

Role of Eco-labels and Consumer's Responsibility for Protecting Environment through Sustainable Food Consumption.

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Abstract: In a modern market economy, the chances for a shift towards sustainable consumption depend decisively on the sustainability and attractiveness of the products offered by companies. According to the United Nations Environment Programme- UNEP 2005, the most common hurdles to sustainable consumption are lack of knowledge and awareness, lack of faith in claims, habits, lack of functionality and quality, slack of availability, and a high price. This study explores the role of eco-labels in enhancing use and disposal of sustainable food products in the city of Hyderabad in Telangana state of India. Through an extensive sample of 1200 consumers for food products, the study is observed that eco-labels significantly influence consumers' choice of products and has a considerable contribution towards sustainable consumption. Using statistical tools such as factor analysis, regression and chi-square, it is also found that consumers perceive protection of environment as a responsibility that paves way to sustainable consumption behaviour. The study concludes that only a few food products have eco-labels while most believed that it is an added expense for the company as majority consumers never read the labels before buying and consuming. Yet the observations reveal that the consumers who account for sustainable behaviour are concerned for protecting the environment and nature and are more likely to purchase sustainable food products.

Key words: Consumption, Eco-labels, Environment, Marketing, Preference

Introduction

Production and consumption are the lifeblood of any economic activity and in the current circular economy, it is essential to ensure that consumption, especially, does not damage the environment in which it takes place. There is a growing thrust on all stakeholders to adopt the three Rs as proposed by Kates in the year 2000, the principles of reduce, reuse and recycle to lessen the damage brought on by consumption. By implementing new production techniques, meeting customer requirements in different ways, and adopting special business models, businesses can actively promote sustainable consumer behaviour (Bocken, 2017; Tunn et al., 2018). The circular economy and business-led sustainable consumption efforts have received little attention in the consumption system (Bocken, 2017; Tunn et al., 2018).

There is a need to understand policy initiatives for promoting sustainable consumption and also obligations on companies in the form of eco-labels. In order to coordinate efforts and collaboratively address the food sustainability challenge, it is essential to build a common language given the complexity of the food system and sustainability. Target audience-specific actions are required. (Jeannine A. et al, 2023). Increasing knowledge and understanding of the connections between environmental, social, and economic sustainability, education on

sustainable consumption and production can aid in the improvement of equity and fairness in society. (Vaughter P. et al, 2023). The authors believe that such education can be aided through eco-labels and an increased consciousness in consumers in upholding their responsibility towards nature. Integrated sustainability labelling systems like the eco-Score, carbon labelling, and simple sustainability tags can be used by the companies to enhance sustainable consumption. (Jens Bergener et al, 2023).

Society is looking up for strategies that can provide consumers with environmentally, socially and economically sustainable consumption. This is an attempt to understand how educated consumers are by highlighting the factors that push them towards sustainable consumption and make them responsible consumers. The study has worked on examining good practices followed by companies in the form of ecolabels for promoting sustainable consumption.

Concept Development and Hypotheses

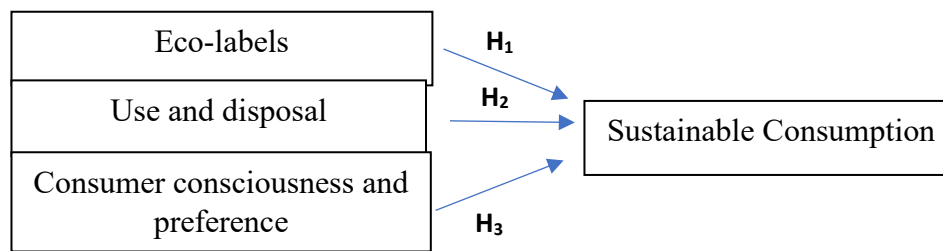
It is important to understand the causes of sustainable behaviour and measure its effects. According to the United Nation's Environment Programme (UNEP 2005), the most common consumer hurdles to sustainable consumption are a lack of knowledge and awareness, a lack of faith in claims, habits, a lack of functionality and quality, a lack of availability, and a high price. Increasing net welfare gains from economic activity by minimising resource use, degradation, and pollution while improving quality of life is the goal of sustainable consumption and production.

