

An Exploratory Analysis of SCB in Delhi Ncr Region

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ABSTRACT

Sustainable consumption behaviour (SCB) is an increasingly important concept today as we face pressing environmental challenges. It entails making conscious choices to minimize the negative impact of our consumption patterns on the planet and promote long-term well-being. Through mindful choices and accountable actions, individuals can pave the way for a more sustainable and equitable future for future generations. However, measuring sustainable consumption behaviour encounters numerous limitations, hindering its comprehensive assessment. One key challenge lies in capturing the multifaceted nature of sustainable consumption behaviour within a singular metric or indicator. It encompasses dimensions such as quality of life, care for environmental well-being & care for the future generations. Additionally, subjective elements further complicate the measurement, as personal values, cultural influences, and socio-economic factors shape individuals' perceptions of sustainability. This paper thoroughly examines the current state of SCB by measuring its level among residents of the Delhi NCR region. Primary data collected using surveys conducted in 5 areas, encompassing 219 randomly distributed questionnaires. Using K-means cluster analysis, patterns and segments within the dataset have been identified. By identifying these segments, policymakers and businesses can tailor their strategies, interventions, and communication efforts to cater to each consumer cluster's needs and motivations. This can further contribute to the development of more targeted and practical initiatives to promote sustainable consumption behaviour across different population segments.

Keywords: Sustainable consumption behaviour, K-means cluster analysis, quality of life, environmental well-being, future generation.

INTRODUCTION

In the present era, sustainability has become an imperative requirement. With escalating environmental challenges and socio-economic disparities, sustainability offers a holistic approach to addressing these issues. It encompasses responsible resource management, environmental stewardship, social equity, and economic viability. Embracing sustainability is crucial for ensuring the well-being of present and future generations, safeguarding the planet's ecosystems, and fostering inclusive and resilient societies. It calls for collective efforts from governments, businesses, and individuals to adopt sustainable practices and policies, promoting a harmonious balance between people, planet, and prosperity. Over the years, the expectation from businesses to play their part in sustainability has been growing. The result means there has been a new rigour to sustainability reporting and a move to monitor and measure formally. Transparency is demanded now at almost every level, with sustainability reporting a vital part of shareholder, employee and stakeholder relations. The UN Secretary-General has intimated all sectors of society to plan for action on three levels: global action to secure greater leadership, more resources and smarter solutions for sustainable development over the upcoming decade. However, they fail to consider the growing environmental effects of consumer product selection, use, and disposal. Sustainable consumption and production patterns are essential to sustain the livelihoods of current and future generations and are one of the overarching objectives of sustainable development. Unsustainable consumption and production patterns are root causes of the triple planetary crises of climate change, biodiversity loss and pollution. Sustainable consumption requires transformational action on behalf of the consumer that will result in a fundamental shift in the way that goods and services are produced and consumed.

The recovery from the economic crisis sparked by COVID-19 has transitioned India's economy from a mixed-planned economy to a mixed middle-income developing social market economy with notable state participation in strategic sectors and indicative planning. It is the world's fifth-largest economy by nominal GDP and the third-largest by purchasing power parity (PPP). The pandemic has had a significant impact on Indian consumption

patterns. According to a survey conducted by BCG, some changes in the goods and services that Indian households buy and the ways they transact those purchases have proved to be fleeting or driven by temporary necessity. In contrast, other behavioural changes appear to be so enduring that companies should consider them the new normal. For example, using a wide range of digital services has remained elevated in India throughout the pandemic. Over time, the Indian consumption patterns have transformed to be more aspirational, and now, in addition to the necessities, spending on health, education, leisure, technology and lifestyle products is also increasing.

