A STUDY ON CONSUMERS PERCEPTION TOWARDS GREEN PRODUCTS CONSUMPTION IN THE POST PANDEMIC SCENARIO IN KAMRUP DISTRICT OF ASSAM

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ABSTRACT

The emergence of Novel Corona virus (COVID-19) has significantly affected the global manufacturing, production, distribution and consumption habits of products at various levels. This has led to change in public health, hygiene and consumption practices as well. Consumer's inclination towards increased consumption of local foods has been on a rise, owing to food safety concerns. Throughout the COVID-19 crisis, consumers' perceived and viewed green products as safer and healthier, which could influence their future diets and medical bills.

Environmental awareness has become a worldwide phenomenon. Responding to Sustainable Development Goals (SDGs) (Goal no 7- ensure environmental sustainability) of World Health Organisation marketers are also awaken about adopting green marketing strategies to combat environmental degradation. Moreover, consumers are becoming more aware about green marketing now. Many manufacturers in India are therefore following Green marketing practices whole heartedly. Taking this into account, a study was carried in the Kamrup district (Metro) area to examine consumers' perception towards consumption and usage pattern of green products in the region. In this study, primary data was collected using a self-administered questionnaire. A total of 400 complete responses were found suitable for analysis. Accordingly, a proposed model is being suggested to the marketers for increasing their market share and profit amongst the competitors of the industry.

Keywords: Consumption Pattern; Consumer Perception; Covid 19; Green Product.

INTRODUCTION

Over a few decades thecivic view and idea for environment related issues has changed. But inspite of the change in outlook, difference still exists in environment related issues as it remains as the most concerned area for social movements in present times. Many studies indicate that public concern towards sustainability and environmental issues has consistently increased over the years (Roper, 2002; Deb Roy & Barua, 2016). As compared with the scenario pre covid and post covid pandemic, improved public support in governmental initiatives for environmental sustenance issues is noted (Gallup& Newport, 1990 and Dev Rroy, PhD thesis 2021).

As per the definition quoted by AMA, green marketing is presumed to be environment responsive marketing as it includes various acts like remodeling the product, changing the product packaging, and modifying the advertisements. Green marketing refers to the process of adopting environment friendly measures at all stages of product or service production so as to make the output environment friendly (Johri & Sahasakmontri, 1998).

Green product: Greenproducts are those products which are produced using energy efficient process, sustainable ways and means, or are manufactured using recyclable materials. These products in their process of production do not harm the environment by emitting harmful gases or other poisonous emissions. Green products possess the characteristics of originality in source of cultivation, are environment friendly, can be used again and again, are chemically safe, are not lethal to health and wellbeing of the people of the society, etc.

A good number of companies are now shifting from non-green to partially green strategies in their operations if not completely green (like Gap Inc). Few companies prefer to highlight their green activities others don't. It depends upon the nature of the industry, values and mission of the firm. For example, Cocacola recycles glass bottles, but does not promote it through advertisements for green brand building. Companies like Patagonia and Bodyshop are completely green and also promote this special feature of theirs. According to GHG Platform India report, 2021, Indian emissionscomprise seven percent of the whole world emissions and the power sector, manufacturing and engineering process and industrial produce sector (barring Agriculture) are the maximum emitters in India.

In addition, during the Corona virus pandemic, India's share of renewable energy (RE) showed a markup improvement of 6% (i.e. it rose from 17 % to 24 %), whereas coal-fired power showed a record decrease of 10% from 76 % to 66 %. Keeping in mind India's present policies and its target to attain 100% electrification to meet up India's SDG Targets, the country's electricity requirement could show a threefold rise by 2040, as the use of appliances would rise which will lead to increased cooling needs.

