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GREEN MARKETING AS A RECENT ATTITUDE TO ACHIEVE SUSTAINABLE DEVELOPMENT

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ABSTRACT

Environmental issues is an important topic nowadays as almost every country's government and society has started to be more aware about these issues. This leads to a trend of green marketing used by the firms /producer in order to gain profit and protect the environment, Green marketing is the process of satisfying the needs and wants of customer's in a way which can bring benefit or profit for both the producer and the society by reducing detrimental impact on the natural environment by providing less environmental harmful and/or more environment friendly products to the respondents, green marketing tools such as ecolabel, eco-brand and environmental advertisement will make easier perception and awareness of green products attributes and characteristics, consequently, guiding them into purchasing environmentally-friendly products. Applying these policy tools plays an essential role to switch customer's actual purchasing behavior to buy environmental friendly products, therefore, reduce the negative impact of synthetic products on the environment. The aim of this research was to know the respondents awareness of green marketing and its impact on sustainable development and to assess the attitude of respondents towards green marketing and sustainable development. A sample of (150) respondents was chosen from (5) super markets for administering well structured survey questionnaires. The analytical tools were used descriptive statistics, inferential statistical treatments such as

percentages, means, and correlation analysis were applied to the data. From the research it was found that majority of the respondents did not have knowledge about green marketing because it is very new concept for respondents otherwise majority of the respondents agree about believing in the concept of green marketing, paying extra cost for green products also majority of the respondents strongly agree about supporting green marketing and sustainable development strategies The results of a correlation analysis between the respondents' attitude towards green products with respondents' demographics showed that, the respondents' attitude towards green products was significant negatively correlated with Age, Education and income were significant positive correlated with respondents' attitude towards green products, the research recommended that government and marketing organizations have to disseminate the importance of green marketing and enhancing the awareness at every level of stakeholders about green marketing.

INTRODUCTION

Today the concept of sustainability is almost ubiquitous by showing application in corporate strategy, consumer choice, student education and academic research. The need for sustainable business practices by corporations around the world is identified to be a result of overall increase in the consumer awareness of lack of environmental protection and social inequities. Over the last decade environmentalism has emerged to be a vital aspect due to increasing issues related to acid rains, depletion of the ozone layer, and degrada-

tion of the land and many more pressing environmental issues. This resulted in increase in consumer concern with regards to restoration of ecological balance by presenting demands for eco friendly products in countries around the world (Doyle, 1992 and Vandermerwe & Oliff 1990). The research on environmental consumerism is a well researched topic with the first research dating back to the 1970s. There has been extensive growth in interest exhibited by marketing academics as well as practitioners with regard to the impact of marketing on promoting and maintaining ecological balance (Chammaro et al 2009 and Bhattacharya, 2011). The growth of green marketing research dates back to 1980s when there was emergence of concept of green marketing. Early literature indicates green marketing to be an approach which indicated signs of shift in consumer attention to green product. At that time green marketing research concentrated on the shift in consumer consumption of green products. There was a great deal of empirical research carried out to identify interest among consumers in using and purchasing green products. Green marketing approach was researched from a corporate interest point of view in the early 90s. Research indicated that 92% of MNCs from Europe changed their products to address growing concerns of environmental pollution. (Vandermerwe and Oliff, 1990). Green marketing research has come a long way since then. Consumers from the developed countries including USA and Western Europe were found to be more conscious about the environment (Curlo, 1999). Research in the last decade (Lee, 2009; Rahbar and Wahid, 2011, Lee 2008; D Souza 2004) has indicated that consumer are aware and are willing to pay more to "go green". There is limited research which has examined the impact of green marketing on consumers from emerging economies like India (Bhattacharya, 2011 and Prakash, 2002).