According to a report by Statista, around 30% of Indian consumers think that sustainability is a buzzword and will lose importance in the future. This could be caused by a lack of customer trust in companies that claim to be sustainable: Nearly 40% state that brands exploit the term eco-friendliness to sell products more expensively. But although consumers are suspicious about the future of eco-friendliness, they still modify their behaviour for reasons to ensure sustainability. Eco-friendliness is also an important purchase criterion for many: approximately one-third of those surveyed name sustainability an important factor for purchasing decisions in all categories. However, according to the same report, consumers also tend to punish brands and stores with poor sustainability policies by avoiding or even boycotting them: e.g., 30% say they have stopped buying a certain brand in the fashion sector because of lack of sustainability. Consumers aged 30 to 49 are willing to go even further. Every fifth respondent who changed purchase behaviour for sustainability reasons reported boycotting a brand or store due to its negative sustainability policy. The main drivers for sustainable purchases are quality, environment, and health. A better quality of eco-friendly products, a good impact on the environment, and personal and/or family-related health speak for sustainable purchases across all categories. Approximately every second respondent indicates these criteria as the main reasons for buying sustainable food & beverages, beauty & personal care products, and fashion items.

Sustainable consumption, as defined by the United Nations, refers to “the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations”. SDG 12, namely, *Sustainable consumption and production practices*, is a part of the United Nations' Sustainable Development Goals, and focuses on ensuring sustainable consumption and production patterns. It aims to promote resource efficiency, reduce waste generation, and encourage sustainable practices across industries. The goal emphasizes the importance of responsible consumption, production, and sustainable management of natural resources. It seeks to achieve more sustainable lifestyles, support sustainable business practices, and contribute to the transition towards a circular economy, thereby fostering a more sustainable and equitable world.

Sustainable Consumption Behaviour has become a critical component of the worldwide sustainability agendas. The concept involves making deliberate efforts to maintain a balance between economic growth & ecological preservation by making conscious decisions about the usage of goods & services while minimizing the negative impact on the environment. The adoption of SCB over the world varies significantly largely due to the socio-economic differences, diversity in cultural attitudes & policy framework of the government of each nation. High income countries encounter higher degree of adoption & implementation of SCB on account of advanced infrastructure, more awareness & education, & strict laws and regulations. In contrast, low & middle income countries are hugely dependent on innovative & resource efficient practices which work on an under-utilized model of SCB.

With rapid development and increasing urbanization, each nation needs to build an infrastructure for effective environmental management, and individual consumer choice and behaviour strongly impact the quality of the environment. Even though worldwide extensive research has been conducted concerning the same issues but a very few of them are from the Indian perspective. Most are limited to environmental education, sustainability and savings in public services in vulnerable populations, and trends for developing products based on green marketing.

To overcome the existing research gaps, this research is designed to achieve the following objectives: (i) to measure the level of sustainable consumption using the construct sustainable consumption behaviour (SCB hereafter); (ii) to sort the respondents into homogeneous sub-groups to analyse the structure of SCB.

LITERATURE REVIEW

Underpinning theories

1. Theory of planned behaviour: The theory given by Icek Ajzen posits that people's intentions to engage in behaviour can be influenced through their attitude towards the behaviour, subjective norms (perceived social pressures to perform or not perform the behaviour), and perceived behavioural control (perceived ease or difficulty of performing the behaviour). TPB suggests stronger intentions lead to a higher likelihood of achieving the behaviour.
2. Maslow's Hierarchy of Needs: Given by A. Maslow, it is used to understand why individuals make confident purchasing decisions. It suggests that a hierarchy of needs, ranging from basic physiological needs to higher-level psychological needs can motivate an individual.

