

Buying Patterns of Eco Labelled Products: A Descriptive Analysis of External and Internal Factors

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Abstract

Environmental deterioration has become a major threat in front of prevailing and the forthcoming generation. The overpopulation, aggressive scale of industrialisation, excessive depletion of natural resources, dumping of electrical and non-organic waste and heavy consumption culture followed by the consumers, contribute to the inclination of environmental deterioration. By introducing eco labels as a marketing strategy, a new segment of environmental communication can be offered to the potential consumers. The study intends to examine the interest in eco labelled product in association with various internal and external factors. The analysis reveals that the eco labels are able to open a new consumption pattern among the consumers, which is more environment-friendly. The result shows that there are significant differences in the interest towards eco labelled product purchasing in different regions of the targeted state. The future study extends with some other external-internal factors and demographic factors.

Keywords: Consumer awareness, Consumer motivation, Communication, Eco label, Green consumers

Introduction

In the modern decade, environmental claims and environmental labels have become a part of marketing strategy. The whole society has a global responsibility to grow without compromising the survival for the coming generations. The development of green marketing opens new vistas for corporates by adding environmental attributes in their business operations. The acute environmental challenges call for environment conscious behaviour from the part of government, business groups, and the whole society. The person who hold positive environmental attitude shows the tendency to engage in environment friendly activities more. The main reason showing this tendency resulting from individual's exposure to knowledge about environmental issues. (Chekima, B. et.al. 2015). The human race is facing fatal environmental hazards from the over consumption of energy resources, water and raw materials, excessive waste production, the industrial emissions etc. The dense population of rural and urban areas also contributes to the creation of life threatening problems. There are huge differences in per capita consumption of goods and

services of different countries and world regions. The standard of living and the rate of consumption are directly proportional. The growing purchasing power and rising influence of social media have enabled Indian consumers to splurge on premium products. Logos, trademarks, and symbols for greener product reflect on product packaging, marketing, advertising communications, websites and tradeshows. Eco labels are powerful tools for encouraging a more sustainable consumption culture. It was recognised in the Agenda 21, in the Rio Earth Summit in 1992. More than 400 eco labels have found in the over 207 countries. More labels and symbols are expected as governments, NGOs, environmental groups, trade associations etc. demand for products that promise environmental and social benefits (Ottman, J.A.2011). Indians familiar with green marketing and green products. However, massive campaigns are needed to take the green movement to the common man. (Maheshwari and Malhotra, 2011).

Industries all over the world try to engage in green practices in the form of using more sustainable materials, using of smaller, lighter and efficient packages and produce more energy efficient products (CEA, 2014). The idea of green marketing is that there is a sizeable market segment for green consumers who are ready to pay a little more for environment friendly products. Those consumers are relatively keeping an environment friendly behaviour than the other consumers. When firms determine to become socially responsible, they face that the environmentally responsible behaviour of today is found to be harmful in the future. In terms of ecological labelling, both certification and standardisation are correlated. In India, as per ISO 14042 standard, all applicants are obligatorily respect environmental legislation with the respective legislation. Eco labels act as a qualifying criteria for companies to improve their operations in to an environment friendly manner to ensure long-term stewardship and wins a competitive edge in the market. To address environmental dimension in the country, Ministry of Environment and Forest (MOEF) with technical support from Central Pollution Control Board (CPCB) had introduced 'Eco Mark' scheme in 1991. After two decades, it did not get much popularity, because it lacked adequate promotional policies.

Eco labels as a tool for environmental communication

Ecological awareness: From the prospective of green consumption, ecological literacy is a key factor, which determines how the consumers are being educated about drastically inclining environmental issues and the willingness to apply this information in their day-to-day life to reduce the detrimental impacts on environment (Peattie, K. 2010). A green company should try to educate consumers about green products, make the consumers aware, how these products protect health and preserve environment and reassure the better performance of green products than conventional products in the similar category (Sara and Madhumita, 2014).

Extra benefits of eco labels: An eco labelled product differs from the non-eco labelled product in the way of environment friendly production. The consumption of this eco labelled product gives benefit not only to the consumer

only but also to the whole society by reducing environmental degradation (Brouhle & Khanna, 2012). Carbon reduction labelling schemes treated as an effective measure for generating environmental awareness of climate change and promotion of green consumption (Zhao, R. et.al. 2016). Voluntary Environmental Programs (VEP) are more effective than firms who own environmental declarations because they get more reputation, value and enjoys higher economic performance in terms of collective production of VEP brand signal (Potoski & Prakash, 2013).

Consumers' purchasing choice: Advertisements enhances product awareness among consumers. When the consumer gets some product information through advertisements, then he will try to gather more and more information about that products and how it affects his demographic factors. (Sogari, G. et.al. 2016). The consumers have some expectation about the product's price, size, design, colour and amenities (Waechter, S. et.al. 2015). The growth of green consumerism in developing countries at a lowest rate because of the inadequate consumer awareness and motivation, lack of support from government authorities and high implementation cost of eco certification programmes.

