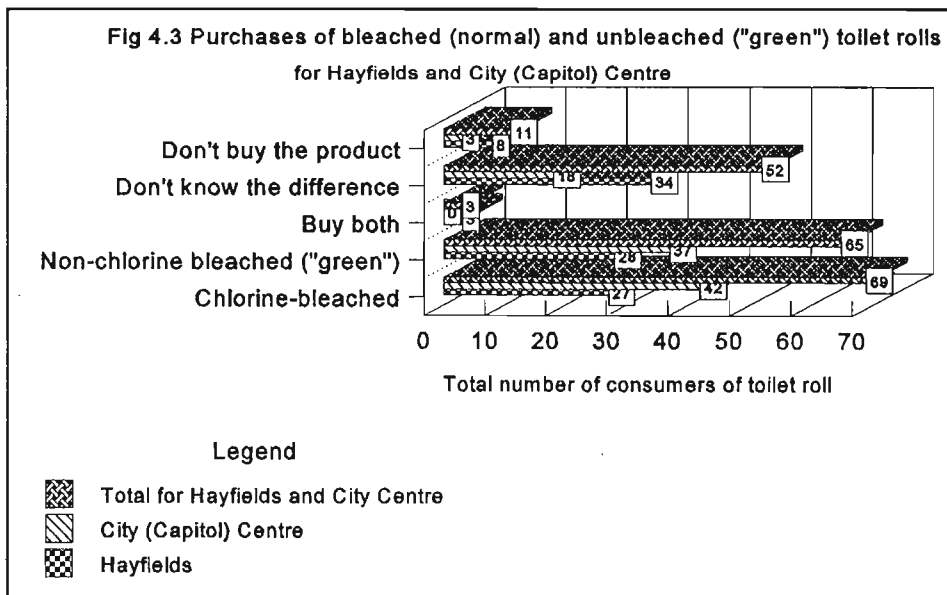
**Fig 4.2 Green expenditure with respect to income of consumers at City Centre**



4.3.2 Purchases of particular products

4.3.2.1 Toilet rolls

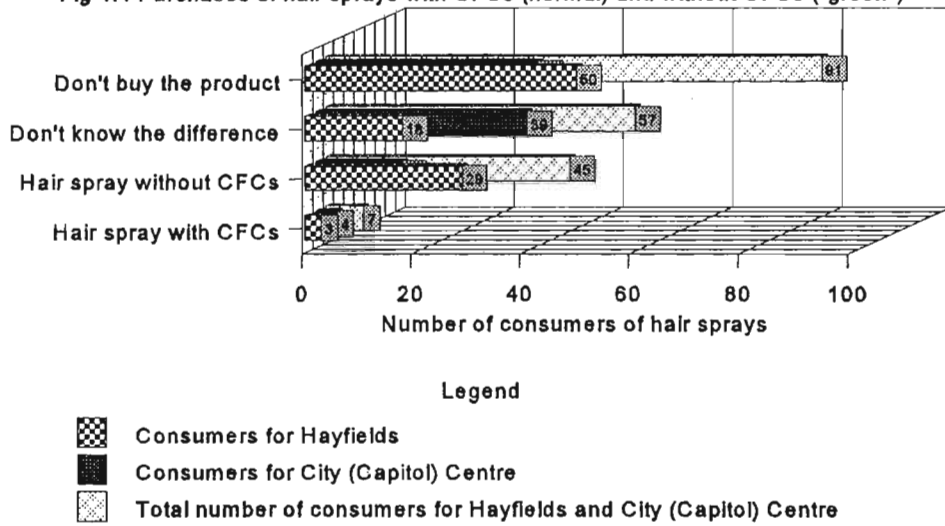
Of 193 respondents across both supermarkets who bought toilet rolls, 36% bought chlorine-bleached toilet rolls; 34% bought non-chlorine bleached “green” toilet rolls; 1.5% bought both; 27% did not know the difference between the two (Fig 4.3).



4.3.2.2 Hair sprays

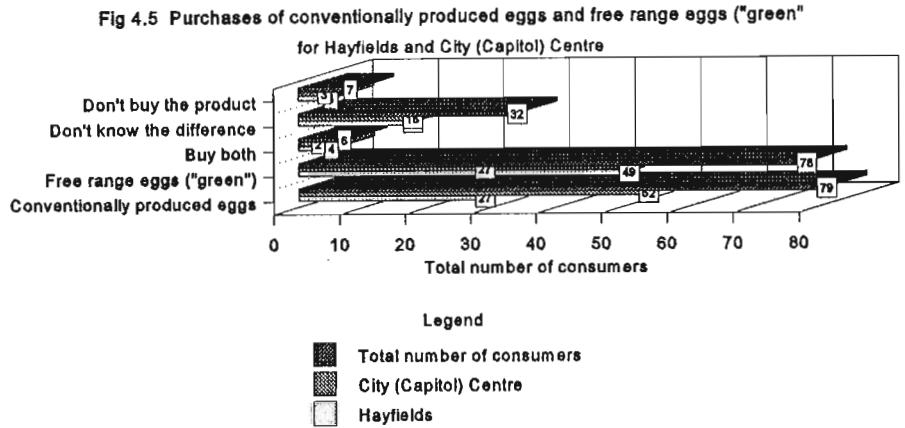
Of 109 respondents who buy hair spray, 6% of the respondents who bought hair sprays knowingly bought those containing chlorofluorocarbons (CFCs); 41% bought hair sprays containing no CFCs (“green”); 52% did not know the difference between hair sprays with or without CFCs that they bought (Fig 4.4).

Fig 4.4 Purchases of hair sprays with CFCs (normal) and without CFCs (“green”)



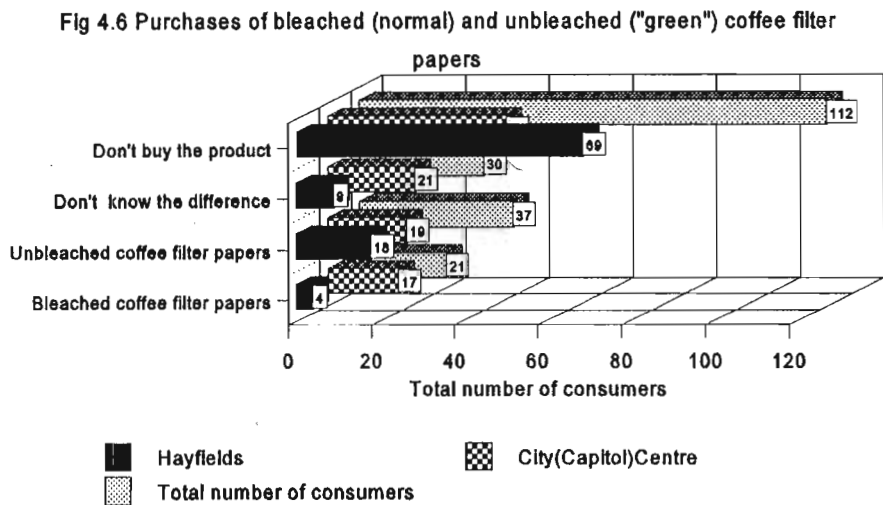
4.3.2.3 Eggs

Of the 193 respondents who bought eggs, 39% bought free range eggs (“green”), 41% bought conventionally produced eggs, 3% bought both, 17% did not know the difference (Fig 4.5).



4.3.2.4 Coffee filter paper

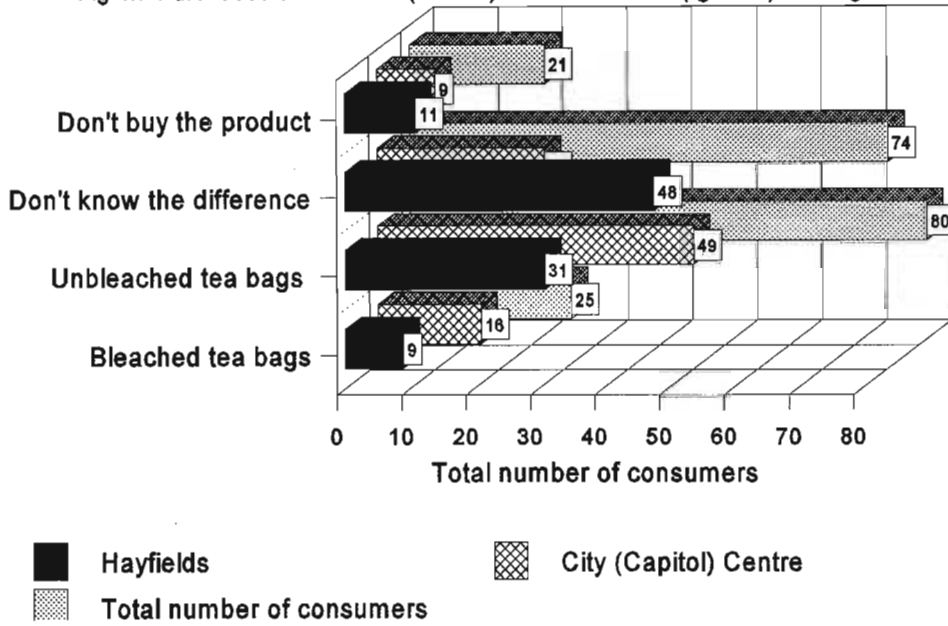
Of the 88 respondents who bought coffee filter papers, 24% bought bleached coffee filter papers, 42% bought unbleached coffee filter papers("green"), 34% did not know the difference between the two alternatives (Fig 4.6)



4.3.2.5 Tea bags

14% of the 179 respondents bought bleached tea bags, 45% bought the unbleached ("green") alternative, 41% of them were ignorant of the difference between the two (Fig 4.7).