Sustainable consumption is described as "the use of services and related products which respond to basic needs and bring a better quality of life while minimising the use of natural resources and toxic materials as well as emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardise the needs of future generations" in the definition put forth by the Oslo Symposium on sustainable consumption in 1994.

The specific objective of this study is to identify the role of eco-labels in enabling sustainable consumption and also to examine the consumer consciousness and preference towards buying, using and disposing sustainable food products.

The concept of a sustainable consumption has been highlighted in the literature through a theory called the Sustainable Consumption Corridor as propounded by Florian Lüdeke-Freund, Tobias Froese and Stefan Schaltegger, which talks about current level of consumption and its ecological impact and vision for future consumption given minimum standards of consumption. sustainable consumption is not easy to implement at different stages of consumers purchase decision. There are barriers to sustainable consumption at each of consumer purchase decision. Needs and wants can often conflict with one another, leading to difficult decisions and choices. In order to navigate these conflicting desires, it is crucial to consider the implications of choices and strive for a balance that meets both immediate needs and the long-term well-being of planet. It is vital to recognize the conflict and find a balance that allows us to meet the needs and preserving the environment for future generations.

Fig 1.1 Conceptual Model for Ecolabels, use and disposal and consumer consciousness for Sustainable Consumption



(Source: Conceptual Model as proposed by authors)

Methodology

The study employs an empirical design besides describing the study variables. Data has been collected from a total of 1200 respondents in the city of Hyderabad, Telangana state in India by following a stratified sampling technique of dividing the city into six strata based on its geographical location. Data has been collected by administering a structured questionnaire, which has been tested for its reliability and validity yielding a Cronbach Alpha score of .976 and a validity score of .988. Data has been analysed through chi-square test, regression and factor analysis.

Ecolabels

Creating systematic sustainable innovation, taking into account the entire product life cycle, including any prospective services, to increase overall sustainability and manage sustainability impacts in the early stages of product creation. Iordache Platis et al., (2022). For any product to be sustainable, it should be ecologically sound, biologically perfect, socially acceptable, and commercially viable. These sustainability indicators (SIs), have a significant impact on consumers' intentions to buy. (Ziaul H., 2020). The government and non-governmental organisations both advocate for the production, marketing, and use of green products. Because of environmental sustainability and their own environmental conscience, consumers are encouraged to use green products. (Shamsi, M.S., 2018). In the markets of emerging economies like India, there is a gap in the analysis of the match between supply and demand for green products and in the promotion of green consumerism by clearly assisting consumers in identifying sustainable products through authorised green labelling systems. (Shibin, K.T., 2016). The companies felt that green marketing concepts, such as establishing a green supply chain, green product design, packaging, pricing, and promotion, were better for the environment and society as a whole and should thus take precedence over traditional marketing strategies. (Yeow Kar Yan, 2014).

Taking clues from the above literature, this study postulates that

Hypothesis 1: Eco-labels have a significant impact on sustainable consumption.

Use and Disposal of Sustainable Food Products

Research on sustainable consumption is expanding and includes a wide range of viewpoints. Efficiency-focused solutions won't be sufficient to make the shift successful; sufficiency-focused solutions must be actively used. (Wang & Su, 2022). Changes in social and

consumption patterns have a variety of effects on sustainable lives. (Echegaray, F. 2021). Three important themes can be established based on the chosen sustainable development targets: decreasing food waste and loss, sustainable natural resource management, and issues affecting many sustainable consumption and production initiatives. (Stefanie Chan, 2018). Socio-psychological factors had a significant impact on how consumers viewed and processed information in various contexts including sustainable consumption. There has been little research on the roles of consumer innovation, and contextual factors, despite the fact that attitude, values, norms, and demographics have been extensively studied as predictors of green behaviour. (Tripathi, A. 2017). The goal of any policy initiative to encourage sustainable consumption should be to increase consumer awareness of sustainable alternatives while also making them accessible, appealing, and inexpensive. (Mikkel S. Hansen, 2010). The current understanding of the relationship between consumer behaviours (and expenditures) and their related environmental impacts has now reached a mature stage of development. (Tukker, A. 2009). Despite all efforts by many companies contributing towards responsible consumption, it is still difficult to communicate with customers about the understandable environmental and social performance of goods and services. This study therefore hypothesises that

Hypothesis 2: Use and disposal of products contributes towards sustainable consumption behaviour

