

## CONSUMERS' ATTITUDE FOR ECO LABELS IN AN EMERGING ECONOMY

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*Eco labels are increasingly being used as vehicles for promoting green credentials of eco friendly products. The way these green labels are perceived by consumers in an emerging market like India is unknown. This study gives an insight into the attitude of the Indian consumers regarding the eco labels. It employs principal component factor analysis to know the attitudes for eco labels in India.*

**Keywords:** *Eco labels, Eco label attitude, Environmental labelling, Ecological consumer.*

### 1. INTRODUCTION

India has proven its economic growth by maintaining a consistent growth record. The burgeoning middle class and the changing consumption patterns (Venkatesh, 1995; Singh, 2000; Das, 2002; Chhokar, 2007) have made India one of the most coveted markets. McKinsey & Company's report (2007) shows that if India continues on its current high growth path for next two decades, the income levels will almost triple and the country will climb from its present position as the 12th largest consumer market today to the world's fifth largest consumer market by 2025. The rapid growth of income, leads to transformation in the lifestyles, which has resulted in a dramatic increase in the demand for newer products. This could result in mindless consumption which is a potent threat to sustainability. The attempts for sustainability like implementing new technology and stricter environmental controls in production often have been outweighed by unsustainable consumption patterns (Schaller, Kuhndt and Pratt, 2009). The growing concern for environmental issues among the general population has forced the companies to go in for environmental marketing. The emergence of green consumers led to growth of environmental labels and marketing claims for example: "eco-friendly", "environmentally safe", "recyclable", "biodegradable and "ozone friendly" (Souza, 2004). As being environment friendly makes an organization socially sensitive, competitive, and customer friendly (Saxena, 2009), the eco labeling of the product makes it more acceptable among the consumers. Therefore there is increased display of eco labels on various product categories, which exuberate the environmental friendly qualities of the products. The literature is bereft of information on consumers employing eco

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labels for purchasing products (D'Souza, 2004). This paper investigates whether the utilization of the eco labels by the Indian consumers is similar across various product categories. It is envisaged that this would help companies to make decisions about eco labeling their products.

## 2. LITERATURE REVIEW

Eco labels are help in identify the products adhering to the environmental standards. They are derived from certification processes and are a market based approach that attempt to influence consumer behavior (Potts and Haward, 2007).

Eco labels provide information at the crucial stage of customer's decision making (D'Souza, 2004) and act as a guide for consumers to choose products that are environmentally friendly (D'Souza, Taghian and Lamb, 2006). Environmental labeling on products is an effective way of communicating to the customer the specific benefits and characteristic of the product and the claim of safety (D'Souza *et al.*, 2006). It is often employed by businesses to differentiate their products, position them and communicate the environmentally friendly message and properties (D'Souza, 2000; Amstel *et al.*, 2007). They help in improving the product sales, product image, and also assist companies to improve all around environmental performance (D'Souza, 2004). D'Souza *et al.*, (2006) opine that the central purpose of environmental labeling is to assist customers to make informed product choices but some customers appear to be unable to understand the exact meaning of some information on product labels as the information may not be transparent, truthful, or based on sound substantiated scientific evidence.

Grankvist *et al.*, (2004) find that information about environmental outcomes provided by eco-labels did influence product preference and the influence was more pronounced in customers who attached more importance to environmental consequences. Consumers pay attention to environmental labels if they value protecting the environment and perceive buying environmentally products as an effective means to achieve this goal (Thøgersen, 2000; Grankvist, Dahlstrand and Biel, 2004; Rashid, 2009). The rationale behind the green certification movement is that, given a choice, consumers would rather buy products that do not harm the environment (Vlosky, Ozanne and Fontenot, 1999). Hartmann, Ibañez and Sainz (2005) find that there is positive influence of green brand positioning on brand attitude. Further findings suggest distinct functional and emotional dimensions of green brand positioning with the interaction of both dimensions in the formation of brand attitude. Highest perceptual effects were achieved through a green positioning strategy that combined functional attributes with emotional benefits.

Eco-labels are essentially credence goods as it is usually not possible for consumers to verify claims concerning environmental improvements made by companies (Clemen, 2010). International non-profit organizations have started to implement ecolabeling for credence attributes programs aimed to inform consumers about environmentally sound or "sustainable" production standards for various products (Heidkamp *et al.*, 2008).

Eco-labels can be classified into 2 categories (Rashid, 2009): self-declaration claims and independent third-party claims. Self declaration claims are placed on a product by the manufacturer, retailer or marketer and may be made on a single attribute or an overall assessment of the product. Product claim could include “environment friendly”, “ozone friendly”, “organic”, “pesticide-free”, “degradable”, and “recyclable” which are usually described on the packaging. However, these claims are usually not independently verified. Independent third-party claims on the other hand are based on compliance with predetermined criteria, which are independently verified by a competent authority. The existence of an independent labeling increases the likelihood of overcompliance by the consumers. (Kirchohoff, 2000). The management of credible third parties such as consumers or environmentalist unions is a challenging issue (Grolleau *et al.*, 2007). Products with ethical labels issued by multinational governments and NGOs are more attractive than nationally endorsed labels, and therefore stand a better chance of being taken seriously and – consequently – of being purchased (Pelsmacker *et al.*, 2005).