Empirical Research

A growing body of research has focused on understanding the intricate relationship between demographic variables and sustainable consumption behavior. This literature review aims to synthesize key findings and trends within this field. Kwon & Ahn, 2021 suggested that socio-demographic characteristics specifically positive anticipated emotion and subjective norm has a positive effect on the formation of behavioural intention towards green hotels in Malaysia for customers belonging to low educational level group. Wang et al., 2014 also analysed the influence of demographic variables on sustainable consumption behaviour which found unmarried, male, wealthy and highly educated consumers to be more active in SCB participation in rural area of China. Figueroa-García et al., 2018 concluded using Smart PLS that sustainable consumption behaviour is determined by education and information which is domain specific to the topics and issues of sustainability in Madrid. However, Kurz et al., 2007 identified socio-demographic factors to play a marginal role on sustainable behaviors. Cui et al., 2003 indicated that the behaviour and thinking of a millennial regarding sustainability and sustainable consumption is far apart from consumers of other generations. Gurtner & Soyeze, 2016; Ruppert-Stroescu et al., 2015; Jang et al., 2011 highlighted the importance of informed and educated consumer in developing sustainable consumption habits. Antonsich, 2010; Confente et al., 2020 emphasized on place identity or attributes of a location that can affect sustainable actions of a consumer. Although, Zhao et al., 2014; Khare, 2014 found gender to be weakly linked with ecological conscious behaviour while income was reported to have a significant influence on it, Zimmer et al., 1994; Tilikidou, 2007, 2013; Park & Ha, 2014 found either inconclusive or no positive relationship between income & EC. Another study by Park & Ha, 2012 found a non-linear relationship between the 2 variables. Age as an influencing factor has been controversial among various researchers. On one hand Liere & Dunlap, 1980; Schultz et al., 1995; Dietz et al., 1998; Akehurst et al., 2012; Olli et al., 2001; D'Souza et al., 2007; Wang et al., 2014; Zhao et al., 2014 found age (higher age in some studies) to be consistently related to sustainable behaviour, on the other hand N. Bhuian et al., 2014a, 2014b; Khare, 2014 did not find any impact of age on sustainable behaviour. It is not clear whether highly educated consumers are more actively participating in sustainable consumption behaviour than less educated consumers but many studies like Arbuthnot, 1977; Schwatz & Miller, 1991; Diamantopoulos et al., 2003 Tilikidou, 2007; Zhao et al., 2014; Wang et al., 2014 found a positive correlation between education and sustainable consumption.

Based on the above ROL it was observed that though a tremendous amount of empirical research exists on sustainable consumption behaviour but there is unavailability of a framework for effective measurement of the construct sustainable consumption behaviour. Also, on account of various inconsistencies that exist in the current literature regarding the demographic analysis of sustainable consumption behaviour further research on the area can be conducted to fill the research gaps.

K-means cluster analysis is a powerful technique in the field of data analysis and machine learning. It aims to group similar data points into clusters based on their feature similarities. The "K" in K-means refers to the number of clusters that the algorithm seeks to identify. It has a wide range of applications like customer segmentation, market basket analysis, geographical data analysis etc on account of which it has been applied in the research paper for demographic analysis of the construct 'sustainable consumption behaviour.' Singh & Gill, n.d. have highlighted that k-means clustering does not require the pre-identification of the number of clusters and it is sensitive to outliers.

RESEARCH METHODOLOGY

Conceptualization of SCB Construct

The concept of sustainable consumption behaviour is a sub-discipline of consumer behaviour that analyses whether consumers incorporate sustainability priorities into their consumption behaviour. Quoquab et al., 2018, proposed an operational definition of sustainable consumption behaviour as a “socially and environmentally concerned way of buying, using and disposing of goods and services. It advocates for considering the quality of life by adopting wise and careful consumption patterns and efficient use of goods and services. While it meets the basic needs of the present consumers, it does not jeopardise the need of the future generation.”

The research has adopted a multi-dimensional construct for the measuring SCB given by Quoquab et al., 2018 which is reflected by a) Quality of life, b) Care for the environmental well-being, and c) Care for the future generation. The items of the scale developed to estimate an individual's level of SCB are listed in Table 2, abbreviated as SCB1- SCB24. The scale is measured using a 5-point Likert scale consisting of scale items as *strongly disagree* to *strongly agree* (1 – 5 = strongly disagree, disagree, neutral, agree, strongly agree, respectively).