Sustainability and sustainable development

Sustainability is a relatively recent notion and its true meaning is often linked with the emergency alert which served as a warning about the negative effect of humans on their environment. This alert was taken seriously for the first time at the United Nations Conference on the Human Environment in Stockholm in 1972, then with the publishing of a book entitled The Limits to Growth and finally after the world oil crisis in 1973 and 1979/1980 and environmental disasters such as the Bhopal tragedy

(1984), the discovery of the Antarctic hole in the **Ozone Layer (1985) and Chernobyl (1986)**. The ultimate response to the claims of the neoclassical

Economic school about unlimited resources and infinite economic growth seems to be the Brundtland Report (1987) and the United Nations Conference on Environment and Development in Rio (1992). The Brundtland Report is known for its prominent definition of sustainability: "Meeting the needs of the present without compromising the ability of future generations to meet their own needs". This definition is primarily criticized for a lack of unambiguous designation of some of its elements. First of all, the term of needs is not clear since one cannot know which needs are comprised therewith and particularly, how to determine the level of satisfaction of needs of different people. Secondly, nothing is known about the wishes, preferences and needs of future generations. Accordingly, there is a question who should decide on how to distribute welfare among present and future generations and whether the state can represent the interests of future generations or not (Kordej-De Villa, 1999). Regardless of the aforementioned, one should be aware of the fact that the scope of the term of sustainability obviously exceeds the scope of environmental protection due to the comprehensive character of the latter. It is applied to achieve economic growth without environmental degradation. Simply put, however, sustainability is the ability of a system to maintain or renew itself perpetually.

It is worth mentioning that the term of sustainability has so far been encompassed by countless definitions and has been applied along with a number of various notions such as sustainable marketing. Irrespective of the variety of the definitions of sustainability and their applications, one may speak about three dimensions of sustainability, economic, social and environmental one, i.e. about a "triple bottom line" which can be shown as 'pillars', concentric circles or interlocking circles (Adams, 2006). In this view, economic sustainability can be denoted as achievement of growth, efficiency and 'fair' distribution of wealth. Social sustainability implies participation in the decisionmaking process, mobility and cohesion, realization of social identity, institutional development and other. Environmental sustainability honours the integrity of various ecosystems, their carrying capacity and protection of natural resources, including biological diversity. In other words, sustainable development is aimed at achievement of a balance

between demands for improvement of life quality and for accomplishment of social welfare and peace for everyone, and demands for preservation of integral parts of the environment as a natural resource that present and future generations depend on, which, as a whole, designates the civilization sustainability of a society. Each of the three areas needs to be optimized within itself and then with respect to the other two areas.

Like to the term of sustainability, there is no universal definition to sustainable Development, though its foundations include the fact that it is oriented to economic and social progress, without affecting the natural equilibrium. A crucial moment in the global acceptance of sustainable development was the aforementioned UN Conference on Environment and Development held in Rio de Janeiro in 1992. Also known as the Earth Summit, it gave a definition and meaning of "sustainable development" as: "Alignment of economic growth, on the one hand, and rational use of natural resources, on the other". This definition has faced some criticism which is mostly reduced to a lack of an emphasis on the integration of economic, social and environmental development which have all been elaborated in above lines. Therefore, (Praude and Bormane 2013) have proposed the following definition: Sustainable development is integrated and balanced development of public wealth, environment and economics meeting the physiological, social and other needs of people and ensuring preservation of the environment and ecological diversity without jeopardizing the possibilities of meeting the needs of future generations. In any case, the concept of sustainable development is based on three major considerations: balanced economic growth, protection and conservation of the environment and respect for and promotion of social and human rights. Although the first two aspects were more prominent in the beginning, people started to pay more attention, as the idea was evolving, on the reinforcement of its social aspect. The key concepts of sustainable development refer to needs and limitations. Needs of the present can be understood as the quality of life. However, the world is experiencing a great gap between rich and poor countries and unequal distribution of wealth. Sustainable development means covering at least the basic needs of all people; all other living standards have to be sustainable (Reutlinger, 2012). On the other hand, sustainable development enables, in the principle, an enterprise to effectively distribute its resources in order to satisfy the interests of all the interested parties and cater for the possibility of successful development of its business in the future. It is important to remember, however, that sustainable development cannot be achieved without committed participation of all social entities and segments. One needs to establish a framework through which it will be possible to decentralise the means for the decision-making regarding sustainable development and formulate a sustainable development strategy at the level of counties and towns as part of the national development strategy. It undoubtedly means that governments, communities and businesses have all responded, to some extent, to the challenge of sustainability.