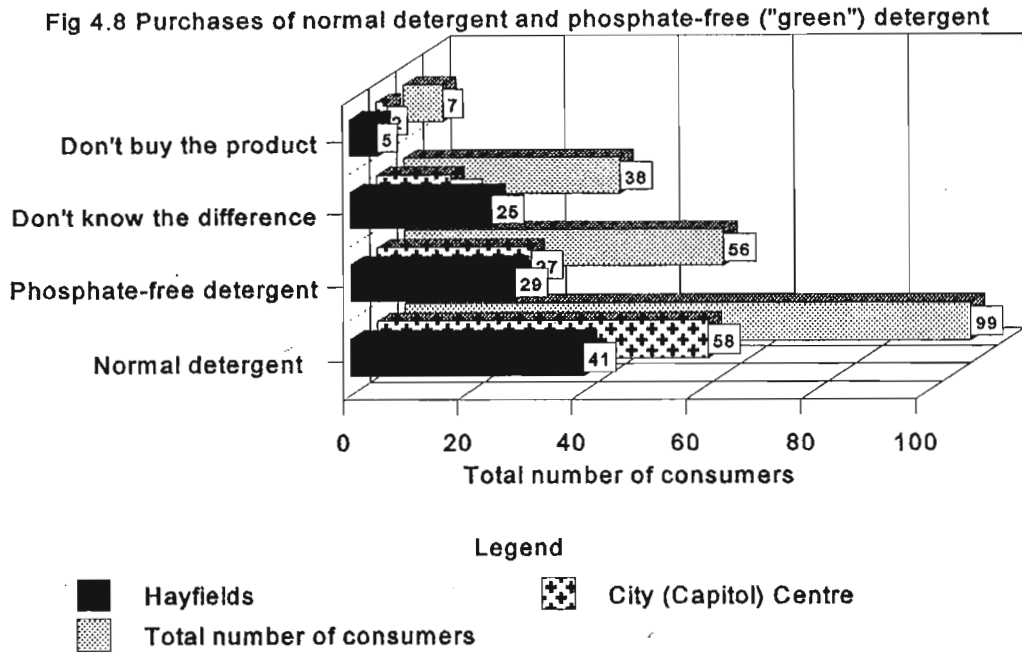
Fig 4.7 Purchases of bleached (normal) and unbleached ("green") tea bags



4.3.2.6 Detergents

Of the 193 respondents, who bought detergents, 51% bought normal detergent. 29% preferred phosphate-free detergent ("green"), 20% did not know the difference and 7 did not buy the product (Fig 4.8).

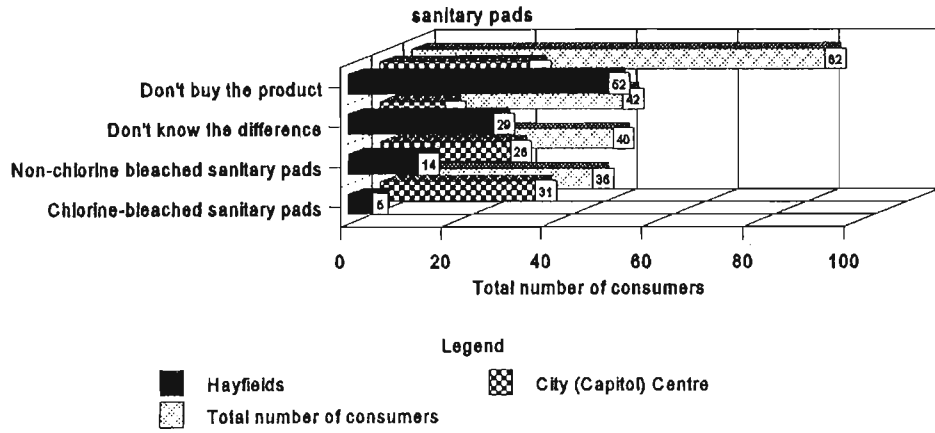




#### 4.3.2.7 Sanitary pads

31% out of the 118 respondents bought chlorine-bleached sanitary pads. 34% preferred non-chlorine bleached ("green") sanitary pads. 35% of them did not know the difference between the two products (Fig 4.9).

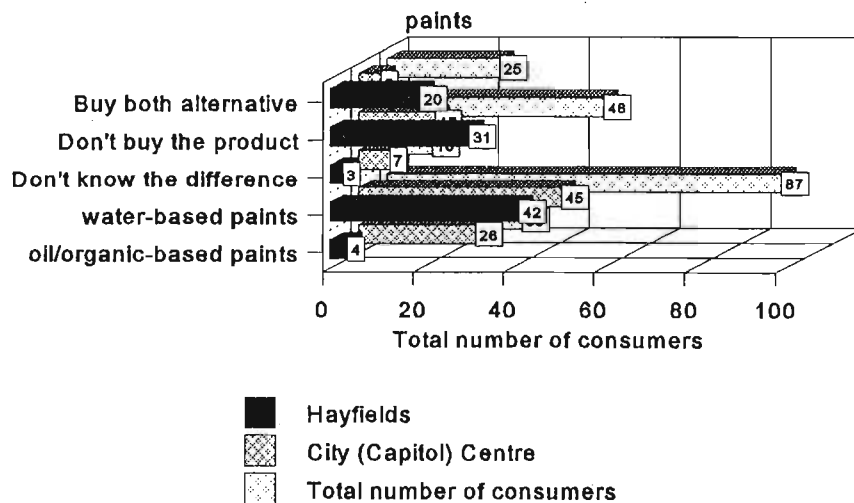
Fig 4.9 Purchases of chlorine-bleached and non-chlorine bleached ("green") sanitary pads



4.3.2.8 Paints

Of the 152 respondents who bought paints, 20% preferred oil/organic-based paints, 57% preferred water-based paints, 7% did not know the difference while 16% bought both alternative (Fig 4.10)

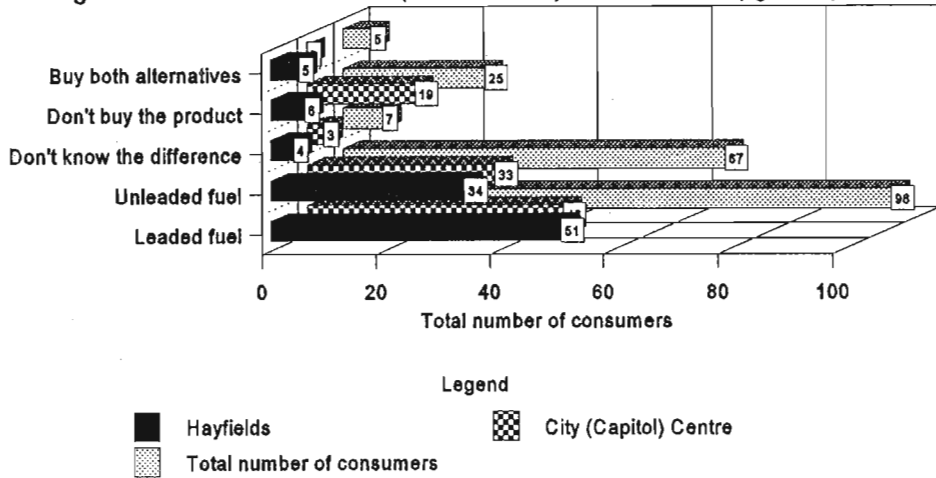
Fig 4.10 Purchases of organic-based, (conventional) and water-based, ("green") paints



4.3.2.9 Fuel

Out of the 175 respondents who bought fuel, 55% bought leaded fuel, 38% bought unleaded fuel ("green"), 4% did not know the difference while 3% bought both (Fig 4.11)

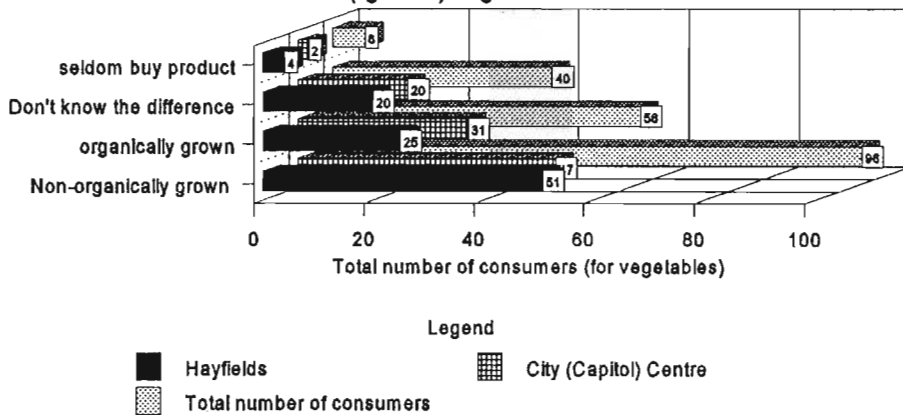
Fig 4.11 Purchases of leaded (conventional) and unleaded ("green") fuel



4.3.2.10 Vegetables

For vegetables, 29% of the 194 respondents bought non-organically grown vegetables, 51% preferred organically-grown vegetables ("green"), 21% did not know the difference (Fig 4.12).

