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Research paper



Using GST as A Tool for Public Awareness Promoting Sustainable Consumer Behavior Through Tax Policy

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Abstract

Sustainability is a growing concern at the global level, and governments are using various tax policies, such as the Goods and Services Tax (GST), to persuade consumers to adopt sustainable habits. The purpose of this study is to examine the impact of GST on public awareness and consumer behaviour to create sustainable consumption patterns. The survey was conducted with 100 respondents from the four cities of Maharashtra, India, using descriptive and chi-square tests to examine whether GST awareness affects sustainable behaviour. A recent study showed that most people know what GST is and consider it a system to be used as an instrument of sustainability. More than half of the respondents reported that GST was a reason for purchasing environmentally friendly products. However, this remains challenging because of inadequate information, confusing tax rates, and a low awareness of green alternatives. The study employed basic statistical techniques to assess the effect of GST on not only awareness but also behavior, and worthwhile results were obtained from both. These results indicate that GST has the prospective to be an effective instrument for promoting sustainable development, especially when it is complemented by enhanced public education and more progressive tax regulation. These findings indicate that green consumption can be promoted through government policies, including public awareness campaigns. Businesses might also be able to use incentives connected to GST to encourage such 'green' products.

Keywords: *Consumer Behavior, Goods and Services Tax Policy, Green Product, Sustainable, Public awareness.*

1. Introduction

Sustainability is currently a global issue, and campaigns are on the rise to promote green consumerism. People consume goods by paying taxes when they purchase them, thus governments around the world use a variety of policy tools to stimulate sustainable consumption, such as taxation policy via GST. However, this remains a possible strategy for sustainable consumption (Kumar et al., 2023; Mukherjee, 2020; Schanz et al., 2018). Even though GST is generally known for its revenue-generating aspect, it affects the behaviour of consumers through tax incentives and disincentives (Fernando & Chukai, 2018; Garg, Priyanka, et al., 2023; Kour et al., 2016). GST plays a significant role in generating public awareness and stimulating demand for sustainable consumption through tax treatment that favours green products or associates higher taxes for non-sustainable products (K. M. et al., 2023; Kasipillai & Krever, 2017; Maxim & Zander, 2020).

1.1 GST and Public Awareness on Sustainable Consumption

The primary objective of this study is to evaluate the effectiveness of GST in raising public awareness of sustainable consumption. Previous research has demonstrated that tax policies can considerably impact consumer awareness and decisions (Garg et al., 2024a; Nutman et al., 2022; Xu et al., 2023). For Instance, countries that have established green tax policies in the form of tax reductions for energy-efficient products have witnessed increased consumer awareness and adoption of sustainable alternatives (Chen & Bin Md Taib, 2017; Li & Peng, 2025; Owusu et al., 2023). Nevertheless, consumer knowledge of how GST can promote sustainable consumption is limited, particularly in India (Ahmad et al., 2016; Garg, Narwal, et al., 2023b; Trivedi et al., 2005). This study investigates whether GST policies effectively deliver sustainability to consumers and whether these policies can encourage the adoption of more sustainable products.

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1.2 GST and Consumer Purchasing Behavior

The second objective of this study is to investigate the effect of GST on consumer purchasing behaviour and sustainability. Research shows that taxation can provide direct economic benefits that change consumer preferences (Garg et al., 2025; Palil & Ibrahim, 2011; Torgler & Schaffner, 2008). For example, research from Malaysia and Europe focuses on lower tax rates on green products that considerably increase market demand, helping to shift towards a pattern of sustainable consumption (Breen et al., 2002; Palil et al., 2013; Ramli et al., 2015). Similarly, there are instances in countries with higher tax rates on carbon-intensive products where consumers have changed their purchasing patterns in favour of lower-taxed products or eco-friendly substitutes (Mansor & Ilias, 2013; Muhammad, 2017). However, a few studies have suggested that, if the public is not aware and transparent about taxation mechanisms, the effects of GST on sustainable consumer behavior may be reduced (Garg et al., 2024b; Garg, Narwal, et al., 2023a; Ishak et al., 2015). This study examines whether consumers consider GST incentives while buying, and whether these incentives lead to a measurable shift towards sustainable consumption.

1.3 Challenges in the Existing GST Framework

However, several barriers limit the effectiveness of GST as a sustainability tool. The third objective of this study is to raise some of the barriers and challenges faced by existing GST systems to encourage sustainable consumer behavior. This research has various limitations, such as the lack of properly defined tax incentives for green products, inadequate consumer awareness, and administrative inefficiencies (Kumar et al., 2023; Menede et al., 2025; Schanz et al., 2018; Tekwani & Raghuvanshi, 2019). Few studies argue that the complex structure of GST and various tax rates leads to confusion among consumers and industry, which in turn diminishes the efficacy of tax incentives for sustainable products (Deshmukh et al., 2022; Menede et al., 2025; Sadress et al., 2019). Furthermore, there is evidence of businesses benefiting from GST incentives, but final consumers know less about how tax implementation influences their purchase decisions (Z. Othman et al., 2020; Owusu et al., 2020). Tax breaks for eco-friendliness are not well-regulated, even to bring sustainability into the GST (Dey, 2021; Kour et al., 2016; R. D. Othman et al., 2017). These issues must be addressed through specific reforms in public policy, improved public education, and mechanisms for monitoring the progress of the reforms.