Green marketing

Recently, a concept of "green marketing" is becoming popular. It began in Europe in the early 1980s when specific products were identified as being harmful to the earth's atmosphere. Terms like Phosphate Free, Recyclable, Refillable, Ozone Friendly, and environmentally friendly are some of the things consumers most often associate with green marketing. While these terms are green marketing claims, in general green marketing is a much broader concept, one that can be applied to consumer goods, industrial goods and even services. Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising.

The American Marketing Association (AMA) defined the green marketing as: the study of the positive and negative aspects of marketing activities on pollution, energy depletion and no energy resource depletion. This definition has three key components: 1) it is a subset of the overall marketing activity, 2) it examines both the positive and negative activities, and 3) a narrow range of environmental issues are examined. It ensures that the interests of the organization and all its consumers are protected, as voluntary exchange will not take place unless both the buyer and seller mutually benefit, the green marketing tools are considered as enhancements to a consumer's knowledge about environmental friendly products. Currently, these tools are also used to help consumers distinguish between green products and conventional products. These tools include eco-brand, eco-label and environmental advertisement:

- Eco-labeling

One of the significant green marketing tools is using eco-label on environmental friendly products. The Environmental labels are increasingly being utilized by marketers to promote the identification of green products.

- Eco-brand

Eco-brand is a name, symbol or design of products that are harmless to the environment. Utilizing eco-brands features can help to consumers differentiate them in some way from other nongreen products.

- Environmental advertisements

Increasing public attention to environmental problems, most organizations have to choose environmental advertisements through media or newspapers as green techniques for introducing their products to environmentally responsible consumers. The objective of green advertisements is to influence consumers' purchase behavior to buy products that do not harm the environment and to direct their attention to the positive consequences of their purchase behavior, for themselves as well as the environment.

Green Marketing and Sustainable Development

Majority of people believe that green marketing refers solely to the promotion or advertising of products with environmental characteristics. Terms like Phosphate Free, Recyclable, Refillable, and Ozone friendly and environmental friendly are some of the things consumers most often associate with green marketing. While these terms are green marketing claims, in general green marketing is a broader concept, one that can be applied to consumer goods and services (Polonsky, 1994). The misconception of green marketing by majority of people makes its definition very critical, yet defining green marketing is not a simple task. Indeed the terminologies and definitions used in this area are varied. The terminologies include; green marketing, Environmental marketing and ecological marketing (Polonsky, 1994). Therefore, there is no universally accepted terminology and definition of green marketing up to today. According to (Herbig et al 1993) green marketing refers "to products and packages that have one or more of the following characteristics; they are less toxic;

are more durable; contain reusable materials and/or are made of recyclable materials". These two definitions are narrow in scope as they focus on a narrow range of environmental issues. Green marketing need to be broadly defined. (Polonsky, 1994) defines green marketing as "consisting of all activities designed to generate and facilitate any exchanges intended to satisfy human needs, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment". This definition is much broader and incorporates much of the traditional components of the conventional marketing definition and also includes the protection of natural environment. Sustainable development requires "sustainable marketing" that is marketing efforts that are not only competitively sustainable but are also ecologically sustainable (Polonsky et al 1997). Indeed, marketing's role in the development process is well recognized. Much of the economic activity is triggered by the marketing process that offers and stimulates consumption to satisfy human needs and wants. However, marketing"s critical role in development will only be appreciated when, through sustainable marketing, it meets the needs of the present without compromising the ability of future generations to meet their own needs (Polonsky et al 1997). Green marketing focus on undertaking all marketing activities while protecting the environment. On the other hand sustainable development demands that the future generations inherit the natural environment in the same state or better as inherited by the previous generations. This calls for the protection and improvement of the environment. Therefore, sustainable development is a dependent variable of green marketing and other factors.

Green Consumption

green consumption is the process of avoiding products, which are likely to endanger the health of consumers, significantly damage the environment in production, use or disposal, consume disproportionately large amounts of resources during production, cause unnecessary waste through over packaging, excess product features or an unduly short life span, use materials derived from endangered species or environments, involve cruelty to, or needless exploitation of, animals; and adversely affect other countries, particularly developing countries (Elkington & Hailes, 1988).

So the green consumer is a subset of consumers who are in some way different from the other consumers, they are ecologically concerned consumers (Henion & Kinnear, 1976).

