

ROLE AND GROWTH OF ECOLABELS IN PROMOTING GREEN CONSUMPTION: AN ANALYSIS OF INDIAN SCENARIO

Dr. Suman Kharbanda*

ABSTRACT

Many governments focus on enforcing sustainability in production and consumption in countries through environment-related restrictions rules and innovative practices innovative practices. These pressurize consumers to adopt green practice sand drive organizations toward a strategic structure of eco-innovation capabilities. Government subsidies and environmental certification programs, insisting on eco labelling of products are some such steps towards sustainability and achieving UNSDG 12. This paper critically assesses the eco labelling program of India and enumerates the reasons why the Indian eco label Ecomark has no taken off in spite of being launched more than thirty years ago This has been done by analysing the literature, the studies in many countries mostly in recent years tell a lot about the usefulness of th eco labels, their impact on consumer behaviour and also why and how the eco labels have been performing in various countries.

KEYWORDS: Eco-Labels, Ecolabel, Ecomark, Consumer Behaviour, Green Consumption.

Introduction

Green consumption is the practice of selecting environmentally friendly products in an effort to lessen or prevent harm to the environment. Due to environmental concerns and issues relating to its degradation, a new consumer segment known as 'green' or 'ecological' consumers is emerging globally. Concerned about protecting the environment and conserving energy and resources, they pay attention not only to the ingredients and methods of production of the so-called 'green products' but also the disposal and recycling of trash during the consumption process. Many governments focus on enforcing sustainability in production and consumption in countries through environment-related restrictions rules and innovative practices innovative practices. These pressurize consumers to adopt green practice sand drive organizations toward a strategic structure of eco-innovation capabilities. Government subsidies and environmental certification programs, insisting on eco labelling of products are some such steps towards sustainability and achieving UNSDG 12. This paper aims to critically assess the eco labelling program of India and understand the reasons why the Indian eco label Ecomark has no taken off in spite of being launched more than thirty years ago This has been done by analysing the literature, the studies in many countries mostly in recent years tell a lot about the usefulness of the eco labels, their impact on consumer behaviour and also why and how the eco labels have been performing in various countries.

The objectives of this paper stated specifically are:

- To deduce from literature the impact of eco labelling on consumer behaviour.
- To critically assess the implementation eco labelling in India and to recommend strategies for strengthening the system of eco labels.

Methodology

This paper has deduced conclusions from literature, from the results of empirical studies conducted in different countries regarding the impact of eco labelling on consumer behaviour and their performances. The paper has enumerated the challenges faced in successfully implementing eco labels and gives recommendations for making it work.

* Associate Professor, Department of Commerce, Shivaji College, University of Delhi, New Delhi, India.

Literature Review This study has studied literature in the last ten years but is not restricted to it. The focus, however has been on last five years on studies from various countries as in the recent years the researchers and policy makers are focusing on the use of ecolabels and their impact on green consumption. The reviewed literature includes both empirical as well as review studies. The studies were drawn from SCOPUS.com and google scholar and other databases. The keywords used were 'eco-labels, ecolabels, consumers behaviour, Ecomark etc. along with appropriate combinations of Boolean operators.

Historically, the ecolabels were started for the purpose of identifying and promoting with products lower environmental footprint in comparison to other similar products. They provide incentives to governments, manufacturing companies, and consumer groups to embrace sustainable best practices, and they promote a shift towards environmentally friendly consumption habits. Eco-labeling did not become popular until the early 1920s. Globally, a number of nations are pursuing green procurement. High awareness and adoption of eco-labeling can be seen in Asian Countries like China, Japan, Indonesia (to some extent), in members of European Union and Australia, member states, and Nordic nations. In India the eco-labeling program (Eco-mark) was introduced in India in 1991. It failed to make an impression and did not follow the guidelines of green marketing.

According to certain studies, an eco-label can solve the issue of asymmetric information by effectively as they inform the consumers about the environmental impact of the product. (Murali et al., 2019).