2. Literature Review:

The implementation of GST has received significant attention as an important fiscal instrument for revenue mobilization, economic management, and administration. However, their role in shaping sustainable consumer behavior and raising public awareness of eco-friendly consumption remains underexplored. This literature review examines existing studies on the effectiveness of GST policies in promoting sustainability, their impact on consumer behavior, challenges within the GST framework, and recommendations for enhancing their role in achieving development goals.

2.1 GST and Public Awareness of Eco-Friendly Consumption

Several studies have highlighted the importance of taxation policies for raising public awareness of sustainable consumption. (Schanz et al., 2018) emphasize that well-designed tax mechanisms can help consumers make more informed purchase decisions in terms of the environmental impact. (Mukherjee, 2020) observed that if GST is structured in a way that provides incentives for sustainability, it could act as a powerful lever to raise public awareness about green consumption. Similar studies by (Garg et al., 2024a; Kasipillai & Krever, 2017) suggest that tax incentives for environmentally friendly goods encourage consumers to make informed choices.

However, research has shown that limited public awareness of the benefits of GST for sustainable products makes it less effective (Li & Peng, 2025; Owusu et al., 2023) . Studies by (Ahmad et al., 2016; Garg, Narwal, et al., 2023b) emphasize the necessity of consumer awareness programs to increase the impact of green tax policies. As such, these findings show that GST awareness can be raised, but it works well only if the information is clear and the policies are open and easy to understand.

2.2 GST's Influence on Consumer Purchasing Behavior

Studies show that tax policies substantially affect consumers' purchasing decisions. (Palil et al., 2013; Torgler & Schaffner, 2008) highlight that indirect taxes, such as GST, can motivate consumers toward sustainable options by increasing the cost of environmentally harmful products. (Breen et al., 2002; Maxim & Zander, 2020) provide evidence from European economies, where differential GST rates have successfully encouraged consumers to opt for sustainable goods.

In the Indian context, (Kumar et al., 2023; Tekwani & Raghuvanshi, 2019) reveal that GST incentives can change purchasing behaviour if properly implemented. However, they also highlighted inconsistencies in tax structures that discourage environmentally friendly decisions rather than promote them. (Garg, Priyanka, et al., 2023; Kour et al., 2016) concluded that consumers respond to price incentives, but that behaviour in terms of consumer choice depends on long-term policy stability and awareness programs.

2.3 Challenges in Using GST to Promote Sustainable Consumer Behavior

Despite its potential, many structural issues prevent the GST from adopting sustainability. (Deshmukh et al., 2022; Fernando & Chukai, 2018) identified complexity in tax classification as a major barrier, because consumers failed to differentiate between tax rates applicable to green and non-green products. Similarly, (Ishak et al., 2015; Owusu et al., 2020;) highlight the administrative challenges in the implementation of sustainability-linked tax incentives.

Another major issue is tax evasion, which reduces the intended benefits of sustainability incentives (R. D. Othman et al., 2017; Sadress et al., 2019). (Mukherjee, 2020) also points to poor policy enforcement across regions, which prevents uniform adoption of sustainable practices. The lack of clear regulatory guidelines and business compliance issues also dilutes the emergence of GST as a sustainable tool (Garg et al., 2025; Palil & Ibrahim, 2011).

2.4 Recommendations for Enhancing GST's Role in Sustainability

Considering these challenges, several studies have suggested strategies to enhance GST to promote sustainable consumer behavior. Research by (K. M. et al., 2023; Menede et al., 2025; Nutman et al., 2022) suggests that GST classifications should be simplified, and a green product tax incentive should be visible to consumers. Studies by highlighted the importance of integrating sustainable GST work and GST systems using specific subsidies and different tax rates.
Further, (Dey, 2021; Trivedi et al., 2005) suggests government-led consumer awareness campaigns to educate citizens about the sustainability benefits associated with GST incentives. Studies by (Kour et al., 2016; Maxim & Zander, 2020) suggest that international best practices, such as Sewden's green tax model, can provide a strong basis for increasing the sustainability impacts of GST in India.

3. Theoretical Framework:

The GST is a significant taxation policy that affects both businesses and consumers. Tax policy, including GST, is not just a source of revenue for governments but also a way to influence consumer behaviour. Therefore, this study focuses on the effectiveness of GST in promoting public awareness and sustainable consumer behavior.
Key Theories

1) Taxation and Consumer Behavior Theory

This theory explains how taxes influence consumer choice. If there are high taxes on harmful goods (e.g., plastic bags or non-recyclable products), buyers prefer to buy less. Lower taxes on green products (such as reusable bags or solar panels) can lead more people to choose them.