Responsibility towards nature and protecting environment

An economy that is resource- and energy-efficient, circular in nature, and focused on waste reduction and recycling, needs to use recycled raw materials and mandate the requirement for eco label certification. (Gustavo, 2020). It is essential that economies adopt a bold systemic strategy to sustainable consumption, and provide a regulatory environment and strategic course that will support bold front-runner initiatives. (Pantzar Mia., et al., 2018). Companies can promote sustainable consumption by utilising business model innovation and social marketing-style strategies that would create an environment pushing consumers to adopt sustainable consuming practices. (Bocken M.P. Nancy., et al., 2017). Green consumerism's motivations and the regulatory frameworks are necessary to encourage consumers to make green purchases. (Shibin., K.T., et al., 2016).

Hypothesis 3: Consumer consciousness and preference has a significant relationship with sustainable consumption.

Results

The study has an extensive sample of 1200 respondents whose demographics are depicted in the following Table 1.1 Sample Demographics.

Table 1.1 Sample Demographics

Details		Frequency	Normal %
Gender	Male	451	37.6%
	Female	749	62.4%
	Others	0	0.0%
	Total	1200	100.0%
Age	13-18 years	185	15.4%

	19-24 years	528	44.0%
	25-29 years	80	6.7%
	30-35 years	60	5.0%
	Above 35 years	347	28.9%
	Total	1200	100.0%
Education	Schooling	52	4.3%
	Intermediate/10+2	123	10.3%
	Under Graduation	593	49.4%
	Post-Graduation	242	20.2%
	PhD	165	13.8%
	Others	25	2.1%
	Total	1200	100.0%
Occupation	Self-employed	138	11.5%
	Employee in Private Firm	137	11.4%
	Employee in Govt. Firm	263	21.9%
	Homemaker	81	6.8%
	Retired (Department)	17	1.4%
	Others	564	47.0%
	Total	1200	100.0%
Zone	Charminar	200	16.7%
	Khairtabad	199	16.6%
	LB Nagar	200	16.7%
	Serilingampally	200	16.7%
	Kukatpally	200	16.7%
	Secundrabad	201	16.8%
	Total	1200	100.0%

(Source: Compiled from primary data)

A glance at the demographic profile in table 3.3 of respondents reveals that, 62.4% are female while 37.6% are male. The respondents age wise classification observes that 44% respondents are in the age group of 19-24 years and 49.4% are under graduates. Most respondents (i.e., 21.9%) are employed in govt. jobs. Zonal classification has been done proportionately to take 200 respondents from each of the six zones.

Table 2.1 Consumer Awareness towards consumption of Sustainable Products

		Yes	No	Total
Awareness	F	1168	32	1200
	%	97.33	2.67	100
Total	F	1168	32	1200
	%	97.33	2.67	100

(Source: Compiled from primary data)

The table no 2.1 depicts consumers' awareness toward sustainable or green product usage. The survey included 1200 respondents, with 97.3333% being aware of the sustainable product and 2.6667% being unaware of the product. The statistics shows that majority of the

respondents are aware of the firms and organisations that practice sustainable consumption patterns. The study of efficient energy and resource usage and allocation is known as sustainable consumption. The assumption is that higher consumption is a sign of better health, but the impact on the environment is more harmful, and it is possible to cut consumption without severely affecting our health or way of life, for everyone.

Validation of Hypothesis 1

According to UNEP 2013, ecolabels are one of the more well-known product sustainability information systems is ecolabelling. Typically found on products, ecolabels are voluntary, participatory, market-based, and transparent economic tools that aim to lessen environmental impacts and increase resource efficiency of products while enabling consumers to make knowledgeable decisions based on the environmental credentials of the products.

Table:2.2 Ecolabel sustainable product and Sustainable Consumption Behaviour

Perception towards Ecolabel			Yes	No	Total
	Ecolabelling influences consumers' purchase decisions significantly	F	431	0	431
		%	100.00	0.00	100%
	Ecolabelling has no influence on consumers' choice of products	F	228	10	238
		%	95.79	4.20	100%
	Consumers do not think about the ecolabel of the things they buy.	F	148	12	160
		%	92.50	7.50	100%
	Consumer never read labels.	F	361	10	371
		%	97.30	2.69	100%
Total		F	1168	32	1200
		%	97.33	2.67	100%

Table:2.3 Impact of eco-labels on Sustainable Consumption Behaviour

Test Statistic	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	47.887	6	.000

(Source: Compiled from primary data)

Table no 2.3 depicts consumers' attitudes regarding ecolabels, which certify environmentally beneficial, and long-lasting items. The study included 1200 respondents, with 431 respondents believing that ecolabeling is important in their purchasing decision, while 148 respondents did not consider ecolabel at the time of purchase, and 361 respondents never read labels at the time of purchase. The chi-square statistic has p-value of .000, which is less than 0.05. Therefore, it is concluded that there is a significant relationship between ecolabeling and sustainable consumption behaviour.