Sample Selection & Data Collection

A self-administered survey was conducted to collect data for the research. This research targeted all household consumers ranging between the ages of 18-60 years who can buy, use & dispose of goods and services in Delhi NCR region including five areas: Delhi, Ghaziabad, Noida/Greater Noida, Gurugram and Faridabad. This research used a convenience sampling method via social media and personal contacts, a non-probability sampling technique where sample units are selected based on accessibility and availability of the researcher. A total of 289 questionnaires were distributed, of which 200 were obtained, making the response rate 69.2%.

Data Analysis

R software has been used to analyse the data through the technique of K-means cluster analysis. K-means cluster analysis is a fundamental technique used in data exploration and pattern recognition. It aims to partition a dataset into distinct clusters, where data points within each cluster are more similar than those in other clusters. The algorithm iteratively assigns points to the nearest cluster center and recalculates the center based on the assigned points. The number of clusters (K) is a critical parameter influencing the analysis. K-means is widely employed in various fields, from market segmentation to image compression, offering insights into data grouping and aiding decision-making. However, it assumes spherical clusters and can be sensitive to initializations. Interpretation should be supported by domain knowledge and visualization.

FINDINGS

Profile of the respondent

The demography of the respondents includes age, gender, educational qualification, income level and area of residence as shown in Table 1.

Variables	Options	N	%
Age	18-25	87	43.5
	26-45	85	42.5
	46-60	28	14
Gender	Male	98	49
	Female	102	51
Educational Qualification	Upper Elementary	1	0.5
	Senior Secondary	21	10.5
	Graduation	81	40.5
	Post Graduation	79	39.5
	PhD	15	7.5
Income Level	Other	3	1.5
	0-2.5L	61	30.5

Area	2.5-5L	29	14.5
	5-7.5L	28	14
	7.5-10L	26	13
	Above 10L	56	28
	Delhi	91	45.5
	Faridabad	7	3.5
	Ghaziabad	73	36.5
	Gurugram	14	7
	Noida/Greater Noida	15	7.5

Table1: Demographic composition of the sample (N = 200)

Descriptive Analysis

The mean of score of SCB ranges between 3 to 4.5 leading to a moderate level of SCB among consumers in Delhi NCR region. The table 2 shows the difference in the behaviour of consumers among each item. The top 2 items are SCB18 (love for the planet) & SCB8 (wastage of food) respectively which concludes that consumers have the tendency to maintain sustainability in their consumption habits due to the realization of their wastage activities and the harm caused by it to the planet. On the contrary, the lowest item is SCB15 (price) suggesting that even though consumers realize that there is a need to ensure sustainability in their consumption habits, many are still unwilling to pay extra to acquire such products. Contrary to the belief, recycling (SCB2) also has a low mean score suggesting consumers are unlikely to conduct sustainable behaviours to have a direct economic benefit.

Sustainable Consumption Behaviour		Mean	Std. Dev	Min	Max
SCB1	I always try hard to reduce misuse of goods and services	3.96	1.058	1	5
SCB2	I recycle daily newspaper	3.24	1.342	1	5
SCB3	I avoid being extravagant in my purchase	3.63	1.005	1	5
SCB4	I avoid over use/consumption of goods and services	3.67	1.080	1	5
SCB5	I reuse paper to write on the other side	4.17	1.080	1	5
SCB6	While dining in restaurant, I order food(s) only the amount that I can eat in order to avoid wasting food	4.23	0.955	1	5
SCB7	I choose to buy product(s) with biodegradable container or packaging	3.41	1.199	1	5
SCB8	I don't like to waste food or beverage	4.46	0.844	1	5
SCB9	I recycle my old stuffs in every possible ways	3.67	1.135	1	5
SCB10	I reuse shopping bag(s) every time go for shopping	3.97	1.169	1	5
SCB11	I plan carefully before I purchase product or service	3.90	1.082	1	5
SCB12	I do care for the natural environment	4.25	0.906	1	5
SCB13	I use eco-friendly products and services	3.61	0.966	1	5
SCB14	I purchase and use products which are environmental friendly	3.53	0.940	1	5
SCB15	I often pay extra money to purchase environmentally friendly product (e.g., organic food)	3.09	1.160	1	5
SCB16	I am concerned about the shortage of the natural resources	3.96	0.987	1	5
SCB17	I prefer to use paper/jute bag since it is biodegradable	3.94	1.033	1	5
SCB18	I love our planet.	4.52	0.808	1	5
SCB19	I always remember that my excess consumption can create hindrance for the future generation to meet up their basic needs.	3.89	1.071	1	5
SCB20	I care for the need fulfilment of the next generation.	3.96	1.017	1	5
SCB21	I think about future generation's quality of life frequently.	3.79	1.115	1	5