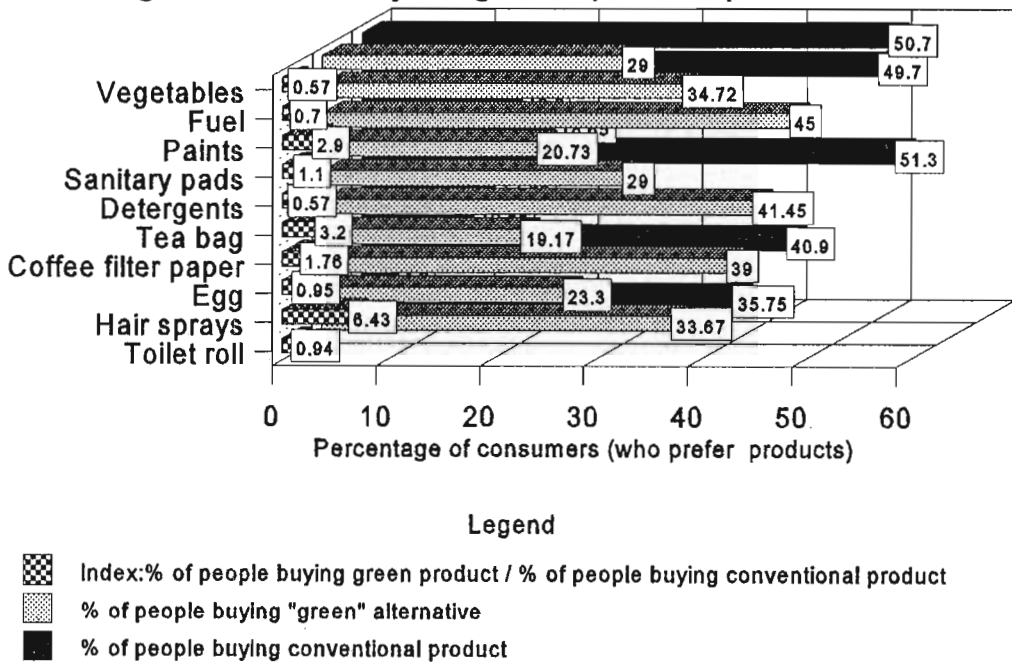
Fig 4.12 Purchases of non-organically grown (normal) and organically-grown ("green") vegetables



4.3.2.11 Summary of “green” product preferences

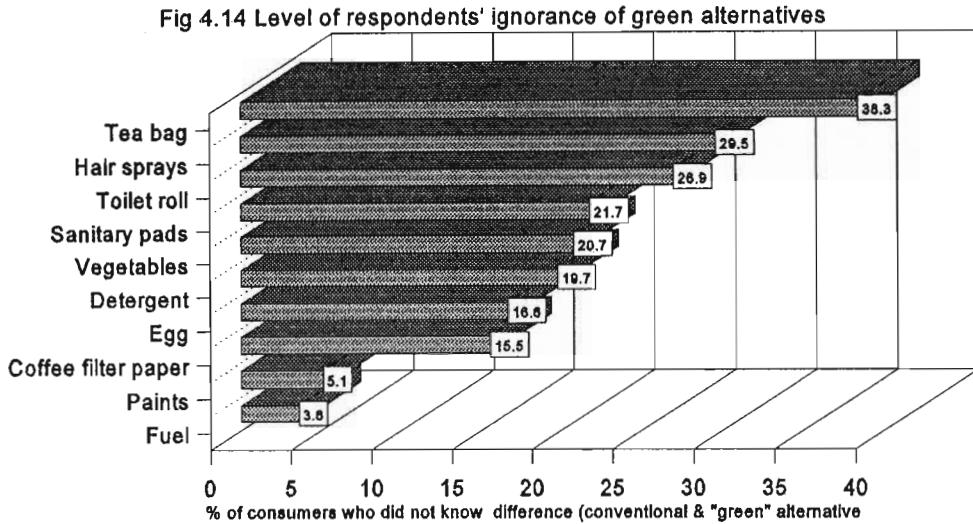
A simple index was calculated to qualify the preferences of consumers for “green” versus conventional products. The index consisted of (% buying “green” products)/ (% buying conventional products). The higher the index, the stronger the trend towards purchasing “green” products. More than six people purchased CFC-free hair sprays for every person who bought conventional hair spray. More than three people purchased “green” tea bags for every person who bought the conventional. However, fewer than half the people bought “green” fuel, and only a third bought “green” vegetables and “green” detergents (Fig 4.13).

Fig 4.13 Summary of “green” product preferences



4.3.2.12 Summary: Level of ignorance of “green” products

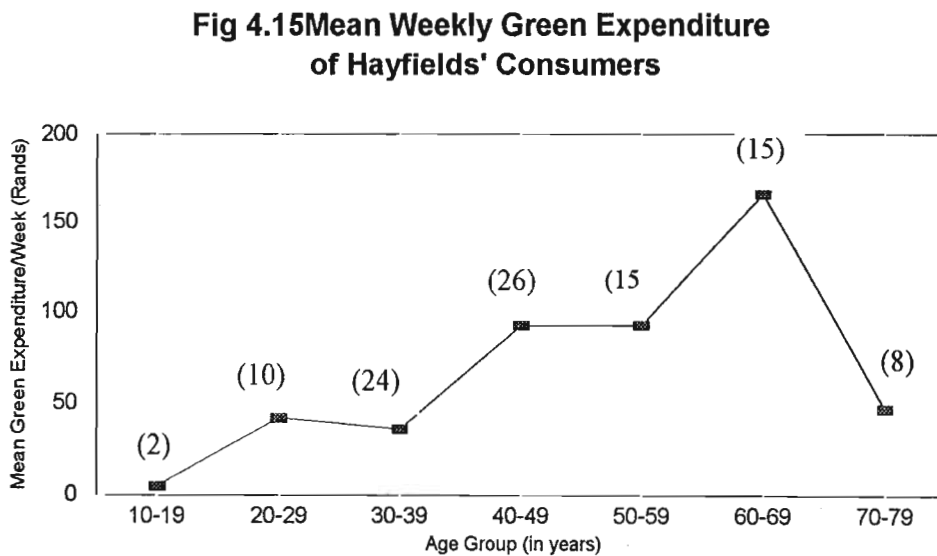
A striking number of people did not know the difference between “green” and conventional alternatives. The number reached as many as 38% for tea bags and 30% for hair spray. The lowest level of ignorance is for “green” versus conventional fuel. See Fig 4.14.



### 4.3.3 Age of respondents

There is an interesting difference in the effect of age of respondent on green expenditure. For Hayfields, older respondents had higher green expenditure (Fig 4.15). For City (Capitol) Centre, the reverse was true (Fig 4.16). This pattern is investigated more fully here.

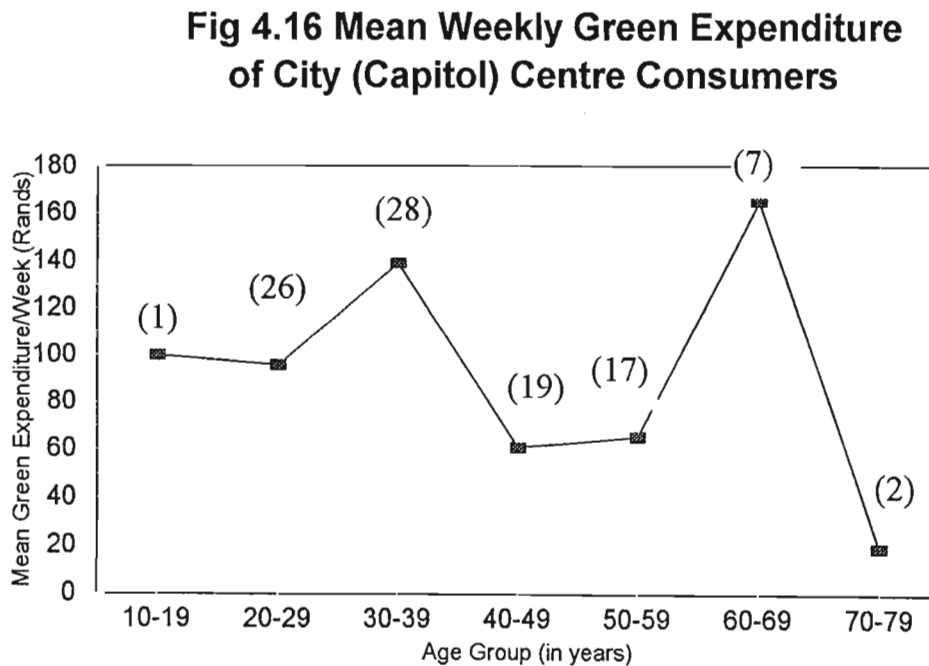
Fig 4.15 Mean green expenditure/week of Hayfields' consumers in different age groups. Number of observations in each age group is given in parentheses.



For Hayfields' consumers, mean green expenditure increases with age. The green expenditure, however, decreases after 60-69 years (Fig. 4.15). There are various factors which may account for this. With increase in age, the family size also increases and so does the mean green expenditure. As the young ones grow into maturity they leave home to create their own homes leaving the adults on their own. Green expenditure therefore decreases. With age too, the family consumption of some items such as hair spray may decrease.

For City (Capitol) Centre, consumers of younger ages initially had relatively higher mean green expenditure (Fig 4.16). The middle-aged consumers (40-49 and 50-59 years) had a lower mean green expenditure but the old (60-69 years) still had higher mean green expenditure. Then the very old consumers (70-79 years) had their mean green expenditure decreasing considerably to a low ebb.