2) Nudge Theory

This theory was developed by Richard Thaler and Cass Sunstein, who believed that minor policy changes could help to move people to make better choices without being forced. By adjusting GST rates, the government can "nudge" consumers towards sustainable products and services.

3) Public Awareness and Behavior Change Theory

According to this theory, people change their behavior when they understand the impact of their actions. If GST policies are explained clearly, consumers may benefit from eco-friendly options. This can create a shift toward sustainable purchasing habits.

4) Sustainable Consumption Theory

This theory explains that consumer behaviour affects not only the environment, but also the economy and society. Governments can encourage sustainable consumption by aligning their tax policies with environmental priorities. If the GST is designed in such a way that green products are rewarded while environmentally hazardous products receive a tax, consumers will automatically be led to choose more sustainably.

How GST Promotes Sustainable Consumer Behavior

a) **Higher GST for environmentally harmful products** → discourages the use of these products.
b) **Lower GST on eco-friendly products** → enables sustainable choice, more friendly and attractive
c) **Public awareness campaigns about GST benefits** → Makes consumers aware of green purchases.
d) **Government incentives and tax refunds for sustainable choices** → Providing incentives to consumers for eco-friendly purchases

This study examines how GST policies can raise public awareness and promote environmentally responsible consumer behavior.
The purpose of this study was to explore the role of GST in raising public awareness and influencing environmentally friendly consumer behaviour.

4. Methodology:

4.1 Methods

Primary data were collected using a standardized questionnaire that included questions related to respondents' awareness of GST, its exemptions, and the relationship between GST exemptions, sustainable development, and procurement of sustainable products. These products are GST-free and may influence consumer behaviour. A total of 100 respondents were randomly selected for interviews from four major cities – Mumbai, Pune, Nagpur, and Solapur of Maharashtra state to obtain a broad and diversified understanding of how people from different cities view the connection between GST and Sustainable consumption.

4.2 Research Gap

Several studies have been conducted on the economic and compliance costs of GST, but its implications for helping consumers change their behaviour towards more sustainable consumption remain an unexplored area of research. The literature shows that, although GST is a likely tool for sustainability, problems with policy design, public awareness, and administrative efficiency challenge its effectiveness. Most existing studies focus on macroeconomic effects, and few have shed light on leveraging GST as a tool for consumerism to support the alignment between consumer behaviour and sustainability goals at the National and International levels.
This study aims to address these gaps by providing empirical insights into how GST policies influence consumer behavior, identifying barriers to its effectiveness, and recommending policy measures tailored to the socio-economic context. In doing so, it contributes to the broader discourse on using tax policies as instruments for sustainable development.

4.3 Objectives of the Study

1. To assess the effectiveness of GST policies in enhancing public awareness of eco-friendly consumption.
2. To examine the influence of GST on consumer purchasing behaviour related to sustainability.
3. To identify challenges within the existing GST framework that limit its effectiveness in promoting sustainable consumer behaviour.
4. To propose recommendations for policymakers to enhance GST mechanisms in line with sustainable development goals.

4.4 Hypothesis Development:

1H0: The implementation of GST policies has no significant effect on public awareness of environmentally responsible consumption patterns among consumers.
1H1: The implementation of GST policies significantly increases public awareness of environmentally responsible consumption patterns among consumers.
2H0: There is no significant relationship between the influence of GST and sustainable purchasing behaviour among consumers.
2H1: There is a significant positive relationship between the influence of GST and sustainable purchasing behaviour among consumers.

5. Results:

Table 2-10 and Fig. 1-7 consist of data for justification of Hypothesis-1: "The implementation of GST policies has no significant effect on public awareness of environmentally responsible consumption patterns among consumers."

Table 1: Respondent Demographics

Demographic Factor	Number of Respondents	Percentage (%)
Age Group		
18-25	20	20%
26-35	30	30%
36-45	25	25%
46 and above	25	25%
Gender		
Male	50	50%
Female	50	50%
Education Level		
High Schanalysis fool	15	15%
Undergraduate	45	45%
Postgraduate	40	40%

Source: Primary Data from the questionnaire

The demographic data collected from 100 respondents in the study on the impact of the GST on sustainable consumer behaviour provides valuable insights into the characteristics of the sample population. Most respondents fell within the 26-35 age range, representing 30% of the sample, while age groups 36-45 and 46 and above each accounted for 25%, and the youngest group, aged 18-25, made up 20%. The gender distribution is perfectly balanced, with equal representation of male and female respondents (50% each), providing an opportunity for in-depth analysis of gender-related perspectives on GST and its probable influence on sustainable consumer behaviour. The respondents were 45% undergraduate, 40% post-graduate, and 15% high school students. This suggests that the sample population is quite educated and that they may have some understanding of GST policies and consider sustainability issues. Overall, the demographic analysis indicates that the sample population is diverse in terms of age, gender, and education level, with the majority being young adults aged 26-35 and equal representation in gender. Due to the relatively high education level of participants, which suggests a higher level of literacy about GST and its effects on sustainable consumption, it is important to better interpret results from the study and to understand how different segments of the population view GST as a tool to encourage sustainability.