SCB22	I try to control my desire of excessive purchase for the sake of future generation.	3.54	1.147	1	5
SCB23	I am concerned about the future generation.	3.90	1.070	1	5
SCB24	I try to minimize the excess consumption for the sake of preserving environmental resources for the future generation.	3.70	1.037	1	5

Table 2: Descriptive Analysis of SCB (N = 200)

Structure of SCB

To analyse the structure of SCB and sort the respondents into homogeneous sub-groups K-means cluster analysis has been conducted using R Studio software. On the basis of *within groups sum of squares* function, the respondents were segregated into 2 clusters as shown in the figure 1.

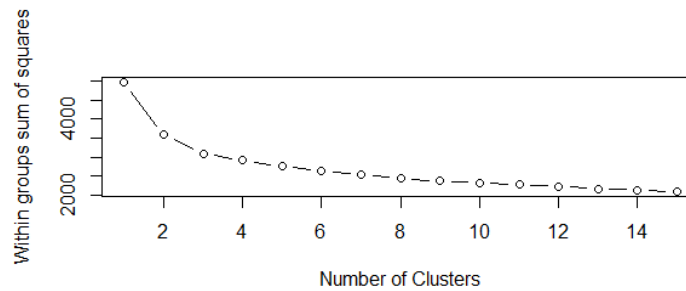


Figure 1: WSS plot of cluster

The table 3 reflects that cluster 1 has a higher mean (4.27) than cluster 2 (3.16) and respectively for each item too which suggests that respondents lying in the cluster 1 are more actively participating in maintaining sustainability in their respective consumption behaviour. 63% of the respondents (126) are classified as active participants while 37% of the respondents (74) are classified as moderate participants who are segregated into cluster 1 and 2 respectively.

SCB Items	Cluster Means	
	1	2
SCB1	4.34	3.30
SCB3	3.88	3.19
SCB4	3.87	3.32
SCB5	4.60	3.45
SCB6	4.56	3.66
SCB7	3.81	2.72
SCB8	4.72	4.00
SCB9	4.13	2.88
SCB10	4.44	3.18
SCB11	4.32	3.18
SCB12	4.56	3.72
SCB13	4.00	2.93
SCB14	3.90	2.91
SCB15	3.48	2.41
SCB16	4.45	3.12
SCB17	4.39	3.16
SCB18	4.83	3.99
SCB19	4.38	3.04

SCB20	4.47	3.09
SCB21	4.35	2.84
SCB22	4.06	2.66
SCB23	4.40	3.05
SCB24	4.20	2.85
Average	4.27	3.16

Table 3: Descriptive Analysis of Cluster Means

Table 4 presents a summary of the demographic segregation of the sample among the 2 clusters.