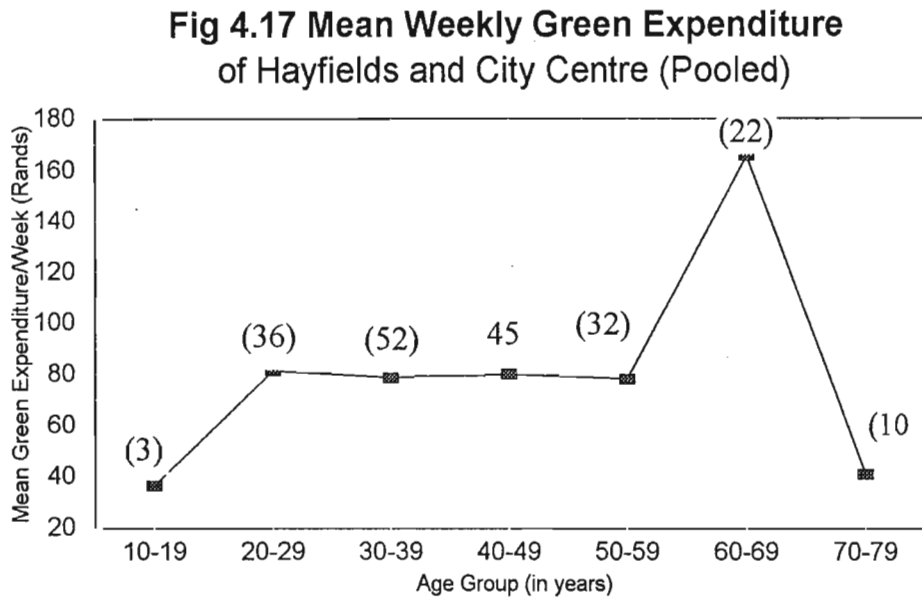
Fig 4.16 Mean green expenditure/week of consumers of City (Capitol) Centre in different age groups. The number of observations in each age group is given in parentheses.



The consumers of the City (Capitol) Centre are unsure about the performance of green products. Hence, the rise and fall of the green expenditure of the young and the old. When the green expenditure per week of both Hayfields and City (Capitol) Centre are pooled, Fig 4.17

is obtained. Green expenditure increases with the young consumers and levels off (from 20-59 years). It increases again following the norm before it decreases during the very old age.

Fig. 4.17 Mean green expenditure of Hayfields and City (Capitol) Centre for different age categories. The number of observations in each age group when it is pooled is given in parentheses.



#### 4.3.4 Willingness to pay a premium for green products

36% of all the consumers said they were prepared to pay a premium for green products if the cost was higher. 1.5% indicated that they might pay or not depending upon the item. 62.5% indicated that they could not afford to pay any premium for green products.

#### 4.3.5 Importance of different factors when purchasing

Respondents were asked to rank the factors that matter when they make purchasing choices. Most important is price (Table 4.1). Green factors like test on animals, waste disposal and ecolabelling were considerably less important.

Table 4.1 Factors considered important when making purchasing choices.\*

Factor(s) considered	Mean score	Proportion of respondents giving any score to this factor
Price	1.4	62%
Performance	2.08	61%
Test on animals	3.20	36.8%
Waste disposal	3.93	34.7%
Ecolabelling	4.15	24.4%

\*Respondents scored 1 for most important factor, 2 for second most important factor and so on. Mean scores are given here.

#### 4.3.6 Price differentials between some “green” products and conventional products

Differences in price between some of the “green” products and conventional products studied were sorted out. Price index consisting (Price of “green” product / Price of conventional) product was calculated (table 4.2)

Table 4.2 Differences in price between “green” and conventional products and their price indices

Product	Average price of “green” product	Average price of conventional product	Difference in price	Price index: Price of green product price of conventional product
Toilet roll	R7.89	R7.89	0.00	1
Hair spray	R13.55	R13.39	R0.16	1.01
Eggs	R2.70	R2.40	R0.30	1.13
Tea bag	R0.19	R0.14	R0.05	1.4
Detergents	R14.2/1.5kg	*	*	*
Sanitary pads	R8.99	R7.99	R1.00	1.13
Paints	R103.50/5L	R78.25/5L	R25.25	1.32
Fuel	R2.14/L	R2.18/L	-R0.04	0.98
Vegetable (Potatoes)	R2.99/kg	R0.99/kg	R2.00	3.02

\* All the detergents that were available were labelled as environmentally friendly and “green”.



Coffee filter papers were also not available on sale during the period of study.

4.3.7 The index of consumer preference and the price index of products are shown (table 4.3).

To compare which alternative product is relatively cheaper or expensive, the additional cost is computed in percentages. The index of consumer preference was calculated by the formula : (% of people that buy “green” product / % of people that buy conventional product). Water-based paints and unleaded fuel are the “green” products which are cheaper than the alternative versions (table 4.3)

Table 4.3 Index of consumer preference and price index of products with its extra cost (%)

Product	<sup>1</sup> Index of consumer preference	<sup>2</sup> Price index of green and conventional products	Additional cost of green products over conventional products ( % )
Toilet roll	0.94	1	0.0%
Hair sprays	6.43	1.01	1.2% more expensive
Egg	0.95	1.13	12.5% more expensive
Coffee filter paper	1.76	*	*
Tea bag	3.2	1.4	36% more expensive
Detergents	0.57	*	*
Sanitary pads	1.1	1.13	12.5% more expensive
Paints	2.9	0.76	24.6% cheaper
Fuel	0.7	0.98	1.8% cheaper
Vegetables	0.57	3.02	202% more expensive

1. Index of consumer preference = % of people that buy “green” product / % of people that buy conventional product.

2. Price index = Price of green product / Price of conventional product

\* Product was not available on sale at the period of study.

Unleaded fuel is a “green” product which is cheaper (due to Government’s subsidy on the production cost).

Consumer preferences for products decreases sharply with higher price index. In other words, the number of people that buys “green” products reduces as the price of “green” products soar (table 4.3). The price index is high when “green” products are relatively more expensive than conventional products. In this case, the consumer preference for “green” products is lower,

as reflected in the lower consumer preference index.

#### 4.3.8 Some “green” products and their distinguishing features

How “green” products are labelled was also noted. Some “green” products and the distinguishing features purchasers use to know they are “green” are indicated in table 4.4. Direct quotations from packaging are given in italics.

Table 4.4 Some “green” products and their labelling and packaging features

“Green” product	Labelling and packaging features identifying products as “green”
1. Non-chlorine bleached toilet roll (2 rolls)	<i>Non-chlorine bleached; biodegradable; no dyes; not tested on animals; made entirely from recycled paper which gives the product a natural beige colour; photodegradable plastic pack; no toxic fumes released when incinerated; lead-free printing inks;</i>
2. Batik Toilet roll single ply sheets	<i>100% recycled paper</i>
3. Eggs	<i>“Free range” eggs written and pasted on green cardboard container.</i>
4. Vibrance Hair spray (275ml)	<i>‘ozone friendly’ is indicated on the container</i>
5. Finesse Condiont Hair Spray (275)	<i>‘ozone friendly’ is indicated on the container</i>
6. Dippity do ultimate hold Hair spray (275ml)	<i>has the inscription ‘environmentally safe and contains no propellant that damages the earth’s ozone layer</i>
7. Ecosoft Autowash macro powered washing powder	<i>Environmentally friendly because it contain biodegradable actives, enzyme complex removes protein and fat-based stains from fibres of fabrics.</i>
8. BioClassic Triple Concentrate	<i>has bio-enzymes and lipo-enzymes to remove stains; biodegradable.</i>
9. Original Mrs. Miles Washing Powder	<i>contains protease enzymes and lipase enzymes; bleaching agent is oxygen-releasing agent, harmless to normal fabric dyes; Sodium carbonate controls pH.</i>
10. Water-based paints	<i>indication of ‘water-based’</i>
11. Unleaded petrol	<i>green colour pump implies healthier process of production</i>
12. Vegetables: Green peppers (Health values) Potatoes (Health values)	<i>104KJ/100g; contains vitamin A and C and iron 361KJ/100g; contains vitamin C and fibre; ideal for cholesterol diets</i>

## Chapter 5

### SUMMARY OF RESULTS AND DISCUSSION

Chapter 5 provides a summary of results and discussion that brings together data from South Africa and outside in a synthesis that considers the place of Green Consumerism in the next decade. Finally, some conclusions are drawn and since key data are unavailable for South Africa and elsewhere, the chapter also sets an agenda for research that allows more rigorous analysis of the development of Green Consumer activities together with recommendations.

#### 5.1 Summary of results

There was a significant difference in total household income between the City Centre (mean income R853 per week) and Hayfields (R1298 per week). However, there was no significant difference in green expenditure between the city (mean expenditure R84 per week) and Hayfields (R92 per week). This implies total consumption of green products was not different between the two suburbs of Pietermaritzburg. The extra income of households in Hayfields is likely to be spent on other things. There is probably a similarity in the quantity of household products and food purchased because household sizes in Hayfields and the City Centre are similar (Hayfields = 4; City Centre = 5).

The weak correlation between the incomes of Hayfields' shoppers and their green expenditure shows the fact that other factors may underlie their purchasing choices. Familiarity, ecolabelling and extent of advertisement are likely to influence the consumers' purchasing choices. Not surprisingly, consumption behaviour is not simple to explain.