A survey on eighty merchants and retailers of green products in various Indian cities showed that even though environment-friendly product dealers and retailers were not well-versed on the ecolabels associated with these products, they were making a significant effort to market and distribute these products to customers. Large-scale awareness campaigns started by the Ministry of Environment, Forests & Climate Change and involving stakeholders at all levels may be beneficial for promoting ecolabelling programs (Chakravarthy et al., 2016). A study in 2009 on Malaysian consumers (Rashid, 2009) was very optimistic that eco labels would not only help, but also encourage the consumers to make right purchase decisions with respect environmental impact of products. Reiterating the same many years later in a different scenario, according to a Chinese study, green furniture, the probability that consumer would choose eco-labeled green furniture increased 1.64 times more than people who didn't think labels were credible (Cai et al., 2017) Another research found a positive relation between trust in eco-labels and green purchase behaviour (<https://shodhganga.inflibnet.ac.in/handle/10603/524325>)

Establishing a market for eco-friendly products, particularly if they are expensive, requires consumer trust, according to (Nuttavuthisit & Thøgersen, 2017) To gain consumers' trust, producers and politicians in industrialized nations employ eco-labels on environmentally friendly items. Eco-labels are a valuable and, in certain situations, a mandatory source of information about the characteristics of products and their less harmful effects on the environment. According to Tafique et al. (2014), customers are more likely to believe eco-labels that have been certified by a third party or a public authority. Similar result was obtained in another study (Kharbanda et al., 2022)

Studies have shown that eco-labels that are managed responsibly play a crucial role in promoting environmentally conscious design and manufacturing practices so as to ensure that future generations can continue to enjoy the entire spectrum of natural resources. ((Daugbjerg et al., 2014; Fan et al., 2019; Nekomahmud, 2020). Reducing or eliminating the adverse environmental impact of certain products is a requirement for the certifying parties. Additionally, these marks assist the producers in using ethical sourcing. Consumer trust is crucial for creating a market for eco-friendly products, particularly if they are high-end (Nekomahmud & Fekete-Farkas, 2020). Nuttavuthisit & Thøgersen, 2017).

Research has shown that customer skepticism results in negative product evaluations, negative attitudes about products, and decreased purchase intentions. Reducing skepticism of consumers towards organic foods (Činjurević et al., 2018). This is where ecolabels can play an important role, especially if they are managed by government or its agencies, and are third party certifications.

Customers' perceived utility of ecolabels, their level of environmental awareness, and their concerns about the environment all have a favorable impact on their inclination to utilize them when choosing products ((Sharma, 2022; Wang, 2020; Sharma & Kushwaha, 2019). Another study on Indian cosmetics came to the conclusion that buyers are more likely to choose products with an eco-label as the green consumers are also health conscious. These consumers look for Information and Certification on the products like cosmetics. (Mishra, 2019))

Eco-labels are significant and, in certain situations, a regulatory practice. They are a source of information regarding the characteristics of products, ingredients and the process of production. These labels also motivate the producers to apply ethical sourcing of raw materials and adopting ecofriendly practices. (Nekmahmud & Fekete-Farkas, 2020). Providing awareness and education to consumers about ecolabels could positively influence Green purchase behaviour of consumers. Taufique et al., (2014a). Despite the findings that environmentally conscious consumers are willing to pay for eco-labeled products, recent research indicates that the market share of these products has not increased much. In a study by Mitran et al., (2022) a positive correlation was found between consumers' attitudes towards ecolabels and their intention to purchase eco-labeled goods not only first time but also for repeat purchase. A study by (Folkvord et al., 2020) concluded that consumers are more likely to buy environmentally and eco labelled cars if difference in price is not very high. Results of this empirical study suggest that consumers value ecolabels positively for an extended shelf life of milk though acceptance of new labeling technology for eco labels is hindered by other factors (Endara 2022) and "...consumers' preferences are diverse according to the type of ecolabels. Consumers are willing to pay more to certified ecolabels than non-certified ecolabels (Kyoj et al., 2022)