Variables	Options		Cluster		Total
			1	2	
Age	18-25	Count	54	33	87
		% within age	62.07	37.93	100%
	26-45	Count	54	31	85
		% within age	63.53	36.47	100%
	46-60	Count	18	10	28
		% within age	64.29	35.71	100%
Gender	Male	Count	60	38	98
		% within gender	61.22	38.78	100%
	Female	Count	66	36	102
		% within gender	64.71	35.29	100%
Educational Qualification	Upper Elementary	Count	0	1	1
		% within education	0.00	100.00	100%
	Senior Secondary	Count	10	11	21
		% within education	47.62	52.38	100%
	Graduation	Count	48	33	81
		% within education	59.26	40.74	100%
	Post Graduation	Count	57	22	79
		% within education	72.15	27.85	100%
	PhD	Count	10	5	15
		% within education	66.67	33.33	100%
	Other	Count	1	2	3
		% within education	33.33	66.67	100%
Income Level	0-2.5L	Count	41	20	61
		% within income	67.21	32.79	100%
	2.5-5L	Count	20	9	29
		% within income	68.97	31.03	100%
	5-7.5L	Count	16	12	28
		% within income	57.14	42.86	100%
	7.5-10L	Count	12	14	26
		% within income	46.15	53.85	100%
	Above 10L	Count	37	19	56
		% within income	66.07	33.93	100%
Area	Delhi	Count	58	33	91
		% within area	63.74	36.26	100%
	Faridabad	Count	3	4	7

	% within area	42.86	57.14	100%
Ghaziabad	Count	47	26	73
	% within area	64.38	35.62	100%
Gurugram	Count	9	5	14
	% within area	64.29	35.71	100%
Noida/Greater Noida	Count	9	6	15
	% within area	60.00	40.00	100%

Table 4: Summary of SCB clusters by demographic variables (N = 200)

It is clear from the summary that the proportion of females clustered into active participants is higher than that of male active participants. Also, is visible from the table that with higher income, the proportion of active participants continues to fall, except for the highest income group of above 10 lakh. Age is not a factor impacting respondents' sustainability habits since the proportion is almost the same for all age groups. However, education plays a significant role in incorporating sustainability habits in consumption patterns, as highly educated respondents seem to be more active participants.

CONCLUSION

The paper aims to close the research gap in the measurement of the construct 'sustainable consumption behaviour' and its analysis. Based on the questionnaire, the current situation of SCB in Delhi NCR region has been discussed. The descriptive analysis reflects that the existing level of sustainability in the consumption habits of the respondents in the mentioned area is moderate, with some respondents reflecting active participation in maintaining sustainability. Also, the K-means cluster analysis has divided the respondents into 2 clusters, which is graphically represented in the figure 2. The visual insight that can be gained from the plot is that data points have been strictly characterized into 2 heterogeneous clusters since there is no overlapping; however, they are not well-separated since their centres are not very far from each other.

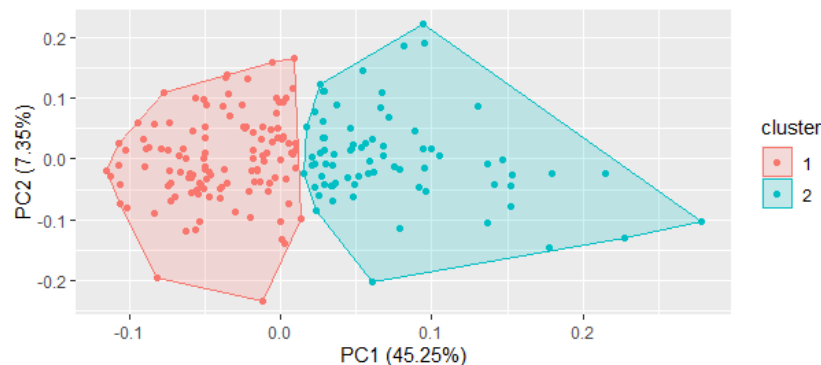


Figure 2: K-means Cluster Plot

The paper has also analysed whether demographic variables impact the sustainability habits of the respondents. Education was a vital demography in incorporating sustainable consumption practices among the respondents.