Validation of Hypothesis 2**Use and Disposal of Sustainable Food products****Table:3.1 Correlation between use and disposal of sustainable product and Sustainable Consumption Behaviour**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.947 ^a	.897	.884	2.02

Predictors: (Constant), Use and Disposal of Sustainable food products

(Source: Compiled from primary data)

To forecast people's preferences for taking action to use and dispose sustainable products, a regression model has been used. The respondent's level of responsibility for environmentally friendly items is the predictor in the regression model showed in table 3.1. The model's R value was .947, and the R square .897, and adjusted R square values were .884. This shows that 90% of the variance in environmental behaviours can be attributed to the consumers' responsibilities for use and disposal of sustainable product. The use and disposal of sustainable products and the obligation to protect the environment were both evaluated in the study, and it was found that it is a significant predictor of environmental concern thereby promoting sustainable consumption. Businesses who want their customers to care more about the environment should concentrate on all the responsibility issues.

Table:3.2 ANOVA Statistics on Consumers' use and disposal of sustainable product and Sustainable Consumption Behaviour

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	104.031	1	104.031	468.492	.000 ^b
	Residual	266.021	1198	.222		
	Total	370.052	1199			

a. Dependent Variable: Sustainable Consumption

b. Predictors: Use and disposal Sustainable Product

(Source: Compiled from primary data)

According to the ANOVA table no 3.2, $F(1,1198) = 468.492$, $p = .000$, the main effect of the predictor variable is statistically significant. Major effects of environmental protection and product accountability is on the dependent variable of consumption and disposal of sustainable consumption, which is found to be statistically significant ($F = 468.492$, $p = .000$) in ANOVA model. With the same mean square of 104.031, the sum of squares is explained to be 104.031. At the .000 level, the F statistic is crucial.

Table:3.3 Coefficients Statistics on Consumers' use and disposal of sustainable product and Sustainable Consumption Behaviour

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.493	.118		12.600	.000

Use and disposal Sustainable Product	.594	.027	.530	21.645	.000
a. Dependent Variable: Sustainable Consumption					

(Source: Compiled from primary data)

The aforementioned table no 3.3 demonstrates that there is a statistically significant and direct connection between the use and disposal of sustainable products, environmental preservation, and sustainable consumption. Responsibility for Environmental Protection and Sustainable Products ($b=.594$) has a significant effect, resulting in ($p=0.000$), the p value is less than 0.05. The alternate hypothesis is accepted i.e. there is no significant difference between sustainable consumption behaviour and responsibilities for buying, using and disposal of sustainable product and protecting environment.

Validation of Hypothesis 3

Responsibility towards protecting environment through sustainable consumption behaviour

Table:4.1 Correlation between responsibilities towards protecting environment and sustainable consumption behaviour

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.953 ^a	.909	.897	1.476

a. Predictors: (Constant), Responsibilities for Sustainable Products and protecting environment

(Source: Compiled from primary data)

Table no 4.1 regression model is presented to predict the environmental protection and responsibility towards sustainable products. R value .953 are the regression significant results. R square is .909, adjusted R square is .897, and the estimate standard error is 1.476. Responsibilities for sustainable products and environmental protection are the regression model's predictions. Consumers who are not accountable for sustainable products and environmental protection are more likely to purchase traditional products. This data can be used to develop more successful marketing strategies. There is a link between responsibility for sustainable products, environmental protection, and purchasing environmentally friendly products.