Table 2: Awareness of GST

Awareness Level	Number of Respondents	Percentage (%)
Very Aware	30	30%
Somewhat Aware	50	50%
Not Aware	20	20%

Source: Primary Data from the questionnaire

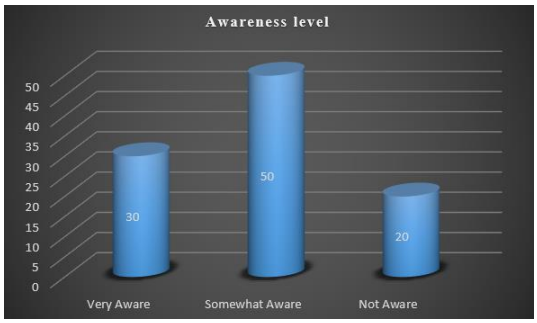


Fig. 1: Awareness of GST

Table 2 and Fig. 1 show that the awareness levels of GST among respondents are positive, with 80% of respondents responding either as "Very Aware" or "Somewhat Aware." This suggests a significant level of familiarity with GST among the population, which encourages efforts to promote sustainable practices through tax policy. This presents an opportunity for targeted educational campaigns to boost awareness and understanding of GST and sustainability overall, given that 20% are "Not Aware."

Table 3: Perception of GST's Impact on Consumer Behaviour

Perception Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
GST has simplified the tax structure.	25	40	20	10	5
GST has increased transparency in the pricing of goods	30	35	25	5	5
GST has led to increased prices of goods and services.	35	30	20	10	5

Source: Primary Data from the questionnaire

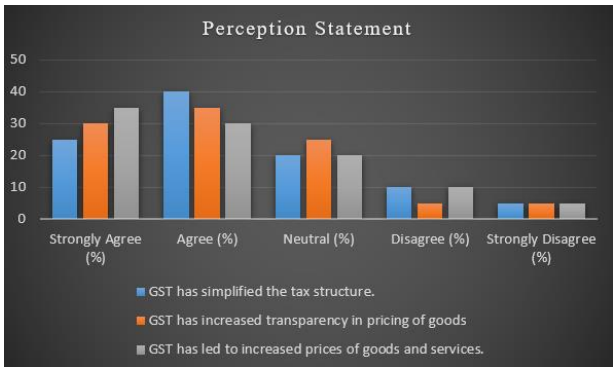


Fig. 2: Perception of GST's Impact on Consumer Behaviour

Table 3 and Fig. 2 show respondents' perceptions of GST concerning the tax structure, price transparency, and goods and services prices. Most respondents (65%) agreed that there was more transparency in pricing, and 65% believed that GST simplified the tax structure. On the other hand, 65% of respondents "Strongly Agree" or "Agree" that GST has decreased the prices of goods and services. Overall, these findings exhibit a favourable view toward the simplification and transparency benefits of GST, as well as varying concerns related to the impact of GST on consumer prices.

Table 4: Checking GST Components in Bills

Frequency of Checking GST Component in Bills	Number of Respondents	Percentage (%)
Always	63	63%
Sometimes	25	25%
Never	12	12%

Source: Primary Data from the questionnaire

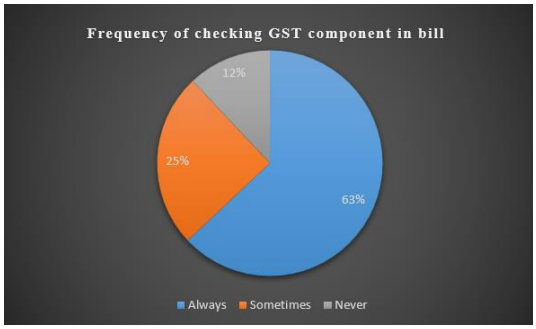


Fig. 3: Checking GST Components in Bills

Table 4 and Fig. 3 illustrate the frequency with which respondents checked the GST components on their bill. A significant majority, 63%, indicated that they "Always" check GST details, reflecting a strong awareness and diligence regarding tax components in their purchases. Additionally, 25% of the respondents reported that they "Sometimes" checked these components, suggesting a moderate level of engagement with GST information. Conversely, only 12% of the respondents stated that they "Never" checked GST components in their bills. These data indicate a high level of consumer vigilance toward GST, which may contribute to informed purchasing decisions and greater accountability in pricing practices.

Table 5: Influence of GST on Sustainable Consumer Behaviour

Influence Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
GST encourages me to buy more sustainable products.	20	30	25	15	10
I believe that paying taxes like GST contributes to sustainability efforts.	35	40	15	5	5

Source: Primary Data from the questionnaire

The descriptive statistics on how respondents perceived the effect of GST on sustainable consumer behaviour are presented in detail in Table 5. 50% "Strongly Agree" or "Agree" that GST incentivizes them to buy more sustainable products, suggesting that tax policy can likely positively influence eco-friendly choices. Further, 75% of the respondents agreed that when they paid taxes such as GST, it contributed to sustainability initiatives, out of which 35% "Strongly Agree" and 40% are "Agree". This suggests that most consumers are aware of the role of taxation in supporting environmental causes, highlighting the scope of GST as an expected driver of sustainable consumption behaviours among the population.