For consumers at the City Centre, the stronger correlation between their income and green expenditure though unexpected, means that people with relatively higher income spend more on green products. As a rich residential area Hayfields' consumers were expected to earn higher income that would be commensurate with a higher level of green expenditure. The stronger correlation between income and green expenditure of the City Centre consumers reflects the fact that the few who earn more spend more on green products.

The index of consumer preference for green products was high for products such as hair spray (6.43), tea bag (3.2), paints (2.9), coffee filter paper (1.76), and sanitary pads (1.1). These suggest a stronger purchasing trend by consumers towards "green" versions of these

products.

Some of the consumers, for example, do buy hair sprays with chlorofluorocarbons (CFCs). They might not know the far-reaching effect of their purchasing choice on the environment. In this case, they form part of the Basic Browns of South Africa for their contribution to disposal of aerosols into the environment. Aerosol sprays have been implicated in the destruction of the ozone layer through their use of CFC gases as the propelling agent (Elkington and Hailes 1988). To boost Green Consumerism, Pick'n Pay (1995) indicates that their hair sprays: *pump ultimate hairspray* contain natural and environmentally friendly ingredients; are not tested on animals; are CFC-free; and are packed in recyclable plastic bottle. Once again most of these consumers may learn the environmental effects from ecolabels, television advertisements and/or from school. Television programmes in South Africa are made in such a way to educate the masses on environmental affairs. Few schools and few number of courses at the Universities have curricula that involve environmental education. However, there are consumers who do not know the difference between hair spray with CFCs and without CFCs possibly due to lack of education, lack of understanding of issues of technical terms or just sheer ignorance. CFCs are inert chemicals discovered in the 1930s used principally as aerosol propellants, refrigerants, and for production of rigid foam insulators. Chlorine released from CFCs rise to the Stratosphere and react with the ozone which shields the planet from ultraviolet radiation. Chlorine acts as a catalyst repeatedly combining and breaking the ozone molecules. Simmons (1997) indicates that the main use for CFCs is now in refrigeration and one calculation has it that more people would die from food poisoning due to inadequate refrigeration than from skin cancer. That a higher percentage of consumers preferred the green versions of these products presupposes their cognisance of the environmental consequences that will arise by consumption of the conventional alternatives. Detergents, fuel and potatoes had a relatively lower index of consumer preference for their "green" alternatives. This indicates more preference for the conventional forms of the products. For fuel, the results show that there are still a number of old models of vehicles that demand the use of leaded (conventional) fuel in spite of the lower price of unleaded ("green") fuel. For potatoes, one might attribute the lower consumer preference for organically grown alternatives to the abundant production and supply of the more conventional, non-organically grown versions in the market. Besides this, the higher price of the organically grown ("green") potatoes (price index 3.02) will surely contribute to consumers' preference for the moderately-priced conventional alternatives.

Generally, the price index showed that “green” products cost more than the conventional products. Unleaded fuel, like other “green” products would have cost comparatively more than the conventional non-green alternative (leaded fuel) had it not been for large Government subsidies to attract more customers in an attempt to reduce air pollution from leaded fuel.

The Government does not subsidise the production cost of the “green” version of paint (water-based paint) but the price is lower than the non green alternative (oil or organic-based paints). According to Hoech's Aktiengesellschaft Corporate Communications, (pers. comm.<sup>1</sup>) water-based paints are “green” because water in the place of organic solvents in car paints, for example, reduces emissions of organic solvents by 90% - significantly contributing to a cleaner environment. Since the environment is harmed by the emissions of these organic solvents that otherwise are released during the painting process, the producers contend that the development of water-based paint has considerable implications. It is a paint that can be diluted by water but at the same time is resistant to rust. This is an example of how waste products can be reduced and avoided by changing products, raw materials, or production processes.

The results indicate that consumers are not prepared to pay premium for green products. If their cost is high, they are more likely to buy conventional versions of the products. Consumers consider, in the order of importance, price, performance of products, waste disposal of products, whether tested on animals or not, and ecolabelling in their choice between “green” and conventional alternatives. Thus, price is a critically important contributing factor, followed by product performance in influencing whether the consumer will be “green” or not. The other environmental factors (waste disposal of products in the course of production and consumption, test on animals and ecolabelling, for example) are secondary and are often not even considered. Some consumers may consider performance first before price, but more often in the present circumstances of South Africa, most consider price first.

Those who consult ecolabelling in their purchasing decisions, might be deceived because all detergents and washing powders are labelled as “environmentally friendly”. Most of them, however, do not bear the South Africa Bureau of Standards (SABS) logo. For products to carry the SABS logo they must not endanger the health of the consumer or others. They must not cause significant damage to the environment during manufacture, use or

---

<sup>1</sup> Hoech's Aktiengesellschaft Corporate Communications, Industrial divisions D-65926, Frankfurt/Main.

disposal. Products must therefore be tested by SABS and proved environmentally benign before being certified with the SABS logo.

The results also suggest that a significant proportion of the sample population do not know the difference between a chosen green product and its alternative conventional product. Hence, the level of respondents' ignorance of "green" alternatives was high for most of the products, the exception being fuel and paints. People who buy fuel know which alternative they are buying - whether "green" unleaded fuel or conventional leaded fuel. Similarly, paint users know which alternative they buy - whether "green" water-based paints or conventional organic/oil based paints. The high level of ignorance on the part of the respondents for green alternatives of most products they buy contributes to the fact that consumers generally do not attempt to check the presence of the "green" alternatives. This in turn implies that they are unlikely to form a strong consumer movement that can interact with manufacturers to demand better products and services.

Consumer-based studies attempt to determine characteristics of green consumers that differentiate them from other consumers and such studies typically focus on traditional demographic (age, income, education) and psychographic (attitudes, values) variables. Shrum, McCarty and Lowrey (1994) cite, for example, J. Walter Thompson found that persons classified as most green tended to be better educated older females with high incomes and liberal orientation; whereas those least green tended to be younger, less well educated males. It is to be noted that this study did not categorize consumers on gender basis but used a household as the observation unit.

## 5.2 Discussion

A system that is environmentally and socially benign and that takes into account the aspirations of future generations, requires a complete restructuring of economic and political institutions in relation to consumer behaviour. One such system or principle is Green Consumerism. The key question is whether it can be a way forward in a country like South Africa far removed from the mainstream of Green consciousness in Western Europe and North America. Peattie (1995) views that green consumption has two key dimensions: the intent to buy that is sustainable and socially responsible, and the socio-environmental impact of the actual purchases. In countries such as Germany and the USA a sufficiently large proportion of the population is involved in recycling and view green consumption as the norm, at least on the

basis of product disposal. An individual can operate as a Green consumer by incorporating environmental concern into any phase of the consumption process. A way can be found in South Africa where gradually all would become involved in an attempt to act locally and contribute to "greener" environment through consumption lifestyles. Notwithstanding the category of consumer group, whether Grey, Economical, Doubtful or Green Consumer, Peattie (1995) contends that the vast majority of people, if offered credible green products with similar prices and technical performance to conventional products, will prefer the green product to the conventional version. The same is true of South Africa. For fairly competitive prices, people generally prefer green products to non-green versions, but they choose conventional products because they are cheaper. Assessing the price differentials between green products and their alternative non-green products it was found in line with Wang (1990) that green products, on the average, cost more.

In Pietermaritzburg, the respondents placed price of products as the most important factor followed by performance in making purchasing choices. The fact that price is considered first in their expenditure in this case study suggests that family income may be the major constraint to Green consumerism being replicated in South Africa. Several factors may account for green expenditure. Easterling, Miller and Weinberger (1995) contend that within the family unit, favourable attitudes, beliefs, and concerns may exist with regard to environmentalism. Then too, some aspects of family resources may serve as constraints of "green" consumption behaviour (for example, family time and family location besides family income). Easterling *et al* (1995) explain that there are time costs associated with developing an awareness and familiarity with product offerings. These include costs associated with learning prices or comparing prices between green and non-green products.

Commitment to green lifestyles can entail family financial hardships (Wang 1990) and that is part of the explanation why consumers in Pietermaritzburg generally preferred more conventional products which are relatively cheaper. Easterling *et al* (1995) also points out that many products may also require additional time (such as refilling bottles) in use or for disposal (sorting, storing, transporting). In South Africa, some people re-use bottles by sending them back for refilling purposes but usually only when they pay a refundable deposit on the bottles. Easterling *et al* (1995) show with USA data the additional cost of green lifestyle. For example, organically-grown potatoes were 61% more expensive than the conventionally grown ones, and organic whole wheat bread was 47% more expensive than the non-green alternative. In

South Africa too, green products cost 1.2% to 202% more than the non-green versions for the products studied (table 4.3). The exceptions are water-based paints and unleaded fuel.