In such a situation an immediate assessment on consumers' perception towards usage pattern of green products in the region is required. In this regard the literature was reviewed and it was found that:

1. Environmental sustainability and personal consciousness of consumers are the motivating factors while unavailability and unawareness, the cost of installation or usage are the demotivating for green product purchase decesion(Shamsi et al, 2010).
2. Green product can be explained and presented in different ways namelyacademic, industrial, consumers perspective based on descriptive meta-analysis, a bibliographic approach, and a consumer survey(Durif et al., 2010).
3. Results indicated that socio-demographic variables like education level, income, age and marital status significantly influence the consumers' perception towards the green concept. (Rezai et al., 2013)
4. There exists positive relation between consumer perception; green corporate perception, eco-label, and green product value. (Kong et al, 2014).
5. Companies resort to increased use of various promotional strategies for embracing use of green products. Yet, the rate of acceptance is low (Hundal, et al., 2015).
6. Personal attitude, perceived social pressure, and perceived autonomy were found to impact customer purchase intentionof organic food. (Tumin et al, 2020).
7. Global food systems and consumer eating habits have implications for post COVID-19 (and post Brexit) food system, trade policy and public trust (Armstrong et al, 2020).
8. The main trends which influence consumer behaviour and consumption trends are the reduction of expenses, basic needs satisfaction, structural changes in consumer basket, increased digitalization, increased demand for home delivery, reorientation towards local shopping, omnichannel services and increasing of the importance of the green content. (Danciu et al, 2021).
9. The factors affecting income of farmers' organic vegetables are all production variables, depreciation of equipment, organic fertilizer, vegetable pesticides, labor wages, land area and *DCovid-19*(the covid-19 dummy variable) (Timisela et al , 2021).
10. The awe of COVID-19 positively affects green consumption behaviour.And the fear, anxiety, and powerlessness of individuals with negative awe of COVID-19 respond to risk and thus pay prime attention to their own safety and interest for promoting green consumption behaviour (Sun, et al. 2021).

Objective

1. To identify the factors influencing consumer perception of green product consumption.
2. To examine the relation between the factors.

RESEARCH METHODOLOGY

Sampling Design

With the help of pretested structured questionnaire (Google forms were used)40 respondents were approached for interview.

Method of Data Collection

Primary data was collected from 400 respondents of Kamrup(metro) district of Assam. The survey was conducted in the period Dec 2020-March2021. The demographic reveal that most of the respondents belong to 20-40 age group and 46 % are females rest are males. Majority of the respondents are graduate and engaged in service.

Research Tools

Likert scale (Five point scale) is used for the study covering scale from strongly agreeto strongly disagree. To examine the perception towards consumption and usage pattern of green products in the regiondata were analyzed by using Factor analysis, Correlation analysis, Regression Analysis. Statistical Package for Social Sciences (version 20) was used to analyze and interpret the data.

Data Analysis and Major Findings Reliability Test

The Cronbach's alpha score for this study was 0.786, indicating high internal consistency (Nunnally, 1978 criteria suggest the alpha value should be above 0.7 to be acceptable).

KMO and Bartlett's Test

A value greater than .5 should be considered to be an acceptable KMO value according to Kaiser (1974).The samples taken are appropriate to conduct factor analysis as the KMO value is 0.692 and the significance value of Bartlett's test of sphericity is less than 0.5.

Exploratory Factor Analysis

A total of three factors were extracted as a result of factors having Eigen values of more than 1. Eigenvalues for factors 1, 2 and 3 are 3.556, 2.019 and 1.003 respectively.Before rotation factor 1 accounted for 44.455per cent variance, factor 2 accounted for 25.232per cent variance, factor 3 accounted for 12.541per cent variance and after rotation, factor 1 accounted for 33.554 per cent variance, factor 2 accounted for 24.806per cent variance, factor 3 accounted for 23.868 per cent variance.In total, the factors 1, 2 and 3 after the rotation have cumulative percentages of 33.554, 58.359, and 82.227, respectively.