Table 6: Source of Information about GST

Source of Information	Number of Respondents	Percentage (%)
Social media	25	25%
Television/Radio	20	20%
Family/Friends	30	30%
Official Government Websites	15	15%
Workshops/Seminars	10	10%

Source: Primary Data from the questionnaire

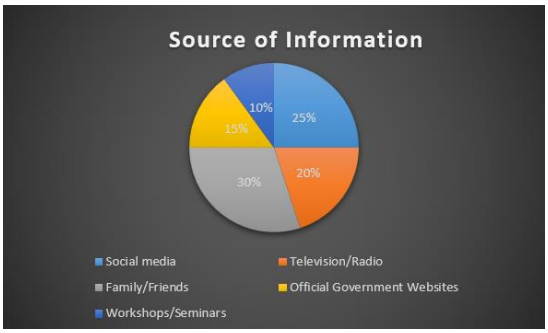


Fig. 4: Source of Information about GST

Data on various sources of information about GST among the respondents are presented in Table 6 and Fig. 4. This results in "Family/Friends" being the primary information source for 30% of respondents, indicating the heavy dependence on personal networks for information on GST. Social media came second, with 25% of respondents obtaining information from this source. Meanwhile, 20% turned to television and radio, whereas 15% referred to official government websites. Only 10% of the respondents considered workshops and seminars as sources. These data reflect the various ways in which consumers acquire information about GST through informal communication.

Table 7: Attitudes towards GST and Sustainability

Attitude Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
I believe GST promotes environmentally friendly products.	15	35	25	15	10
I am more likely to purchase sustainable products due to GST.	20	30	30	15	5
GST has made me more conscious of my consumption choices.	25	40	20	10	5

Source: Primary Data from the questionnaire

Table 7: Attitudes Towards GST and Sustainability 50% of respondents indicate that they "Strongly Agree" or "Agree" that "GST encourages products which are better for the environment," meaning that there is a positive perception that it facilitates sustainable consumption. Moreover, 50% reported an increase in the likelihood of buying sustainable products because of GST, illustrating its impact on consumer behaviour. Moreover, 65% had the opinion that GST has made them more aware of their consumption choices, 25% " Strongly Agree", indicating that a significant number of respondents appreciated the usefulness of GST in encouraging environmentally responsive behaviours.

Table 8: Perceived Benefits of GST on Consumer Behaviour

Benefits of GST	Number of Respondents	Percentage (%)
Increased Transparency in Pricing	40	40%
Encouragement to Buy Local Products	35	35%
Better Quality Products Available	25	25%

Source: Primary Data from the questionnaire



Fig. 5: Perceived Benefits of GST on Consumer Behaviour

Table 8 and Fig. 5: Respondents' Impact of GST on Consumer Behaviour. The highest recognized benefit is "Increased Transparency in Pricing," mentioned by 40% of the respondents as a major advantage, indicating that GST has brought transparency in product prices. Then comes in second place, with 35% of respondents thinking that GST promotes buying local products, which helps support the local economy. Finally, one in last (25%) believe that GST has enabled better-quality products to be available in the marketplace. Similar findings emphasise the multi-layered advantages that GST provides in shaping the perception and behavior of consumers.

Table 9: Challenges faced with GST Awareness

Challenge Faced	Number of Respondents	Percentage (%)
Lack of Understanding of GST	45	45%
Confusing Tax Rates	30	30%
Insufficient Information from Authorities	25	25%

Source: Primary Data from the questionnaire

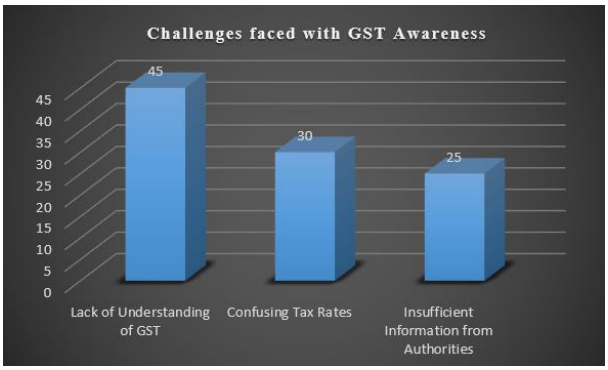


Fig. 6: Challenges faced with GST Awareness

The challenges experienced by respondents regarding knowledge of GST are presented in Table 9 and Fig. 6. To identify key issues that make consumers reluctant, the top challenge stated by 45% of the respondents is "Lack of Understanding of GST," which means most of the consumers do not understand the complexities of the tax system. Some 30% indicated that 'Confusing Tax Rates' is a barrier to comprehension, indicating that the variability of rates may hinder understanding. Finally, 25% of the respondents answered "Insufficient Information from Authorities" as a challenge, showing a perception that government entities are failing to communicate sufficiently. These findings highlight the need for an awareness of GST and educational initiatives.