Table:4.2 ANOVA Statistics on Consumers' responsibilities towards preferences of sustainable products, protecting environment and sustainable consumption behaviour

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	67.259	1	67.259	296.422	.000 ^b
1 Residual	271.830	1198	.227		
1 Total	339.089	1199			

a. Dependent Variable: Preferences of Sustainable Products

b. Predictors: (Constant), Responsibilities for Sustainable Products and protecting the environment

(Source: Compiled from primary data)

Table no 4.2 ANOVA figure showed that the predictor variable's main effect is statistically significant, $F(1, 1198) = 296.422$, $p.000$. This signifies that the independent

variable influences the dependent variable in a statistically significant way. An ANOVA model incorporating the primary impacts of sustainable product responsibility and environmental protection on the dependent variable of sustainable consumption behaviour was shown to be statistically significant ($F = 296.422$, $p.000$). The explained sum of squares is 67.259, and the mean square is also 67.259. At the .000 level, the F statistic is significant.

Table:4.3 Coefficient Statistics on Consumers' responsibilities towards preferences of sustainable products, protecting environment and sustainable consumption behaviour

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.152	.120		17.964	.000
	Responsibilities for Sustainable Products and protecting environment	.478	.028	.445	17.217	.000

a. Dependent Variable: Preferences of Sustainable Products

(Source: Compiled from primary data)

According to the table no 4.3, there is a statistically significant and direct association between responsibilities for sustainable products and environmental protection and sustainable consumption behaviour. Responsibilities for sustainable products and environmental protection ($b=.478$) has a substantial impact, i.e., ($p = 0.000$), less than 0.05, it is states that, there is a significant difference between responsibilities towards protecting environment and sustainable consumption behaviour.

Humans possess the right to alter their surroundings to suit their needs and coexist peacefully with the natural world. Because there are only so many resources on earth, when humans interfere with nature, the results are usually disastrous. Resource conservation is a crucial aspect of sustainability. Sustainable marketing strategies might be used to cover up unethical behaviour.

Table: 5.1 KMO and Bartlett's Test Statistics on Consumers' responsibilities towards nature & environment and responsibilities towards sustainable products, and sustainable consumption behaviour

Kaiser Meyer Olkin Measure of Sampling Adequacy.		.807
Bartlett's Test of Sphericity	Approximate Chi Square	3162.467
	df	45
	Sig.	0.000

(Source: Compiled from primary data)

The above table 5.1 shows Bartlett's test has a significance value of 0.000. The investigation discovered that the KMO measure is .807 and the Bartlett's test of sphericity with 45 df, the yield chi square is 3162.467. KMO values between 0.8 and 1 signify acceptable. As the p value correlating to the test statistic is less than significance

level 0.05, therefore null hypothesis is rejected and it is concluded that there is a significant relationship between nature, environment, responsibilities towards sustainable products and sustainable consumption behaviour of the product.

Table:5.2 Factor Analysis of Consumers' responsibilities towards nature/environment and sustainable consumption behaviour

Components	Factors in the components	Factor Loading	% variation from rotation sum of squared loading
1 Responsibility towards sustainable products	Humans have the right to change their surroundings to meet their needs.	0.798	40.529
	Nature's balance is extremely delicate and easily upset.	0.698	
	approaching the maximum number of people that the earth can support	0.635	
	conscious of the growing boundaries that our industrialised civilization cannot exceed	0.737	
	The use of sustainable marketing can be utilised to conceal a negative practise.	0.664	
	Strategies to reduce environmental effect incur costs for the organisation.	0.75	
	The preservation of resources is a critical part of sustainability.	0.764	
2 Responsibility towards nature and environment	Humans live in harmony with nature.	0.688	39.907
	When humans intervene with nature, the results are typically terrible.	0.728	
	The Earth's space and resources are limited.	0.769	
Total percentage variation from rotation sums of squared loading			80.436

(Source: Compiled from primary data)

Table 5.2 shows factor analysis and 10 factors are reduced to 2 categories namely i) Responsibility towards sustainable products ii) Responsibility towards nature and environment. Many companies are still unsure of the advantages of sustainability and view it as an extra expense. Humans need to coexist peacefully with nature for society to prosper, while strategies to lessen environmental impact cost the organisation money, according to a factor loading of 0.688 and 0.750, respectively. With a factor load of 0.664, sustainable marketing is capable of being used to cover up unethical behaviour.

Discussion

For efficient placement of sustainable products as well as for presenting strategies for sustainable food consumption, it is crucial to segment customers based on their needs and characteristics. This concept stems from the idea that sustainable consumption places a strong

emphasis on the consumer's accountability for the results of their choices, and that these choices must be taken into consideration when creating consumer goods that will encourage sustainable food consumption and a change in lifestyle.