At present, the Government of South Africa subsidises the production and sale of unleaded petrol. The intention is to attract more customers to buy unleaded fuel and to reduce lead pollution in the environment. Small quantities of lead compounds added to petrol increase the octane number. This allows the use of higher compression ratio engines with more ignition spark advance, which means improved engine efficiency and fuel economy (Elkington, Burke and Hailes 1988, Caltex Unleaded Petrol Technical Working Group 1996). While addition of lead compounds to fuel results in such improved efficiency, lead pollution is known to cause poisoning in most organisms (Simmons 1974, Caltex Unleaded Petrol Technical Working Group 1996). However, since the early 1970s, many countries have started to phase out the use of lead as an antiknock additive to fuel. South Africa, in this instance, started vigorously to promote the sole use of unleaded fuel in 1996 (Caltex Unleaded Petrol Technical Working Group 1996)

With regard to the use of subsidies to promote the consumption of products, Baumol and Oates (1992) discuss the difficulties in determining the optimal structure of taxes and subsidies and the use of standards and pro-environmental pricing for protection of the environment. They remarked that the proper level of the Pigouvian tax (subsidy) upon the activities of the generator of an externality (social damage or benefit) is equal to the marginal net damage (or benefit) produced by that activity. They try to indicate that with such subsidy we do not know how to determine the exact dosages that it calls for. In other words, there may be special cases in which one will be able to form reasonable estimates of the social damages but in general we simply do not know how to set the required level of subsidy. Baumol and Oates (1992) add that in the absence of proper signals from the market, it is typically necessary to utilize a political process (that is a method of collective choice) to determine the level of activity. From this perspective, the selection of environmental standards can be viewed as a particular device utilized in a process of collective decision making to determine the appropriate level of an activity involving external effects. In effect, in spite of the subsidy on "green" unleaded fuel in South Africa there is still some demand for conventional leaded fuel due to old models of vehicles still in use.

There are consumers who do not buy green products at all irrespective of income. In this case it appears that they do not care about green products or they are anti-green. Some



have the perception of green products being of poor quality. For example, some consumers have the notion that non-chlorine bleached toilet roll is made of recycled paper and that an item re-used is of inferior quality. On the other hand, the attitude of anti-greenness may be due to fatigue of "green" things. They are tired of thinking about green issues due to too much publicity from the television, radio, newspaper advertisements and/or ecolabelling of products. The results of this study indicates that some proportion of consumers (34%) know the harmful impact of the non-green products on the environment during its production or usage and would not buy it in preference to its green alternative. A smaller proportion know the difference but choose to buy both. Others don't know the difference at all and cannot indicate which alternative they prefer. This may be due to lack of education, lack of understanding of issues of technical terms, or insufficient ecolabelling.

With all different categories of consumers, it is clear that consumers switch easily from one category to another depending on circumstances. Consumers who consider themselves deeply green will, by accident or design, purchase many products which are less sustainable and less socially responsible. These may be misled by packaging or are simply in a hurry or because of financial constraints or other circumstances beyond control that sets in, buy the non-green versions of product. For instance, the authors of *Green Pages: The Business of saving the World* (Elkington, Burke and Hailes 1988) explain why they could not afford to print *Green Pages* on recycled paper. They remark that recycled paper offers a number of environmental advantages. It saves trees, energy and water. However, when Routledge, their publishers, sought quotes from the main suppliers of recycled paper, their book product turned out to be 40% more expensive. Moreover, the thickness of the paper would have introduced more difficulties at the book binding stage. On a tight budget, they had no option but to go the non-green route. Conversely, the most environmentally-sceptical and economically-minded consumers may still use, for example, lead-free fuel or grow their own largely organic produce (Peattie 1995). That is why Banerjee *et al* (1995) arrive at the conclusion that being green is not one part of a dichotomous state. Instead, greenness should be conceptualized as a continuous variable with shallow and deep involvement as the two extremes.

Peattie (1995) viewed that green is a relative concept and that different people and different countries would have different perceptions of what constitutes a green product according to the perception of different environmental problems, their urgency, causes and potential solutions. He holds the view that what is environmentally good represents a moving

target. Environmental concerns vary over time, between different countries and among different stake holders within the business environment. In this light, it is ironic to note that Di-ethyl,di-methyl,trichloro,ethane (DDT) was originally promoted as a solution to environmental pest problems that was safe enough to eat, and CFCs were marketed as exceptionally environmentally inert.

Peattie (1995) explain that technology changes or competitor actions can render a particular green product obsolete. Hence, what constitutes a green product also varies over time. He adds that air pollution, traffic congestion and rising levels of crime may be key concerns among city dwellers. Those living on the coast may be more concerned with water pollution and littering by holiday makers and the danger of tanker spills. The same is true across South Africa. Due to differences in social backgrounds, income, location of homestead (rural or urban), people have different perceptions towards Green Consumerism. Peattie (1995) writes that in many ways it is often misleading to generalize and attempt to categorize the green consumer. However, he suggests that virtually everyone can be classified as an 'ecologically concerned consumer' and provided that other factors such as price are relatively equal, most people would choose an environmentally superior product. Most consumers' concern about global warming or ozone depletion relates to the potential impact on society. Carbon dioxide (CO<sub>2</sub>) is the waste which has excited most interest. More serious is the accumulation of CO<sub>2</sub> in the atmosphere. The hypothetical result is to produce a 'greenhouse' effect in which according to (Wilson 1988, Reavey and Graves 1996, Simmons 1974, 1997) additional CO<sub>2</sub> allows the absorption of more solar radiation and hence the rise of global temperatures with subsequent ice-cap melting and shifting of climatic belts. Yet, a lot of CO<sub>2</sub> is produced from consumer behaviour.

According to Sunday Tribune, 2 June 1995 edition captioned *About time, says environmentalists to water pollution probes*, Farhana Ismail and Colleen Jeffery report of 18 companies having contravened certain sections of the Water Act for discharging oil and various wastes into sewers in Pietermaritzburg. The Department of Water Affairs and Forestry said their latest charges concerned an illegal discharge of unpurified industrial effluent in the Baynes Spruit (Pietermaritzburg). It is not only individuals who should become Green Consumers and therefore look to Green Consumerism as a way forward in South Africa but industries as well. Brundtland's report: "*Our Common Future*" by The World Commission on Environment and Development (1987) indicate that politicians and a lot of authors have been concerned with

environmental issues. It is interesting to consider views of industries. Tyson, Kruger and Louw (1988) reported that several sources of primary pollutants such as particulate, sulphur dioxide, nitrogen oxides, carbon monoxide, hydrocarbons, and carbon dioxide exist in the Eastern Transvaal Highveld, and high pollution levels exist in many other parts of the country. As far as manufacturers are concerned, Campenella (1993) asserted that to compete internationally South Africa would need to come to terms with international controls applied by many of its potential trading partners in the global marketplace. All these findings suggest that Green Consumerism's potential is still latent in South Africa but is a movement still in the making.

The Brundtland Commission recommended that sustainable development should become the goal of every government and of every international agency. On rooting of Green Consumerism in South Africa, it is the policy of the Government as enshrined in the Constitution of the Republic of South Africa (1996) that everyone has the right to:

- (a) an environment that is not harmful to their health or well being and
- (b) to have environment protected, for the benefit of present and future generations, through reasonable legislatures and other measures that
  - i. prevent pollution and ecological degradation
  - ii. promote conservation; and
  - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Deliberating on people's attitudes to various environmental issues, from purely local, to national and to global, Simmons (1997) identifies the work of Cotgrove (1982) that identified two social groups with particular environmental attitudes. These he calls the Cornucopian and the Catastrophists. The first put their faith in technology and economic development and assert that increased quantities of resources can easily be available for all, provided that investment in technology is high and that social structures encourage enterprise. This social group is the dominant group in the world at the moment. The second group think that there are physical limits to resources and that the planet's life-support systems can be badly degraded by environmental contamination; reform needs attention to wastes and to a lower level of material consumption in industrialized nations. Simmons (1997) on his part contends that Green Political parties are devoted to moving towards the Utopias of the environmentalist's cause and are Catastrophists in Cotgrove's terminology. In this light, Green Political Parties advocate a low-consuming economy, the use of renewable resources of energy,

decentralization, the revaluation of the roles of, for example, work and women, and especially the peace campaigns which aim at the removal of nuclear weapons. Apparently, the Government of South Africa share the views and objectives of Green Political Parties elsewhere in Britain and Germany and is similarly acting with such principles. That is, there is environmental concern enshrined in the Constitution of the Republic of South Africa (1996) Chapter 2 section 26.

Some Manufacturers express their views about the future of Green Consumerism being replicated in South Africa. Carl Kim (Pty) Ltd, for example, which produces toilet roll reports that much of the tissue product are made out of recycled paper. The company points out that there is pressure from other parts of the company in other countries to produce "green" alternatives of their products in South Africa. However, the company is sceptical as to the future of mass production of green products and services. This is because consumers look down upon recycled tissue paper as of lower quality not commensurate to its price.

Mr. Z. B. Goetzee, the Executive Director of South Africa Poultry Association (pers. comm.<sup>2</sup>) reports that the Poultry industry produces the following in its production process: manure is used for fertilizer and cattle feed; blood and feathers are recycled; and the offal is used as pet food. Mr. Coetzee expresses that the industry endeavours environmentally friendly production but consumers are not showing particular interest commensurate to the volume of production. On the other hand, the industry does not run enough campaigns to increase customer awareness on their green products to encourage environmental concerns. He attributes this to the question of price and that South Africa still have many people sticking to the conventional product. He expresses his disbelief that there is as strong a drive in the Republic of South Africa as elsewhere in Europe and USA about the future of mass production of green products and services. This is not consistent with the studies of Schuhwerk and Lefkoff-Hagius (1995). Their research examined how consumers responded to different print advertisements for a green laundry detergent. They considered a "green" appeal which emphasized the environmental attributes of the product and a "non-green" appeal which emphasized the cost saving attributes of the product. Their results showed that for those highly involved with the environment, there was no significant differences in purchase intent and

---

<sup>2</sup>Z. B. Coetzee, Executive Director of South Africa Poultry Association, P O Box 1202, Honeydew 2040.

attitude toward advertisement. However, for those less involved with the environment, the green appeal was significantly more persuasive than the non-green appeal in terms of the same variables. Cotzee's disbelief in the strong drive about the future of mass production in South Africa has little support. Consumers differ in their knowledge of and concern about the environment (Roper Organization 1990, Schuhwerk and Lefkoff-Hagius 1995) and consumers who are highly involved with the environment will be intrinsically motivated to attend to the environmental attributes of products with green appeals. Then, with the green appeal of advertisement consumers who are not even highly involved with the environment will be gradually motivated to buy the green product as Green Consumerism gets more rooted in South Africa. Schuhwerk and Lefkoff-Hagius (1995), Shrum, McCarty and Lowrey (1995), suggest that the use of green appeals by marketers can be productive.