Environmental attributes in a product and the need to keep transparency: Green attributes alone creates consumer satisfaction. The consumer never ready to consume green products by sacrificing others they expect from the consumption of products. By watching green advertisements regularly, some changes happen in consumer behaviour culture and create an empathetic feeling towards the environment. Green advertisements help to develop environmental awareness among consumers and motivate them to consume eco friendly products. (Morel, M. & Kwakye, F. 2012). Green attributes of the products are clearly defined and stated; still they face some problems in product's greenness. The consumers are vigilant to gather more information regarding the eco attributes of products (Woolverton, A & Dimitri, C, 2010). Green products are labelled on different kinds of environmental considerations like recyclability, ozone friendliness, toxic emissions, wild life safety, consumption of water, waste generation etc. The success of green labels depends on to what extend a consumer interprets the connection between environmental issues and the role of these labels and products for solving these environmental issues (Banerjee, A. and Solomon, B.A., 2003).

In bygone times, demographic factors were the only factors treated as factors affecting consumers' buying decisions, but in the modern decade, various internal and external factors and theories impinge consumer-buying decisions (Faiers, A. et.al, 2007). The different groups of green consumers are resource conservers, health fanatics, animal lovers and outdoor enthusiasts. The regular green products consumption behaviour will become effective only if the products are delicious, hygienic, sanitary, effective, attractive and easy to find in the mainstream outlets (Ottman, J.A. 2011).

Role of companies and Government in eco labelling program: Companies are providing guidance and support to the consumers on how to reduce the negative environmental impacts of the products during the use and disposal period

(Schuchard, R .2008). (Gutierrez, Y.B. et.al, 2008) discussed the role of producers to adopt alternative methods to reduce the pernicious impact on the environment by reselling to second hand dealers and donating to charitable societies. Government develops eco labels under public administration. There are options to encourage the adoption of particular standards by public measures. It involves giving subsidies to reinforce the demand and supply of eco friendly products, information campaigns, financial support to private labels and legislation outlining minimum requirements. Public procurement policies also promote green consumption (Korteland, M. 2007).

Evaluation criteria

Consumer Response: The criteria used for the study is consumer response. The success of an eco labelling program purely depends on the cognisance of consumers about these programs. The success of a consumer oriented marketing strategy is measured in terms its awareness created among consumers, understanding and behaviour of consumers. The awareness indicates how much a consumer knows of the programs existence. Understanding indicates the consumers' awareness on various environmental issues and the meaning of eco labels or environment friendly labels and the information about how far these eco labelled products help to reduce the negative impacts on environment. The consumer behaviour towards a particular product depends on many external and internal factors, and the eco labels are only a part of external factor.

Objectives and hypothesis

The objectives of the study are based on two external factors and two internal factors. The dependent variable taken for the study is interest in buying eco labelled products by comparing with independent variables eco labelled product pricing and eco labels (external factors), consumer awareness and consumer motivation (internal factors). The objectives are as follow:

1. To examine the relation between eco labelled product pricing and eco labels in products (external factors) and the preference in buying eco labelled products.
2. To examine the relation between consumer awareness and consumer motivation (internal factors) and preference in buying eco labelled products.
3. To study the interest in buying eco labelled products in different regions of the particular district.
4. To examine the relationship between satisfaction from the consumption of eco labelled products and (i) the preference in buying eco labelled products (ii) and the frequency of purchasing eco labelled products.

Following null hypothesis are set out for the study:

- Ho a: There is no significant association between external factors (i) eco labelled product pricing, (ii) eco labels and the preference in buying eco labelled products.
- Ho b: There is no significant association between internal factors (i) consumer awareness, (ii) consumer motivation and the preference in buying eco labelled products.
- Ho c: There is no significant difference in the preference towards buying eco labelled products in different regions.
- Ho d: There is no significant association between satisfactions from the consumption of eco labelled products and (i) the preference in buying eco labelled products and (ii) the frequency of purchasing eco labelled products.

Data sources

Mainly the primary data used for the study is collected from a district in Kerala state named. The district 'Malappuram' is divided into three parts, southern, central and northern to make the results easy to compare. The total number of respondents collected from all the three regions are 100, 31 respondents from northern parts, 36 respondents from the central region and 33 respondents from the southern region. The data collected by interviewing the respondents face to face. The responses of the consumers are taken under four heads, eco labelled product pricing, eco labels on products, consumer awareness and consumer motivation.

Eco labelled product pricing: In the market, the main challenge faced by the eco labelled products is its price. Different barriers of green product purchasing like the lack of enough time to make a decision, higher price and the scarcity of available information. The consumers make an electronic appliance purchase decision based on product's environment performance like energy efficiency, water consumption, fuel consumption etc. (Young, W. et.al; 2010). The environmental awareness and health consciousness makes consumer to seek eco friendly products. Taking the other consumers into consideration, the experience they derive from the consumption of green products allures them into bearing a premium (Biswas, A & Roy, M. 2015). The higher prices of the green products are compromised through giving subsidies and outright product giveaways.