Green Marketing Process

Green marketing process comprises with external and internal Ps: after integrating them green success will automatically come through four Ss. The following figure is showing the green marketing process with the integration of seven external Ps, seven internal Ps and four Ss.



Figure 1: Green Marketing Process

Source: Green marketing management (Peattie, 1992)

Green marketing Mix

Marketing mix is a set of tactical marketing tools (product, price, place and promotions) which are blends to generate desired response from the consumer. Green marketing mix is a particular form of development of product, price, promotion and place that do not harm the environment, then companies that apply "green" marketing philoso-

phy are expected to take into consideration ecological aspects of each element of marketing mix before developing and placing products in the market.

Objectives

The research had been carried out keeping in mind the following objectives:

- To identify the socio-economic characteristics of the respondents.
- 2- To know the respondents awareness of green marketing and its impact on sustainable development.
- 3- To assess the attitude of respondents towards green marketing and sustainable development.

Methodology

This research is mainly descriptive. Both primary and secondary sources of data had been used for this. Secondary data had been collected from different published sources like books, journals, magazines, and web sites. For collecting primary data survey method had been used. The sample size was 150 consumers (30 from each super market) from 5 different super markets such as (Carrefour, Alfa market, Dina farms, hyper one and Metro market).

Data had been analyzed through simple statistical techniques like frequency, percentage and descriptive statistics like mean. Correlation analysis was used to measure the relation between the respondents' attitude towards green products and their demographics.

RESULTS AND DISCUSSION

Knowledge about green marketing

Table (1) showed whether the officials under study have any knowledge about green marketing:

Table 1. Knowledge Level of the officials about green Marketing

Knowledge	Frequency	%
yes	1	20
no	4	80
total	5	100

Source: questionnaire data, 2016.

It was found that only 20% of the total officials know about green marketing and the rest 80% do not know.

Respondents' characteristics

Table (2) showed that, Majority (63.3%) of respondents were male and the rest (36.7%) were female. Majority (60%) of the respondents were fall into (35 to 55 years) age group. Besides, it is clear from the table that most (66.7%) of the respond-

ents were well educated as they had a graduate level of education. The income levels of the major respondents (43.3%) were (3 to 7 thousand) LE/Month.

Table 2. Distribution of respondents by their demographic Characteristics

Variable	Description	Frequency	Percentage
	Male	95	63.3
Gender	Female	55	36.7
	total	150	100
	Less than 35 years	20	13.3
Age	Between (35-55) year	90	60
	Greater than 55 year	40	26,7
	total	150	100
	Under graduation	30	20
Education	Graduation	100	66.7
Status	Post graduation	20	13.3
	Total	150	100
	Housewife	20	13.3
Occupa-	Businessman	15	10
tion	Others	115	76.7
	total	150	100
Income	less than 3 thousands	45	30
	Between 3-7 thousands	65	43.3
	More than 7 thousands	40	26.7
	total	150	100

Source: questionnaire data, 2016

Respondents' awareness about green Marketing

Table (3) showed that, respondents disagree about the awareness and understanding of green marketing so majority of the respondents do not have knowledge about green marketing because it is very new concept for respondents otherwise majority of the respondents agree about believing in the concept of green marketing, paying extra cost for green products, government should play a vital role in green marketing and in future we may be having only green products, Table (3) also showed that majority of the respondents strongly agree about supporting green marketing and sustainable development strategies, everyone is responsible for successful green marketing concept.

Table 3. Respondents' awareness about green Marketing

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I have the awareness and understanding of green marketing	30	40	30	30	20
	20%	26.7%	20%	20%	13.3%
I believe in the concept of green marketing	15	25	40	50	20
	10%	16.7%	26.7%	33.3%	13.3%
I support green marketing and sustainable development strategies	20	20	30	30	50
	13.3%	13.3%	20%	20%	33.4%
I am ready to pay extra cost for green products	25	15	50	45	15
	16.7%	10%	33.3%	30%	10%
Government should play a vital role in green marketing	25	15	50	30	30
	16.7%	10%	33.3%	20%	20%
Everyone is responsible for successful green marketing concept.	10	25	15	45	55
	6.7%	16.7%	10%	30%	36.6%
In future may be we have only green products	5	15	20	60	50
	3.4%	10%	13.3%	40%	33.3%

Source: questionnaire data, 2016

Correlation between respondents' attitude towards green products and respondents' demographics

Table (4) presented correlation of the respondents' attitude towards green products with respondents' demographics, the respondents' attitude towards green products attitude was correlated with the five respondents' demographics and three were significant. Age was negatively

correlated with respondents' attitude towards green products at 1% level, Therefore increase in the age of the respondents' means that they have less favorable attitude towards green products. Education and income were significant positive correlated with respondents' attitude towards green products at 5 %, 1% level respectively, increase in income and high level of education mean that the respondents statistically states more favorable attitude towards green products.