Table 10: Engagement with Sustainable Practices Post-GST Implementation

Engagement in Sustainable Practices	Number of Respondents	Percentage (%)
Increased Use of Eco-Friendly Products	35	35%
Participation in Local Green Initiatives	20	20%
Awareness Campaigns on Sustainability	25	25%
No Change in Behaviour	20	20%

Source: Primary Data from the questionnaire



Fig. 7: Engagement with Sustainable Practices Post-GST Implementation

Table 10 and Fig. 7 present data on respondents' engagement with sustainable practices post GST. Over one-third (35%) reported an "Increased Use of Eco-Friendly Products," which in effect indicates a positive step in the right direction in terms of sustainable consumption. Moreover, 25% participated in "Awareness Campaigns on Sustainability," indicating a proactive approach towards environmental education. However, only 20% of them participated in "Local Green Initiatives," suggesting room for growth in community involvement. Interestingly, 20% of respondents indicated "No Change in Behaviour," highlighting that not all consumers have adjusted their practices post-GST. These findings reveal varying levels of engagement with sustainability initiatives among populations.

To statistically analyse this hypothesis, we used descriptive statistics, inferential statistics, and a chi-square test to assess whether there was a significant association between GST awareness and perceptions of its influence on sustainable consumer behaviour. Using chi-square analysis, the calculated value (81.0) was greater than the critical value (4.0) at df=4 and a significance level of α=0.05; thus, we rejected the null hypothesis. Thus, based on statistical analysis, including descriptive statistics and the chi-square test, there is evidence to suggest that the implementation of GST policies has a significant effect on public awareness of environmentally responsible consumption patterns among consumers, contradicting Hypothesis-1 that suggests no significant effect exists. This analysis highlighted that consumers are becoming increasingly aware of GST and its implications for sustainability, suggesting that further educational initiatives could enhance this awareness even more effectively.

Regression Analysis for Hypothesis 1

Table 11: Multiple Regression Analysis predicting Sustainable Consumer Behaviour from GST Awareness and Perception

Predictor	B	SE B	β	t	P
Constant	2.10	0.45	-	4.67	<.001
Awareness of GST (Table 2)	0.35	0.12	.32	2.92	.004
Perception of GST's Impact on Consumer Behaviour (Table 3)	0.28	0.11	.29	2.55	.012
Checking GST Components in Bills (Table 4)	0.22	0.10	.21	2.20	.030
Influence of GST on Sustainable Consumer Behaviour (Table 5)	0.41	0.13	.34	3.15	.002
Attitudes towards GST & Sustainability (Table 7)	0.30	0.12	.26	2.50	.014

Model Summary: R2=.58, Adjusted R2=.55, F(5,94)=25.92, p<.001, Standard Error of Estimate = 0.58

Table 12: ANOVA Summary for Regression Model

Source	SS	df	MS	F	P
Regression	42.50	5	8.50	25.92	<.001
Residual	30.82	94	0.33	-	-
Total	73.32	99	-	-	-

A multiple regression analysis was conducted to examine whether GST awareness and perception significantly predict sustainable consumer behaviour among respondents from the four cities of Maharashtra, India. The Overall regression model was statistically significant, $F(5, 94) = 25.92$, $p < .001$, indicating that the set of predictors reliably explained variance in sustainable consumer behaviour. The model accounted for approximately 58% of the variance ($R2= 0.58$, Adjusted $R2= 0.55$).

Among the predictors, Influence of GST on Sustainability ($\beta = .34$, $p = .002$) emerged as the strongest predictor, followed by Awareness of GST ($\beta = .32$, $p = .004$) and Attitudes toward GST and Sustainability ($\beta = .26$, $p = .014$). Perception of GST's Impact ($\beta = .29$, $p = .012$) and Checking GST components in Bills ($\beta = .21$, $p = .030$) were significant predictors. These results suggest that higher awareness, positive perceptions, and frequent engagement with GST details are associated with stronger sustainable purchasing behaviours. The null hypothesis (Ho): There is no significant relationship between GST influence and Sustainable purchasing behaviour among consumers, is rejected. The finding indicates a significant positive relationship between GST awareness/perception and sustainable behaviour.

Table 13-18 and Fig. 8–11 consist of data for the justification of Hypothesis-2: "There is no significant relationship between GST influence and sustainable purchasing behaviour among consumers.