Hartmann and Ibañez (2006) Green purchasing is central to this societal transformation. Probably one of the most critical issues in green marketing is the reduced individual benefit perceived by most consumers. Thus, the challenge for green marketers has so far been to increase the perception of individual benefits by adding emotional value to green brands, and will be even more so in the future. Future green marketing research should extend its analysis to the motivational basis of environmental behaviour. In particular, the branding of nature, so to speak, seems to us to be a promising direction for both research and practice.

Phau and Ong (2007) observe that green issues spans an array of product categories, such as food (biodegradable packaging), hairspray (CFC-free), paint (biodegradable) and stationery (recycled paper) and the clothing industry. Plumb and Zamfir (2009) conclude that the green certificates system could contribute to a better promotion of renewable energy sources.

Grolleau and Sana (2008) have presented empirical estimates of the impacts of various determinants on the adoption of official ecolabeling schemes among countries. Their findings indicate that economic and political freedoms, innovation capacities and experience with other environmental voluntary approaches play a major and sometimes counter-intuitive role to explain the diffusion of governmental ecolabeling programs. They believe that measuring the ‘real implementation’ of such programmes in terms of number of product categories covered or number of ecolabeled products number can allow to refine the empirical analysis. Vlosky, Ozanne and Fontenot (1999) examine the relationships between intrinsic environmental motivations and the willingness-to-pay a premium for environmentally certified wood products. They propose a model that captures the effects of perceptions, awareness and price on consumer willingness to purchase and pay a premium for environmentally certified forest products.

Pelsmacker *et al.*, (2005) find that consumers attach greatest importance to the distribution strategy of ethically labeled coffee, followed by the type of ethical label, and the issuer of the label. Consumers prefer extra information on the package, in addition to a label. Out-of-shop promotion of the label and the type of

brand are of minor importance. Since the perception of environmental labels is crucial as a promotional tool in making consumer choices and so it must be accurate, consumers should understand the relevant information and it must not be misleading (D'Souza, 2004). Companies that mislead and make use of ecolabels just to increase their sales are exposed to customer boycott (Laroche, Bergeron and Forleo, 2001). It may be argued that perhaps customer skepticism about questionable product claims may be the result of some inadequate, inaccurate, and even difficult to comprehend information provided on product labels (D'Souza, 2004). Baker and Ozaki (2008) posit that consumers would be more likely to choose environmentally friendly brands but they find it difficult to identify them.

Very little research has been done to determine the influence ecolabelling has on the purchasing power of consumers and their perceptions (D'Souza, 2000). This is very true in case of consumers in emerging economies.

### 3. RESEARCH METHODOLOGY

The study was undertaken to investigate the attitude of Indian consumers towards Eco labels. Data was collected using a self-completion questionnaire administered to the respondents. The questionnaire was administered to 200 respondents but only 164 valid respondents were entered into data analysis. The sample consisted of respondents from the cities of Chandigarh, Mohali and Panchkula. The sample was selected taking into account, presuming that it constituted an eco literate part of the population. It was assumed that this part of the population in an emerging economy, had knowledge of eco labels. This section of society could comprehend and employ the various eco labels in their purchase decisions. The attitude towards eco labels was measured by 36 items employing five point Likert scales ranging from 'strongly agree' to 'strongly disagree'. The data was factor analyzed using principal component analysis so as to know the attitudinal factors about the eco labels. The information collected also included demographic characteristics of the respondents like age, sex, occupation, marital status, and educational qualifications.

### 4. RESULTS AND DISCUSSION

The important attitudinal factors were extracted through principal component analysis. The cronbach alpha value for the items has been calculated to be .742, usually a value higher than .7 is regarded as reliable. Kaiser-Meyer-Olkin (KMO) measure, show a value of .731, which can be considered excellent and Bartlett's test of sphericity has a significance level of 0.000, showing there is a high degree of correlation between the variables, which means the factor analysis was suitable (Table 2).

**Table 1**  
**KMO and Barlett's Test of Sphericity**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.731
Barlett's Test of Sphericity	Approx. Chi-Square	2899.67
	Degrees of Freedom	630
	Significance	.000

There were eleven factors extracted through the principal factor analysis. These factors have eigen values above 1 and have been able to explain around 66.641% of the total variance.

The extracted factor 1 explains 8.704% of variance and has an eigen value of 7.108. This factor had higher factor loading for 'reading eco labels' (.753), 'willing to pay more for eco labeled product' (.666), 'looking out for environmental safe labeled products' (.699) of the consumers. This factor could be labeled as 'eco label literacy'. This shows that urban Indian consumers are eco label literates and environmentally conscious consumers.