In conclusion, the effect of education on sustainability is unequivocally profound and far-reaching. This research has illuminated the transformative potential of education in fostering sustainable practices at individual, societal, and global levels. Education imparts knowledge about environmental challenges and cultivates a critical understanding of the intricate interplay between human actions and the ecosystem. Through increased awareness and knowledge dissemination, education empowers individuals can make more informed choices to minimize their ecological footprint. It nurtures a sense of responsibility and stewardship, encouraging the adoption of sustainable behaviours and rejecting practices that undermine the planet's well-being.

Furthermore, education's ripple effect extends to policy formulation, as educated citizens become catalysts for advocating and driving sustainable policies and initiatives. Educated individuals are can effectively engage in informed dialogues, influence decision-makers, and contribute to creating a more sustainable future. However, the potential of education to drive sustainability is not automatic. A comprehensive approach is essential, integrating interdisciplinary perspectives that connect environmental, social, and economic dimensions of sustainability.

Ensuring that educational curricula embrace these aspects equips learners with a holistic understanding of sustainability's challenges and opportunities. In essence, education acts as a cornerstone for the foundation of sustainability. It can transcend boundaries and generations, shaping values, attitudes, and behaviours that align with the long-term health of our planet. As we navigate an era of unprecedented environmental challenges, investing in education becomes a necessity and a strategic imperative for fostering a harmonious coexistence with nature.

POLICY RECOMMENDATIONS

In light of the comprehensive analysis conducted in this research paper, several policy recommendations emerge that hold the potential to address the identified challenges and capitalize on the opportunities. Firstly, the literature review highlights the gap that exists in the effective measurement of sustainable consumption behaviour specifically in Delhi NCR regions hindering the conduct of sustainability in day to day consumption habits. The recommendations are rooted in the empirical findings and insights garnered from the study's investigation. Based on the significance of education and income level in shaping sustainable consumption habits as highlighted in this research, the following policy recommendations are put forth:

1. **Promotion of Financial Literacy and Education:**

Encourage comprehensive financial literacy programs at all educational levels. Equip individuals with the knowledge and skills to make informed financial decisions, emphasizing the long-term benefits of sustainable consumption practices.

2. **Education Integration into Curricula:**

Collaborate with educational institutions to incorporate sustainability education into curricula. Embed lessons about responsible consumption, resource conservation, and the ecological footprint of various lifestyle choices.

3. **Subsidized Access to Sustainable Goods and Services:**

Provide subsidies or vouchers that facilitate access to sustainable goods and services for individuals. This can include public transportation, energy-efficient appliances, and locally sourced organic foods.

4. **Corporate Responsibility and Transparency:**

Encourage corporations to adopt transparent practices by disclosing their environmental impact. Reward companies that adopt sustainable production methods and provide clear information to consumers about the sustainability of their products.

5. **Public Awareness Campaigns:**

Public awareness campaigns can be launched to highlight the correlation between education, income level, and sustainable consumption. These campaigns can empower individuals to make conscious choices and debunk misconceptions about the affordability of eco-friendly living.

6. **Community Engagement and Workshops:**

Organize community workshops that emphasize the importance of sustainable consumption. Foster dialogue between different income groups to exchange ideas and practices that promote sustainable living on a budget.

7. **Green Job Training and Opportunities:**

Develop training programs for sustainable jobs, such as renewable energy installation and green construction. Enhance the employability of individuals specially people belonging to lower income level by providing access to the growing green economy.

8. **Multi-stakeholder Partnerships:**

Facilitate partnerships between governments, non-governmental organizations, educational institutions, and businesses to collectively address sustainable consumption. Collaboration can lead to holistic approaches and shared resources.

9. **Long-Term Monitoring and Evaluation:**

Establish mechanisms to monitor and evaluate the effectiveness of these policies over time. Regularly assess the impact of educational initiatives, subsidies, and incentives on sustainable consumption behavior across various income levels.

By implementing these policy suggestions, stakeholders can foster positive changes, enhance existing practices, and contribute to the advancement of sustainability in Delhi NCR region.

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