Ulrich Feiter of Organic Agriculture Association of South Africa (pers. comm.<sup>3</sup>) explains that there are numerous advantages in producing food crops organically, all geared:

- to sustain long term ecological integrity
- to use as far as is possible, renewable resources to build up and maintain long term fertility
- to encourage and enhance biological cycles within the farming system including microorganisms and soil fauna, plants and animals
- to produce food of high nutritional quality in sufficient quantity to meet market demand
- to utilize production methods that are low- or non polluting, low energy input and sustainable
- to encourage individual farm sustainability.

Feiter also points out that the climatic and environmental conditions in South Africa are so varied that each area would have to develop its own techniques but the fundamental guidelines are still the same. Agricultural Extension Officers would also be of help. In any case, he expresses firm support of Green Consumerism as a way forward for South Africa.

While Tager (1995) expresses greater hope for the development of a dynamic consumer movement, Moolman (1995) states that a Consumer Affairs Act is envisaged in future which will regulate national co-ordination. Presently, South Africa National Consumer Union

---

<sup>3</sup> Dr. Ulrich Feiter, Organic Agricultural Association of South Africa, P O Box 67726, Bryanston 2021.

(SANCU) has opened Regional offices in all the Provinces. However, the Consumer Affairs bill has not been tabled.

### 5.3 Conclusion

The consumer is faced with a variety of consumption choices but considers prices as the most important factor in making his purchasing decisions. This goes to say that income plays a significant role in ones green expenditure. Being guided by price of products before performance, environmental impact of product and service choices appear to be secondary considerations to consumers. Consumers can therefore shift from one variable of greenness to another and might not be permanently put into definite categories of greenness. In South Africa, similar to the advanced countries, the early phase of green consumption has seen relatively few people consistently and deliberately avoiding green purchasing behaviour. Rather, the majority of consumers are predominantly “economical” or “doubtful and confused” about the green challenge. Most consumers are not prepared to pay premium for green products. However, development of Green Consumerism has been for over two decades and South Africa is just at the beginning stage of such a recognizable continuum. There are some consumer preferences generally for green products and services that cost less. Manufacturers too, are very hopeful as to their contribution to the future of mass production of green products and services but only if the cost to consumers are kept down. Others, especially in the area of agriculture, express great optimism in Green Consumerism once it has taken off fully in South Africa in the next decade.

### 5.4 Recommendations

- It is recommended that more education both formal and informal and the creation and maintenance of a strong, responsible and organised consumer voice that will interact with manufacturers take place.
- It is recommended that ecolabelling should be in simple language that avoids as much technical terms as possible.
- All South African-made products that are environmentally benign should be certified with the logo of South Africa Bureau of Standards. That will help prospective Green Consumers to easily identify them in shops and have the trust to buy them having being certified.

- There is the need for Government intervention with the promotion of Green Consumerism by setting political structures that can make consumer associations and Green movements feasible. The Government could set lower taxes or subsidize on the production of some green products initially so that the prices would be relatively lower than other non-green versions.
- The Company with the best environmental performance could be awarded and given much publicity for certain period. This will promote stiff competition for manufacturers to produce on environmentally-sound practices.
- Further studies to define South African consumers into various categories such as that identified by Roper Organisation (1990) in US and Peattie (1995) is needed.
- There is also a clear need to further research that will classify consumers on the basis of gender and education and relating this to their income.

## REFERENCES

- Aaker, D. A. and Day, G. S. 1982. *Consumerism: Search for the Consumer Interest*. Free Press New York.
- Bailey, K. D. 1978. *Methods of Social Research*. Free Press, New York.
- Balderjahn, I. 1986. Das Umweibewusste Konsumerstenverhalten, Duncker and Hum bolt.  
Cited in Peattie (1995) *Environmental Marketing Management: Meeting the Green Challenge*. Pitman Publishing, London.
- Banerjee, S., Gulas, C. S. and Iyer, E. 1995. Shades of Green: A Multidimensional Analysis of Environmental Advertising. *Journal of Advertising*, 24:21-31
- Baumol, W. J. and Oates, W. E. 1992. The Use of Standards and Prices for Protection of the Environment. In: Wallace E. Oates (ed) *The Economics of the Environment*. Edward Elgar Publishing Ltd, p.161 - 170. University Press, Cambridge.
- Caltex Unleaded Petrol Technical Working Group. 1996. Unleaded Petrol for South Africa. *An Information Booklet for the Motorist and the Filling Station Owner/Operator*, p.14-15
- Campanella, J. 1993. South Africa Must Come to Terms with International Controls. *Municipal & Openbare Dienstse* (June 1993) 12: 11-27.
- Chase, D. and Smith, T. K. 1992. "Consumers Keen on Green but Marketers Don't Deliver," *Advertising Age*, 63 (June 29), s2-s4.
- Clever, I. 1991. Farmers, don't keep consumers in the dark. *Farmers Weekly*, 14 June 1991, p.14
- Coddington, W. 1993. *Environmental Marketing: Positive Strategies for Reaching the Green Consumer*. McGraw-Hill, New York.



- Cotgrove, S. 1982. *Catastrophe or Cornucopia: The Environment, Politics and the Future*, John Wiley & Sons, New York.
- Dobson, A. 1990. *Green Political Thought*. Harper Collins Academic, London.
- Du Pleissis, P. J., Rousseau, G. G. and Blem, N. H. 1990. *Consumer Behaviour*. Halfway House: Southern Book Publishers, Cape Town.
- Easterling, D., Miller, S. and Weinberger, N. 1995. Environmental Consumerism: A Process of Children's Socialization and Families' Resocialization. *Psychology & Marketing* 12:531-550.
- Eckersley, R. 1992. *Environmentalism and Political Theory*. SUNY Press, Albany.
- Elkington, J. and Hailes, J. 1988. *The Green Consumer Guide*. Victor Gollancz Ltd London.
- Elkington, J., Burke, T. and Hailes, J. 1988. *Green Pages: The Business of Saving the World*. Routledge, London.
- Graves, J and Reavey D. 1996. *Global Environmental Change; Plants, Animals and Communities*. Longman, London.
- Hermann, R. O. 1982. The Consumer Movement in Historical Perspective. In Aaker, D. A. and Day, G. S. 1982. *Consumerism: Search for the Consumer Interest*. Free Press. New York
- Hernion, K. E. II. 1982. Will the normative become the descriptive? In: *Ecological Marketing*. 1:6
- Kilbourne, W. E. 1995. Green Advertising: Salvation or Oxymoron? *Journal of Advertising*, 24:7-19

- Levin, G. 1990. Consumers Turning Green: JWT Survey. *Advertising Age*, 61 (November 12), 74
- Lowe, P. and Goyder, J. 1983. *Environmental Groups in Politics*. George Allen and Unwin.
- Maynes, E. D. 1990. At Home with Consumers. Direct Selling Education Foundation. Vol II No. 1 :6 Pretoria.
- McDonagh, P. 1994. 'Towards an Understanding of What Constitutes Green Advertising as a Form of Sustainable Communication' *Cardiff Business School Working Paper in Marketing and Strategy*.
- Miller, K. and Hirschowitz, R. 1990. Laws, By-laws and Regulations which apply to Fresh Produce Markets and the Marketing of Fresh Produce. *H.S.R.C. Report*, 8: 179, Pretoria.
- Moolman, L. 1995. Introductory Remarks. SA National Consumer Union (SANCU) Workshop for UN Consumer Protection 1985 Workshop (31 March 1995). In: *Report of the United Nations Guidelines for Consumer Protection. SA National Consumer Union (SANCU) (1995) Workshop 31 March, Pretoria*.
- Myburgh, R. (ed) 1995. The Self-Help Approach to Consumer Problems. How and where to complain: SA National Consumer Union (SANCU), Pretoria.
- Peattie, K. 1995. *Environmental Marketing Management: Meeting the Green Challenge*. Pitman Publishing, London.
- Peters, R. L. 1994. Conserving Biological Diversity in the Face of Climate Change. In: Chung Kim, K. E. & Weaver, R. D., eds. *Biodiversity and Landscapes (a paradox of humanity)* Cambridge University Press.
- Pick'n Pay. 1995. What is in Pick 'n Pay Green (Environmentally Friendly) *leaflets on Pump*

*Hairspray: Ultimate Hold*, Cape Town.

Pirages, D. 1977. Introduction: A Social Design for Sustainable Growth," in D. C. Pirages, ed., *The Sustainable Society: Implications for Growth*, Praeger Publications, New York

Pollack, S. 1995. *Improving Environmental Performance*. Roulledge Publishers, London

Porritt, J and Winner, D. 1988. *The Coming of the Greens*, Fontana, London.