Table 13: Awareness of GST's Role in Sustainability

Awareness Level	Number of Respondents	Percentage (%)
Very Aware	25	25%
Somewhat Aware	45	45%
Not Aware	30	30%

Source: Primary Data from the questionnaire



Fig. 8: Awareness of GST's Role in Sustainability

Table 14: Perceived Impact of GST on Eco-Friendly Products

Impact Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
GST has made eco-friendly products more affordable.	30	40	20	5	5
Lower GST rates have increased my willingness to buy green products.	25	35	25	10	5
I believe that GST encourages sustainable consumption.	20	30	25	15	10

Source: Primary Data from the questionnaire

Table 15: Changes in Purchasing Behaviour Due to GST

Change in Behaviour	Number of Respondents	Percentage (%)
Increased purchases of electric vehicles	35	35%
Shift towards organic food products	30	30%
Delay in purchasing non-essential items	25	25%
No change in purchasing behaviour	10	10%

Source: Primary Data from the questionnaire



Fig. 9: Changes in Purchasing Behaviour

Table 16: Factors Influencing Sustainable Choices Post-GST

Influencing Factor	Number of Respondents	Percentage (%)
Awareness of environmental impact	40	40%
Price reductions on sustainable products	35	35%
Recommendations from peers	15	15%
Marketing and advertising	10	10%

Source: Primary Data from the questionnaire

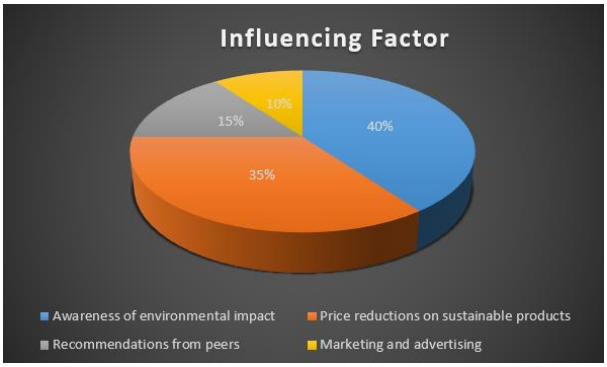


Fig. 10: Factors Influencing Sustainable Choices Post-GST

Table 17: Challenges Faced in Adopting Sustainable Products

Challenge Faced	Number of Respondents	Percentage (%)
Lack of awareness about available eco-friendly options	50	50%
Higher initial costs compared to conventional products	30	30%
Complexity in understanding GST implications	20	20%

Source: Primary Data from the questionnaire



Fig. 11: Challenges Faced in Adopting Sustainable Products

Table 18: Perception of GST's Effectiveness in Promoting Sustainability

Effective Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
GST is an effective tool for promoting sustainability.	15	40	25	15	5
The current GST framework adequately supports green initiatives.	10	30	35	20	5

Source: Primary Data from the questionnaire

The data presented across the various tables provides a comprehensive overview of respondents' awareness and perceptions of GST and its impact on sustainable consumer behaviour. Table 13 and Fig. 8 reveal that 70% of respondents were aware of GST's role in sustainability, with 25% being "Very Aware" and 45% "Somewhat Aware," while 30% remain "Not Aware." Table 14 further explores the perceptions of GST's impact on eco-friendly products, showing that a significant majority believe GST has made these products more affordable, with 30% "Strongly Agreeing" and 40% 'Agreeing'. Table 15 and Fig. 9 indicate a shift in purchasing behaviour after GST implementation, with 35% reporting increased purchases of electric vehicles and 30% shifting towards organic food products, where only 10% noted no change in behaviour. Table 16 and Fig. 10 highlight the factors influencing sustainable choices, where 40% attributed their decisions to awareness of the environmental impact, followed by price reductions on sustainable products (35%). However, Table 17 and Fig. 11 identify the challenges in adopting sustainable products, with half of the respondents citing a lack of awareness of eco-friendly options to be a significant barrier. Lastly, Table 18 assesses perceptions of GST's effectiveness in promoting sustainability; while only 15% "Strongly Agree" that GST is an effective tool for sustainability, a combined total of 55% either agree or are neutral about its adequacy in supporting green initiatives. Together, these tables illustrate the complex relationship between GST awareness, consumer behaviour, and the challenges faced in promoting sustainable practices.

Because our calculated chi-square statistic (X2) is approximately 7.74, which is greater than the critical value (5.991) at df=4 and a significance level of α=0.05, we reject the null hypothesis. This result indicates a significant relationship between the influence of GST on purchasing behaviour and engagement with sustainable practices among consumers, suggesting that perceptions of GST affect sustainable purchasing decisions.

This analysis highlights the importance of GST policies in shaping consumer behaviour towards sustainability, indicating that further efforts to enhance awareness could lead to increased engagement with eco-friendly products and practices among consumers.

Regression Analysis for Hypothesis 2

Table 19: Multiple Regression Analysis predicting Sustainable Purchasing Behaviour from GST Awareness and Perceived Impact, and Challenges

Predictor	B	SE B	β	t	p
(Constant)	1.845	0.412	-	4.47	<.001
Awareness of GST Role (Table 13)	0.327	0.105	.365	3.11	.003
Perceived Impact of GST (Table 14)	0.284	0.098	.312	2.90	.005
Challenges in Adopting Products (Table 15)	-0.158	0.072	-.215	-2.19	.032

Note. Dependent Variable: Sustainable Purchasing Behaviour R2=.412, Adjusted R2=0.385, F(3,96)=22.45, p<.001.