Table 1
ROTATED COMPONENT MATRIX

	Component		
	1	**2**	**3**
I always check the ingredients present while buying products	0.724	-.017	.283
I can segregate green products and non-green products	0.837	0.047	0.260
I am familiar with green products	0.849	0.130	0.089
I oftenbuy green products even if it isexpensive	0.658	0.011	0.664
I recommend others to buy green products	0.547	0.006	0.711
I always prefer green products than non green products	0.016	0.043	0.898
I buy organic products because it's a green product	0.073	0.989	0.031
I buy ayurvedic products because it's a green product	0.036	0.993	0.013

The rotated component matrix (Varimax) represented the three factors loading from the eightitems.

The highest percentage of the difference is shown by factor 1 (33.554 percent). Factor 1 loaded with variables such as*I always check the ingredients present while buying products*, *I can segregate green products and non-green products* and *I am familiar with green products*.The items in this segment shows the awareness level of customers towards green products and therefore this factor has been referred to as Awareness.

Factor 2 explains 24.806 per cent of the variation loaded with variables such as *I often buy green products even if it is expensive*, *I recommend others to buy green products* and *I always prefer green products than non green products*.The items in this segment revealed the buying behaviour of customers; therefore, this factor has been named as Buying Behaviour.

Factor 3 explains 23.868 per cent of the variation loaded with variables such as *I buy organic products because it's a green product* and *I buy ayurvedic products because it's a green product.* The third factor consisted of items highlighting customer's knowledge and buying behaviour towards green products and hence this factor has been named as Green Product Purchases.

Model of the Study

By conducting Exploratory Factor Analysis thestudy summed up in getting three factors namely, Awareness, Buying Behaviour and Green Product Purchases. It is found that Awareness is positively related to Buying Behaviour as people are aware about what is green product whereas Buying behaviour is negatively related to green product purchases.

So, this awareness acts an important input in buying decision process of the customers. Helping them to exhibit a positive buying behaviour towards green product. But the actual concept of green product is perceived wrongly by the customers' as they think that organic, ayurvedic and herbal products are referred to as green product. Thus, awareness is there about green products and its benefits but the true purpose of it does not get served as the genuine meaning is yet to be realized by the people of the society. At this juncture the role of the model developed is vital. As it will help various responsive agencies of the society like the government, non-government bodies, companies and industrialists to realize why is there no growth in purchase of green product inspite of existence of awareness amongst people about green products. This study further helps to realize that, instead of wasting precious resources in alternative ways of awareness creation it is important to make people aware on the basic differences about the various facets of the term green product. Thus, a model explaining the

relationship awareness, buying behaviour and green product purchases is shown below.
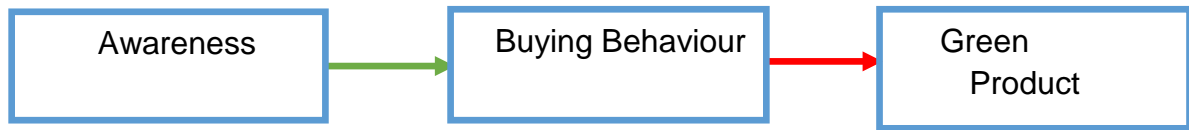
| Awareness | → | Buying Behaviour | → | Green Product |

FIGURE 1
RELATIONSHIP BETWEEN AWARENESS, BUYING BEHAVIOUR AND GREEN PRODUCT PURCHASES

Relationship between awareness, buying behaviour and green product purchases Correlation investigation was conducted to verify the relationship between awareness, buying behaviour, and green product purchases.

The analysis showed that the correlation between the three variables, named awareness, buying behaviour and green product purchases, The results of correlation analyses indicated that awareness (r=0.120, p<0.05) is positively and significantly correlated with green product purchase and awareness (r=0.592, p<0.01) is positively and significantly correlated with buying behaviour.

H_1:   *There is a significant positive relationship between awareness and buying behaviour is accepted and*

H2:   *There is a significant relationship between awareness and buying behaviour is also accepted.*

Moreover, buying behaviour is not significantly related to green product purchases.