Prokop, M. K. 1992. *Managing to be Green*. Pfeiffer & Company San Diego, USA.

Rolston, C. P. and di Benedetto, C. A. 1994. 'Developing a Greenness Scale: An Exploration of Behaviour Versus Attitude', In: Park, C. W. And Smith, D. C. (eta) *Marketing Theory and Applications*, Proceedings of 1994, AMA Winter Educators ' Conference.

Roper Organization 1990. "Environment: Public Attitudes and Behaviour," a report by the *Roper Organization and S. C. Johnson and Son, Inc.*, New York, p. 31-47

Rousseau, G. G. 1991. Consumerism and Marketing: What is expected of Agriculture. *Agrekon*, 30:189-192 (December 1991, No.4).

Schuhwerk, M. E. and Lefkoff-Hagius R. 1995. Green or Non-green? Does the Type of Appeal Matter When Advertising a Green Product? *Journal of Advertising*, 24:46-54

Schwartz, J. and Miller, T. 1991. "The Earth's Best Friends." *American Demographics*, 13 (February), 26-35.

Shrum, L. J., McCarty, J. A. and Lowrey, T. A. 1995. Buyer Characteristics of the Green Consumer and their Implications for Advertising Strategy. *Journal of Advertising*, 24:71-82

Simmons, I. G. 1974. *The Ecology of Natural Resources*. Edward Arnold (Publishers) Ltd,

London.

- Simmons, I. G. 1997. *Humanity and Environment: A cultural Ecology*. Addison Wesley Longman Limited, England, p.20.
- Simpson, J. A. and Weiner, E. S. C. 1989. *The Oxford English Dictionary*. Volume III Cham Creeky Clarendon Press, Oxford.
- South Africa National Consumer Union. 1991. *Buy Right. Consumer Guide for South Africa*. Tafelberg Publishers Ltd, Cape Town.
- Tager, L 1995. The Promotion and Protection of Consumer's Economic Interests. In: *Report of the United Nations Guidelines for Consumer Protection Workshop* Presented by SA National Consumer Union (31 March 1995).
- The World Commission on Environment and Development. 1987. *Our Common Future. A Reader's Guide: The Brundtland Report Explained*. Earths can Publication Limited.
- Wang, G 1990 (April) It is not easy being green. *Money*, pp. 101-112
- Winski J. M. 1991. Green Marketing: Big prizes but no easy answers. *Advertising Age*, 62 (46) GR3.
- Zinkhan, G. M. and Carlson, L. 1995. Green Advertising and the Reluctant Consumer. *Journal of Advertising*, 24:1-6.

## APPENDIX 1

UNIVERSITY OF NATAL (PIETERMARITZBURG)  
SCHOOL OF ENVIRONMENT AND DEVELOPMENT  
GREEN CONSUMERISM: IS IT A WAY FORWARD IN SOUTH AFRICA?  
A CASE STUDY IN PIETERMARITZBURG

INTERVIEWER: KWASI ADDAI-POKU

DATE OF INTERVIEW.....

INTRODUCTION: Hello, my name is Kwasi Addai-Poku from University of Natal. I would like to ask you a few questions for a survey I am conducting on people's attitudes to "green" products. These are products that do less damage to the environment when they are being made or being used. (a.) The purpose of the survey is to find out the proportion of the South Africa population that want "green" products and services. (b.) We hope that the results will show opinions of consumers.

**All survey responses will be kept strictly confidential. Please answer all questions.**

### Demographic information:

1. Male ..... Female..... 2. Age
3. Place of residence .....
4. Do you have employment? Yes  No   
Your occupation.....  
If no to question 4, are you supported? (e.g. pensioner?) Yes..... No.....
5. Are you the breadwinner? Yes..... No.....
6. How many people live in your house? ..... Adults..... Children.....
7. Please, could you estimate the total income of all the people in your household after tax and other deductions (the takehome total) ?.....
8. What Education do you have? (Please tick where appropriate)  
No education                  Primary                  Secondary                  Diploma                  Degree

### WHAT GREEN PRODUCTS DO YOU BUY?

9. For each of the following products and their alternatives, which do you buy?
  - a. Toilet rolls:
 

Chlorine bleached	<input type="checkbox"/>
Non-chlorine bleached	<input type="checkbox"/>
Don't know the difference	<input type="checkbox"/>
Don't buy this product	<input type="checkbox"/>
  - b. Hair spray:
 

With CFC's	<input type="checkbox"/>
Without CFC's	<input type="checkbox"/>

Don't know the difference   
 Don't buy this product

c. Coffee filter paper:  
 Bleached   
 Unbleached   
 Don't know the difference   
 Don't buy this product

d. Tea bags:  
 Bleached   
 Unbleached   
 Don't know the difference   
 Don't buy this product

e. Detergents:  
 Normal detergent cleaner   
 Phosphate-free detergent cleaner   
 Don't know the difference   
 Don't buy this product

f. Sanitary pads:  
 Chlorine bleached   
 Non-chlorine bleached   
 Don't know the difference   
 Don't buy this product

g. Eggs:  
 Poultry eggs (non free range)   
 Free range eggs   
 Don't know the difference   
 Don't buy this product

h. Paints:  
 Organic or oil-based paints   
 Water-based paints   
 Don't know the difference   
 Don't buy this product   
 Buy both   
 Seldom buy

## i. Fuel:

- Leaded "97" or "93"   
 Unleaded "95" or "91"   
 Don't know the difference   
 Don't buy this product   
 Buy both

10. Do you buy any organically grown vegetables (those grown without chemicals)?  
Yes  No  If yes, what type.....
11. Does it cost you more money or save you money to buy green products?  
cost more  cost less  cost the same  able to save
12. Could you indicate how much you spend on green products(or environmentally friendly products) per week compared to rest of products? .....
13. Which of the following factors is important to you when you choose a product. ( Indicate in the order of importance you consider).  
 Price  
 Performance  
 Ecolabelling  
 Waste disposal  
 Test on animals  
 Advertising  
 Reputation  
 Familiarity  
 Don't consider any (just the need)
14. Please, could you indicate your willingness to buy green products if they are available and do not cost more? Please, tick which one applies to you.  
 Very strongly willing  Strongly willing  Less strongly  Just willing  Not sure   
 Does not care
15. If green products are available and cost more, are you prepared to pay a premium for them?  
 Yes..... No..... How much extra are you willing to pay per week?.....
16. Do you want to know about the environmental friendliness or harm of the products you buy?  
 Yes  No
17. If yes to 16, through what means do you want to be informed? .....

**YOUR ANSWERS WILL BE TREATED IN THE STRICTEST CONFIDENCE.  
 THANK YOU FOR YOUR COOPERATION.**

## APPENDIX 2

UNIVERSITY OF NATAL (PIETERMARITZBURG)  
SCHOOL OF ENVIRONMENT AND DEVELOPMENT  
GREEN CONSUMERISM: IS IT A WAY FORWARD IN SOUTH AFRICA?  
A CASE STUDY IN PIETERMARITZBURG

RESEARCHER: KWASI ADDAI-POKU

Please answer all the questions as best as you can on a separate sheet of paper. Some questions might not be relevant to your own situation; if so, please say.

**All survey responses will be kept strictly confidential.**

1. What do you understand by “green” products?  
\_\_\_\_\_
2. What green products does your industry produce?  
\_\_\_\_\_
3. Why are they “green”?  
\_\_\_\_\_
4. Are consumers showing particular interest in environmentally friendly products of your industry?  
\_\_\_\_\_
5. Has your company modified its production in response to “green” demands from customers? If so, what changes have been made?  
\_\_\_\_\_
6. To what extent is/are the product(s) reusable or recyclable?  
\_\_\_\_\_
7. Do you foresee your industry expanding or modifying its production to meet the demands of the green consumer in the next 3 years? Or the next 10 years?  
\_\_\_\_\_
8. Does your industry run any campaigns to increase customer awareness on green issues and encourage environmental concerns?  
\_\_\_\_\_
9. Do you know what effect your production process has on the environment? How did you find out?  
\_\_\_\_\_
10. Does your green manufacturing process save energy or use environmentally benign



sources of energy?

---

11. Does your green manufacturing process entail significant reductions in emissions into air and water?

---
12. Are appropriate technologies being used to minimize emissions?

---
13. Please, could you provide information on the production processes of environmentally friendly products and those of the conventional products of your industry? Additional documentation about the industry will be helpful.

---
14. Could there be a way for you to include environmental cost arising from your production process in the production cost to reduce long-term costs to society?

---
15. Please, could you express your views on the future of mass production of green products and services?

---
16. (If you also operate outside South Africa) Is there pressure from other parts of your company in other countries for you to produce "green" things here?

---
17. Have you done market research on demand for green products? Would you be willing to allow us to see/quote relevant parts of the results?

---
18. Do you have data on changing consumer demands for green products year by year? Would you be willing to allow us to see/quote relevant parts of the results?

---
19. Do you have information on proportions/kinds of green consumers in South Africa? Would you be willing to allow us to see/quote relevant parts of the results?

---

Thank you very much.

Please give your name, organisation's name, address, fax and phone numbers on return of your answer sheets to Kwasi Addai-Poku, School of Environment & Development, University of Natal - Pietermaritzburg, P/B X01, Scottsville 3209. Fax +27 (0)331 260 6224.