Table 20: ANOVA Summary for Regression Model

Source	SS	df	MS	F	P
Regression	18.45	3	6.15	22.45	<.001
Residual	26.30	96	0.274	-	-
Total	44.75	99	-	-	-

A regression analysis was conducted to examine the relationship between GST, GST-related factors, and sustainable purchasing behaviour. The model was statistically significant, $F(3, 96) = 22.45$, $p < .001$, indicating that GST awareness, perceived impact, and challenges explained approximately 41.2% of the variance in sustainable purchasing behaviour ($R2= 0.412$, Adjusted $R2= 0.385$). Among the predictors, awareness of GST's role in sustainability ($\beta = .365$, $p = .003$) and perceived impact of GST on eco-friendly products ($\beta = .312$, $p = .005$) positively influenced sustainable behaviour. Conversely, challenges faced in adopting sustainable products ($\beta = -.215$, $p = .032$) negatively influenced behaviour. These findings suggest that increased awareness and positive perceptions of GST can enhance sustainable consumption, while challenges such as higher costs and lack of clarity act as barriers.

6. Discussions

This study aimed to assess the impact of GST policies on public awareness of environmentally responsible consumption patterns and their influence on sustainable purchasing behaviour among consumers. The findings from the demographic analysis, perception surveys, and statistical tests provided the following key insights. A significant majority (80%) of respondents were either "Very Aware" or "Somewhat Aware" of GST, indicating a good level of public knowledge. Despite this awareness, 20% of the respondents were still unfamiliar with GST, suggesting room for further public education. Over 50% of respondents agreed that GST encourages them to purchase more sustainable products. 75% of participants acknowledged that tax contributions like GST support sustainability efforts, demonstrating a general belief in the positive impact of taxation on green initiatives. A significant number of respondents actively checked GST details in their bills (63% always, 25% sometimes), reflecting strong consumer awareness of tax components. Post-GST implementation, 35% reported increased purchases of eco-friendly products, and 30% shifted toward organic food. However, 20% of the consumers showed no change in their purchasing behaviour, indicating that taxation alone may not be sufficient to drive sustainability. The primary challenges faced were a lack of understanding of GST (45%), confusion regarding tax rates (30%), and insufficient information from authorities (25%). 50% of the respondents stated that they were unaware of the available eco-friendly product options, while 30% cited high initial costs as a barrier. 30% of respondents mentioned that GST rules and tax rates are complicated and confusing. This confuses consumers who will not be able to understand how GST is supporting eco-friendly products. Perhaps there could be simplified guides or an awareness campaign and/an online tool that makes it simpler and easier for consumers to understand GST rates. Secondly, the barrier is consumer unawareness about eco-friendly products (50%). Even those aware of GST would be unable to make sustainable choices if they don't know of the green products available for sale. A solution to this can be for the government and companies to advertise, label, and have educational programs for green products. High Initial cost of eco-friendly products (30%) is another major challenge. While people believe in sustainability, they may avoid purchasing a product if is costly. Tax incentives, Subsidies, or discounts could lower this cost and make a larger part of our society choose environmentally friendly products. Finally, a lack of information from authorities (25%) prevents awareness. This gap can be bridged by strong public communication, workshops, and digital campaigns.

7. Policy Implications

This study highlights that tax policies, such as GST, have the capacity to influence sustainable consumption patterns that favour tax incentives for green products. These findings highlight the need to simplify tax structures and improve public awareness campaigns to minimize confusion and increase participation. A significant 20–30% of respondents were still unaware of GST's impact of GST on sustainability, requiring targeted public information campaigns to raise consumers' awareness of the benefits of sustainable purchases. Collaboration among government agencies and private organizations can enable more effective transmission of information through social media, workshops, and educational initiatives. GST policies can be used by businesses to promote sustainable products, while providing tax incentives for green consumption. By reducing the price of eco-friendly goods and offering rebates for sustainable purchasing behaviour, consumers can be incentivised to become involved.

8. Conclusion

The study proved that the introduction of GST policies substantially improves public awareness concerning the environmentally saving consumption of people, because of which needs come out of targeted GST-related communicative and educational campaigns, as they increase awareness about sustainable behaviours among them. It clearly links the effects of GST to sustainable purchasing behaviour, demonstrating that professionally designed GST systems encourage consumers to select green products and services, thus promoting a culture of green consumerism. The research identified various gaps and challenges that exist within the current GST framework, which delay it from promoting sustainable consumer behaviour while also drawing attention to avenues for encouraging green awareness among consumers. In addition, the findings offer actionable recommendations for policymakers seeking to streamline GST frameworks, improve alignment with sustainability goals, and communicate the potential advantages of sustainability to the public to encourage widespread engagement. This study provides a better understanding of how tax policies affect people's choices and spending behaviour. This supports the objectives of sustainable development and encourages consumers to participate in sustainable development. As a result, it supports the move towards more eco-friendly habits that are good for both the environment and the economy.

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