Consumer are encouraged to make larger purchases when they value the quality of the food they purchase. This implies that consumers will buy more green food products if they believe they are more valuable and satisfying. In wealthy nations, organic food is highly valued for its freshness, nutritional content, and environmentally responsible growing and harvesting practices.

Government regulations and the limitations they impose on food production, such as the use of limited or no additives, fertilisers, Genetically Modified Organisms (GMO), and antibiotics, have enabled the value placed on organically produced food.

Healthy eating habits among consumers are the key to sustained food consumption. The goal of consumers is to eat more high-quality, fresh produce, including more fruits and vegetables. This relates to the behaviour goal of eating a diet with less negative health effects. When people consume food in a sustainable way, they satisfy the nutritional and satisfying demands of the present generation without harming the needs of future generations.

Eco-labels and certifications promote awareness and encourage consumers to make purchases and consumers through use of eco-labels consumers are convinced to switch to eco-friendly products to lessen carbon impact. It is the responsibility of food manufacturers to be truthful when marketing their products. The study suggests that many consumers are influenced by unsubstantiated marketing claims. Majority of consumers are willing to believe unsubstantiated marketing claims about food products.

The existence of marketing statements on the package is one aspect that can impact our decision-making. Food advertising includes a lot of healthy and nutritional promises. They frequently guarantee that a product is a healthy choice and they can be highly convincing. People may prefer one food product over another for a variety of reasons.

Due to rising values' perceptions, the green market has emerged as a crucial niche for businesses attempting to differentiate themselves. In rich countries, natural food is profoundly esteemed for its newness, wholesome substance, and naturally capable developing and reaping rehearses. The value placed on organically produced food has been made possible by government regulations and restrictions on food production, such as the use of minimal or no additives, fertilizers, Genetically Modified Organisms (GMOs), and antibiotics. shoppers are becoming all the more earth cognizant and will generally purchase a greater amount of them.

The study depicts consumers' opinions toward sustainable or green product usage, majority of consumers are aware of firms and organisations that practice sustainable consumption. Factors like food safety and health, environmental benefits for purchasing sustainable products, low initial cost, celebrity endorsement and consumers consciousness are considered by the respondents at the time of purchasing the sustainable product. Consumers' attitudes regarding ecolabels, which certify environmentally beneficial, and long-lasting items-respondents believing that ecolabeling is important in their purchasing decision, it is concluded that there is a significant relationship between ecolabeling and sustainable consumption behaviour.

Conclusion

It is concluded that consumption of organic/sustainable food products has been rising in a significant manner. It should go without saying that there are limitations and difficulties associated with purchasing sustainable food items, such as not knowing how food affects the environment, time constraints, and price limitations. The primary objective of consumer behavior marketing is to develop strategies to support their behavioral response. Because there are so many factors to consider, businesses have traditionally found it challenging to comprehend consumer purchasing behavior.

To predict the environmental protection and responsibility towards sustainable products, consumers are more likely to purchase sustainable products. There is a link between responsibility for sustainable products, environmental protection, and purchasing environmentally friendly products. From the study it is concluded that there is a significant and direct association between responsibilities for sustainable products & environmental protection and sustainable consumption behavior.

Many businesses are still unconvinced of the benefits of sustainability and see it as an additional cost. The use and disposal of sustainable products and the obligation to protect the environment were both evaluated in the study, and it was found that it is a significant predictor of environmental concern and sustainable consumption. Businesses who want their customers to care more about the environment should concentrate on all the responsibility issues.

The major effects of environmental protection and product accountability is on the consumption and disposal of sustainable food consumption. There is a statistically significant and direct connection between the use and disposal of sustainable products, environmental preservation, and responsibilities for sustainable consumption.

It is important to implement educational marketing initiatives to increase consumer trust in eco-friendly goods. Businesses should think about conducting environmental audits of their operations to increase sustainability and boost the effectiveness of their green branding initiatives. These green branding techniques will aid in increasing consumer knowledge of the advantages that the company's goods and services have for the environment. Companies can think about employing a number of measures to increase consumer trust in the sustainability of their products. There is a significant relationship between corporate marketing claims and issues that companies must convey while selling green products.

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