Table 4. Correlation between respondents' attitude towards green products and respondents' demographics

Respondents' attitude	gender	age	Education status	Occupation	income
	0.672	- 0.092**	0.041*	0.771	0.098**

*Sig at 0.05 **Sig at 0.01

Findings

Major Findings of the research are:

- The awareness level about green marketing is poor among both the officials and the respondents of super markets.
- The research findings show that respondents have a strong positive attitude Towards green marketing.
- These days respondents are more aware of environmental issues.
- 4. Respondents who are older have less favorable attitude towards green products
- 5. Richer respondents have more favorable attitude towards green products.
- Respondents agree to that: "In future more and more respondents will prefer Green products."

CONCLUSION

The awareness about green marketing is really poor in both the cases of super markets and respondents levels. But if it is ensured the environment friendliness then the super markets will be benefited with increasing respondents' satisfaction. It may also facilitate to increase the productivity and profitability. Respondents will also lead a happy life with sound health and safety. So the government and marketing organizations have to take the initiative to enhance the awareness at every level of stakeholders about green marketing.

REFERENCES

- Adams, W.M. 2006. The Future of Sustainability: Re-thinking Environment and Development in the Twenty-first Century, The World Conservation Union, Report of the IUCN Renowned Thinkers Meeting, January 29-31, Gland, Switzerland, pp. 1-18.
- Bhattacharya, S. 2011. Consumer Attitude towards Green Marketing in India. The IUP Journal of Marketing Management, pp. 62-70
- Chamorro, A., Sergio Rubio. S. and Miranda, F.J. 2009. Characteristics of Research on

- Green Marketing. Business Strategy and the Environment, 18, 223-239.
- Chicago Mintel, R. and Stamatiou, E. 2006.

 Green Roofs— A 21st Century Solution to the Urban Challenges of Green Space, Air Pollution, Flooding & Energy Conservation, WSEAS International Conference Vouliagmeni, Greece. Journal WSEAS Transactions on Energy, Environment, Ecosystems and Sustainable Development, 2(6), 909-918.
- Curlo, E. 1999. Marketing strategy, product safety, and ethical factors in consumer choice, Journal of Business Ethics, 21(1), 37-48.
- Doyle, J. 1992. Hold the Applause: A Case Study of Corporate Environmentalism, The Ecologist, 22(3), 84-90.
- Elkington, J. and Hailes, J. 1988. The Green Consumer Guide, Victor Gollanz, New York, USA, 7 p.
- Kordej-devilia, Ž., and Ekonomska, Politika. 1999. 'Economic Growth and Sustainable Development', Economic Trends and Economic Policy, 9(73), 321-341.
- Lee, K. 2009. Gender Differences in Hong Kong Adolescent Consumers Green Purchasing Behavior. Journal of Consumer Marketing, 26(2), 87-96.
- Praude, V. and Bormane. S. 2013. 'Sustainable marketing prospects and challenges under present economy', Regional Formation and Development Studies, 11(3), 165-176.
- Polonsky, M.J. 1994. An introduction to Green marketing, Electronic Green Journal, 1(2), 123-135.
- Polonsky, M. and Mintu, A. 1997. The future of Environmental marketing: Food for Thought, Environmental marketing strategies, practice, theory and research Haworth, pp. 389-391.
- Reutlinger, J. 2012. Sustainable Marketing The Importance of Being a Sustainable Business, Bachelor's Thesis in International Business, Lahti: Lahti University of Applied Sciences, Degree Programme in International Business, Autumn, pp. 1-72.
- Vandermerwe, S. and Michael, D.O. 1990. Customers Drive Corporations Green. Long Range Planning, 23(6), 10-16.