H3:   *There is a significant relationship between buying behaviour and green product purchases is rejected.*

Table 2 **SUMMARY OF HYPOTHESES**		
Hypotheses	**Values**	**Result**
H1: There is a significant relationship between awareness and buying behaviour	0.120	Accepted
H2: There is a significant relationship between awareness and buying behaviour.	0.592	Accepted
H3: There is a significant relationship between buying behaviour and green product purchases.	-.010	Rejected

Regression Analysis of Awareness and Buying Behaviour

The result of regression analysis between awareness and buying behaviour is given below. The adjusted R Square of the model is .349 with the R Square = 0.350 which means 35 percent variations in the variable buying behaviourare being explained byawareness. Thus, awareness is having 35% of impact on buying behaviour.

The F-test is highly significant, thus it can be assumed that thereis a linear relationship between the awareness and buying behaviour. Moreover, the unstandardized coefficient, B, for awareness was foundout to be 0.808 with level of significance. This means that increase in awareness,there is an increase in buying behaviour of 0.808.The standardized coefficient beta reveals awareness has a betacoefficient of0.592 which means that the awareness has significant positive influence over the buying behaviour.

Regression Analysis of Awareness and Green Product Purchases

The results of regression analysis between awareness and green product purchases are given below.

The adjusted R Square of the model is .012 with the R Square = 0.014 which means 1 percent variations in the variable green product purchases are being explained by awareness. Thus, awareness is having 1% of impact on green product purchases.

The F-test is highly significant, thus it can be assumed that thereis a linear relationship between the awareness and green product purchases.The unstandardized coefficient, B, for awareness was found out to be 0.113 with level of significance. This means that increase in awareness, there is an increase in green product purchasesof 0.113. The standardized coefficient beta reveals awareness has a beta coefficient of 0.120 which means that the awareness has significant positive influence over the green product purchases.

Scope and Limitation of Study

From the literature review a conclusion can be drawn on the minimal quantity of work done on consumer perception and green products in Kamrup district of Assam focusing on the pandemic period. Indian scenario is changing fast with the gradual change in people's attitude towards environment friendly products and concern for environment is also in a rise. The global scene is also not different from the Indian scenario; just the active participation from the governmental and non governmentalagencies role is making a difference. Such organisations are designed to create awareness amongst customer about the harmful impact of not using sustainable items and also protect and promote sustainable environmental growth.

Managerial Implication

The industrialists and firm owners will be able to save their resources from being wasted as the study identifies the focal point on behalf of the marketers. The area where the marketers should concentrate so as to improve the sales of green product and overall turnover and profit, is through improved awareness measures amongst the consumers. More promotion related to awareness creation about the benefits of using green products to health, environment and society is highlighted in the study. This will help the stakeholders of the society and create a spiraling

impact amongst the people of the society about the good effects of using green products. This has especially become important in the post covid scenario.

Conclusion

To examine consumers' perception towards consumption and usage pattern of green products in the region in the post pandemic periodthe present study has taken some factors namely Awareness, Buying Behavior and Green Product Purchase. These three factors helped to establish the relationship between customers' buying behavior of green product and their awareness about green products. It is found that people are aware but their idea about green product constituent is partially correct. People are purchasing organic, herbal or ayurvedic products in the name of green products. There lacks awareness amongst people about the true meaning of green product so marketers must work on this aspect through floating infomercials (instead of commercials only). As infomercials are laden with information about a particular idea so marketers can promote their green product and provide general information about green product as well. Another idea for promotion of green products can be done with the help of non governmental agencies if they join hands with the companies and help in inculcating the habit of promoting small ideas like shopping in paper or cloth bags, purchasing recycled materials, or purchasing energy efficient products then also some changes may be noticed. If at the grass root level that is at micro level changes are done then only the impact of promoting green products or making green marketing popular will work. Mighty drops of contribution from individuals will help to create significant impact at macro level in the future as well.

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