From the manufacturers' point of view, to increase sustainable consumption the stakeholders like suppliers, manufacturers should add information on ecolabels. Trust in ecolabels can be increased through such policies. (Panico et al., 2022). Preference for eco labelled sea food over other goods was found higher among consumers for eco labels and related positively to comprehension of seafood sustainability labels. Lack of familiarity with ecolabels, insufficient information regarding product sustainability, were some obstacles to purchase of eco- labelled goods in a study in Italy. (Calderon). Similar findings were found in research studies (Bronmann et al., 2021; Winson et al., 2022). Credibility of ecolabels and trust in it is positively correlated to purchase intention of consumers. A systematic literature review by (Thøgersen & Noblet, 2012) found that many empirical studies had emphasised the usefulness of ecolabels. It encouraged use of ecolabels for promoting sustainability consumption and making them more comprehensible like many other studies (Ziyeh & Cinelli, 2023, (Riskos et al., 2021)

Indian Scenario

As early as 2005, a WTO report concluded that ecolabels that are "voluntary, participative, market-based" and could contribute to shifting consumption to a more sustainable level. (WTO,2005). However, this has not been found in the case of India. Currently, at the global level there are more than "456 ecolabels in 199 countries, and 25 industry sectors" according to Ecolabel Index, "the largest global directory of ecolabels." (<https://www.ecolabelindex.com/>). India's eco mark is one of them.

India became one of the early ones out of developing nations to include an ecolabelling program into its environmental policy in 1991 when the Ministry of Environment, Forests, and Climate Change introduced the Type I ecolabel, Ecomark (Consumer Education and Research Center (CERC), 2006). "Type I environmental labelling programmes are voluntary and can be operated by public or private agencies at the national, regional or international level. The agencies establish the principles and procedures for developing Type I environmental labelling programmes, including the selection of product categories, product environmental criteria and product function characteristics, and for assessing and demonstrating compliance" (<https://www.iso.org/news>).

It is administered by the Bureau of Indian Standard and is a third-party certification. The certification follows a cradle-to-grave approach, i.e. evaluation is done at every stage ranging from extraction of raw material to manufacturing process and finally to the disposal of the concerned product. BIS is responsible for "renewal, suspension and cancellation" of the licence. It also inspects sample so the firms for this purpose. (<https://www.bis.gov.in/product-certification/eco-mark-scheme/>)

Centre for International Trade, Economics & Environment published a report in 2007 focusing on why the Ecomark scheme in India could not take off. The report concluded with some reasons for this and also gave some recommendations. The following section of the current study lists out some of those reasons and compares the same in current period substantiating with evidences from some recent studies. Unfortunately, the situation with respect to Ecomark is not very drastically different even now, though the efforts of government are directed towards improving the same

One of the significant challenges with ecolabels in India is the absence of standardized criteria across different products and industries. This lack of uniformity makes it difficult for consumers to trust the authenticity and reliability of the ecolabels. Based on findings from literature, this paper proposes that clear and unequivocal rules for eco-labels should be established so as to create a supportive ecosystem

for the production and consumption of environmentally friendly items. Additionally, sellers are advised to enhance their reputation by raising awareness about eco-friendly products, recognizing that awareness serves as the foundation for consumer trust, leading to purchasing intentions. In essence, it is important to foster the trust of consumers as has been seen in multiple studies over the years in different countries.

Limited Awareness

Research in various countries has shown that a positive correlation exists between consumer purchase intention for green products and their awareness about eco labels (;(Kharbanda et al., 2022; Průša & Sadílek, 2019; Testa et al 2013; (Taufique et al., 2014b).) A significant challenge in India is that consumers' awareness about eco labels is low in India. This is attributed mainly to two reasons. First, that the prevalence of eco labels is slow for domestic manufacturers and that there is no focus on giving awareness to consumers by stakeholders. Along with the green ness of the products, it is important to talk about ecolabels and their interpretation.