Eco Labels: There are lot of issues, which force corporate to move in the green path, among these the most important cause is the growing public awareness regarding the environmental degradation. (Verma, P.K. 2012). The emergence of eco labelling concept took place in 1970s when the global market demands comprehensive tool that link the environmental regulations with performance standards. By adopting eco labelling strategy, firm can disclose its eco friendly policies and programmes and its achievement towards carbon footprint.

Consumer Awareness: Some past studies show that educated consumers are concerned on green products. In the case of developing countries, consumer awareness is one of the barriers in green consumption. Corporate adopt print and visual media and other modes to widespread the knowledge of environmental awareness and eco friendly products (Maheshawari, A & Malhotra, G.2011). Better environmental education and awareness of serious environmental issues and consequent climate changes create a demand for eco friendly products (Ansar, N.2013). As concerned to India, green consumerism stills in a niche stage because the consumers are lack of environmental knowledge and lack of information about green products (Cherian, J. & Jacob,J. 2012 ; Sharma, Y.2011).

Consumer Motivation: In the olden times, green marketing motivates consumers to behave in environment friendly manner. green marketing strategy focused on motivating the consumers to go for green products and found that the consumers' preference for such products depended on the utility of the product. (Polonsky, M.J. 2011). The stakeholders involved in the labelling programme are the producers, processing industry, retailers, wholesalers, shops and the professional or daily consumers. The implementation of eco labelling program in an organisation is based on its technical capacity, management structures, organisation's products demand, market and skills to implement standard requirements. (Bostrom, M. and Klintman.M. 2011).

Data analysis

Table 1: Pearson's Chi square estimates

N= 100

Path	d.f.	Value	Asymp.sig (2 sided)	Remarks
EPP → IEP	4	11.176	0.025	0.025 < 0.05. Ho [a(i)] Rejected
EL → IEP	4	7.048	.031	.031 < .05. Ho [a(ii)] Rejected
CA → IEP	4	5.017	.027	.027 < 0.5. Ho [b(i)] Rejected
CM → IEP	4	4.630	.025	.025 < .05. Ho [b(ii)] Rejected

Note: EPP=Eco labelled Product Pricing, EL= Eco labels, CA= Consumer Awareness, CM= Consumer Motivation, IEP = Interest in Eco Labelled products (Dependent Variable).Level of significance=.05

Table 2: Kruskal-Wallis H estimates

N=100

Particulars	Region	N	Mean Rank	Remarks
Are you interested in eco labelled products?	Northern	31	49.47	0.042 < 0.05. Rejected Ho c.
	Central	36	43.78	
	Southern	33	58.80	
	Total	100		
Chi Square value	6.324	d.f.= 2	Asymp.sig.= 0.042	Level of significance=0.05

Table 3: Spearman's Rank Correlation Coefficient ($\tilde{\rho}$) estimates

Path	$\text{rho}(\rho)$ value	Sig. value	Remarks	N=100
IEP → SCEP	-0.140	0.165	$0.165 > 0.05$. Accepted $H_0[d(i)]$	
FEPP → SCEP	0.394	0.000	$0.000 < 0.05$. Rejected $H_0[d(ii)]$	

Note: SCEP=Satisfaction from the Consumption of Eco labelled Products, IEP = Interest in Eco labelled Products, FEPP= Frequency in Eco labelled Product Purchasing. Level of significance=.05

Conclusion

From the preceding analysis, clear lessons emerge, such as how the eco labelling programmes are get influenced by various external and internal factors. The Table 1 describes the association between IEP and external factors (EPP, EL) and internal factors (CA, CM). $H_0[a(i)]$ & $H_0[a(ii)]$ rejected by proving that there is an association between 'Interest in Eco labelled Products' and 'Eco labelled product Pricing' and 'Eco Labels'. The $H_0[b(i)]$ & $H_0[b(ii)]$ also rejected and explains the existence of relationship between the 'Interest in Eco labelled Products' and 'Consumer Awareness' and 'Consumer Motivation' at 0.05 level of significance.

Table-2 explains the 'Interest in Eco labelled Products' based on different regions. The test results show that there is a significant difference between the interest in eco labelled product purchasing in southern, northern and central regions. The purchasing decision of consumers of each region is influenced by the demographic and other external-internal factors.

Table-3 indicates the association between satisfactions from the consumption of eco labelled product and two variables like interest in eco labelled products and the frequency of eco labelled product purchasing. $H_0[d(i)]$ is accepted on the grounds of moderately weak and negative relation existing between SCEP and IEP at .05 level of significance. $H_0[d(ii)]$ is rejected on the grounds of moderately weak positive relation existing between SCEP and FEEP at .05 level of significance.

The further scope of research in the area wise classification of respondents in rural and urban areas to test the significant difference in their interest in eco labelled products. The other internal factors like consumers' attitude, knowledge and external factors like availability of eco labelled products, peer influence, shelf space need to be tested to get more clarification in the interest in the consumption of eco labelled products. Demographic factors like age, gender, education, income, social class etc. also have a great impact on consumers' eco labelled product-purchasing decisions.

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