Factor 2 has high loadings for items like 'need for close regulation of eco label claims' (.755), corporations can do a lot to improve the environment (.679), individuals can do a lot to improve the environment (.558), need for environmental safe certification of products (.542). This factor shows that even though customers are eco label literate but they are dissatisfied with the regulation of ecolabelling, efforts on the part made by corporations and general public in large and felt the urgent need for eco certification of all products. This shows that even consumers are well aware about eco labels but are dissatisfied with the tall claims of the eco labels and feel the need for more regulated eco labels for more products. This factor could be labeled as 'dissonance'. It has eigen value of 3.15 and is responsible 8.624 % of variance.

**Table 2**  
**Attitudinal Factors Towards Eco Labels**

<i>Factors</i>	<i>Variables</i>	<i>Factor loadings</i>	<i>% of variance</i>	<i>Eigen value</i>
<b>Factor 1</b> <b>[Eco literacy]</b>	Read Labels	.753	19.743	7.108
	Look for Eco labels	.696		
	Willing to Pay More	.666		
	Buy Fewer Chemical Pdts	.536		
	Buy advertised products	.507		
<b>Factor 2</b> <b>[Dissonance]</b>	Regulation of Ecolabels	.755	8.624	3.105
	Corps can do more	.679		
	Individuals can do more	.558		
	Need for Ecolabels	.542		
<b>Factor 3</b> <b>[Non performance]</b>	Low in Quality	.838	6.565	2.363
	Low in Performance	.807		
	Comparatively low performance	.662		
<b>Factor 4</b> <b>[Efficacy]</b>	Help in Energy Conservation	.829	5.064	1.823
	Help in public health	.770		
	Buys on past experience	.583		
	Eco labeled Pdts Needed	.553		
<b>Factor 5</b> <b>[Positive attitude]</b>	Buy Env. Safe Products	.728	4.900	1.764
	Believe in Information	.618		
	Buy Pdts in Recycle Packs	.571		
<b>Factor 6</b> <b>[Importance]</b>	Ecolabel concept understanding	.730	4.386	1.579
	Imp. Of Env. Information	.538		

On factor 3 the items that scored high were: 'eco labeled products are low in quality' (.838), 'eco label products are low in performance' (.807) and 'eco labeled products are inferior to non green products' (.662). This factor corroborates the earlier factor of 'dissonance' by showing that environmentally conscious consumers are dissatisfied with the way the eco labels are employed by companies and the products do not perform in comparison to non green products. This factor could be termed as 'non performance'. It accounts for 6.565% of variance and has an eigen value of 2.363.

The factor 4 has higher loadings of variables like 'eco labeling will help in energy conservation' (.829), 'eco labeling will help in sustaining the public health' (.770), 'need for environmental safe certification' (.553). This factor accounted for 5.064 % of variance and had an eigen value of 1.823. This factor could be labeled as 'efficacy' of eco labels.

Factor5 has high factor loadings of variables namely 'buy eco labeled products' (.728), 'believe in environmental information on packages' (.618), 'buy products that use recycling package' (.571). This factor accounts for 4.9% of variance and has eigen value of 1.764. This factor could be termed as 'positive attitude towards eco labeled products'.

On the factor 6, the items scoring significantly are 'understanding the concept of environmental certification' (.730), and 'environmentally safe packaging information is important' (.538). This factor accounts for 4.386 % of variance and has an eigen value of 1.579. This shows that Indian consumers feel they are well informed about importance and significance of eco labels.

## **5. DISCUSSION**

Eco label is an important unique selling proposition (USP) for companies. The usage of eco labels in India could help the companies in the furtherance of their goals, as the urban Indian consumers are eco literate and have strong positive attitude towards the eco labeled products. The consumers get influenced by eco friendly brands and make an extra effort to check the labels to find if the products are environmentally safe and contain fewer chemicals. This has strong implications for companies and marketers. The companies need to incorporate green technologies so as to develop green products for providing green value to the urban Indian consumers.

Even though there is strong urge to consumption of eco friendly products but still the consumers are not satisfied with the prevailing eco labeled goods. There is a sort of cognitive dissonance attitude towards the eco labeled products. The consumers feel that not much is done to check the veracity of the green labels. There is a need felt for doing more for the environment, collectively by public and local authorities. The environmentally conscious consumers are dissatisfied with the way the eco labels are employed by companies and the products do not perform in comparison to non green products. The companies should allay the fears of consumers by employing cutting edge technologies for innovations that serve the customers with better performance and value delivery.

The customers believe that if the eco labels are implemented and regulated properly they can help in restoring the environment. The customers even though

buy environmentally certified products but still they are skeptical about these labels.

## 6. CONCLUSIONS

The Indian consumers are increasingly getting environment conscious, so green labels serve as important tools for differentiating and positioning the products from the competitors. Though the eco labels serve as important selling proposition but still they are bereft of trust among the consumers. The eco labels can lend credibility to eco labeled claims only if products live up to the expectations of the customers.

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