- **Enforcement:** The Ecomark in India is not mandatory, it is voluntary for some listed industries to get it. This makes the enforcement of ecolabel standards in India has faced challenges. One of the reasons being the tedious paperwork associated with getting the ecolabels The government has now made an effort to simplify the process and grant the certification within thirty days.
- **Lack of Trust:** Making it mandatory for many industries and increasing the base of coverage of this can be effective in making Ecomark more trust worthy and globally being recognised. The manufacturers prefer to get certifications of other countries which are more established, known and trusted. As seen above, studies from various countries have shown that consumer trust is very important in green products and ecolabels play a very important role in enhancing it. Along with that, the trust of manufacturers in the certification agencies is also crucial.
- **Absence of Standardization:** One of the significant challenges with ecolabels in India is the absence of standardized criteria across different products and industries. Different eco labels are being used by different manufacturers. Some are using self-declarations, while others are also using internationally known eco labels. This lack of uniformity and the ambiguity in eco labels makes it difficult for consumers to trust the authenticity and reliability of the ecolabels.
- **Scope of Ecolabels:** Some eco labels in India do not cover the entire lifecycle of a product. For example, an ecolabel might focus on the raw materials or production process but may not account for the environmental impact during transportation, use, and disposal. Ecomark has a cradle to grave approach, but not manufacturers are using it due to some below mentioned reasons.
- **Cost Considerations:** Some industries might be resistant to adopting ecolabels due to concerns about potential increased costs or changes to be brought about in their production processes. This resistance can deter the widespread adoption of ecolabels across various sectors. Moreover, the manufacturers who are exporters avoid cost increase due to Ecomark.

Eco-labels can serve as Non-Tariff Barriers (NTBs) for international trade, especially for exporters of India. A recognition of the Ecomark of India at WTO would benefit the manufacturers. Therefore, the effort of government of India should be directed to advocate for the mutual recognition or equivalency of eco-label schemes across different countries at the WTO. Else the Indian exporters are compelled to seek the certification of the destination country thus increasing their cost. This thus makes them to avoid taking Ecomark certification in the process. If the Indian Ecomark alone sufficed for exporting products globally, individual exporters could significantly cut costs. The financial burden of obtaining certification might be reason enough for exporters to not rely solely on the Ecomark. This gives indications on why India's Ecomark Scheme is deemed unsuccessful and faces challenges

Conclusion

Despite many challenges, there are opportunities for improvement. The government and relevant authorities are now working to develop a comprehensive regulatory framework for ecolabels. This would involve setting clear standards, ensuring enforcement, and promoting awareness among both producers and consumers.

A key recommendation of this study is to that there should be clear and unequivocal rules for eco-labels to create a supportive ecosystem for the production and consumption of environmentally

friendly items. Additionally, sellers are advised to enhance their reputation by raising awareness about eco-friendly products, recognizing that awareness serves as the foundation for consumer trust, leading to purchasing intentions. There is a need for instilling among stakeholders, trust in the realm of eco-friendly products. Providing practical guidelines for fostering this trust is the crux of the issue.

The study thus concludes that green consumption can be increased and promoted further by strengthening the system of Ecolabels in country, creating awareness among consumers and instilling trust among them for green products and in certification. The comprehensibility of the eco labels should be increased, as the literature has shown that this impacts the purchase intention of consumers and also their trust in green products and reduces their skepticism for these products. An important step is to curb green washing by strict vigilance in issuing and renewing certifications of quality and for green credentials. Now that India is making its mark in the international market and aims to be among the top five economies in the coming decade, it is crucial to attain and maintain high standards in sustainable production and moving to archive UNSDG 12.

While there are many studies on ecolabels in other countries, the research done on Ecolabels in India is very less. This study shall add to the extant literature and give a direction to future researchers for comparing the working of ecolabels and to policy makers to look more deeply into the policies that can make the Ecomark make its mark globally.

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