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# Green Product Consumption: A Rural Women's Perspective

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#### Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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# **ABSTRACT**

Consumer awareness and perception towards green products have become increasingly significant in the context of sustainable consumption and environmental conservation efforts. This study investigates the dynamics of consumer behavior regarding green products, examining factors that influence awareness, attitudes and purchasing decisions. The study was conducted in Hisar and Mahendergarh districts of Haryana during the period of 2022-23. In each district, two villages were chosen, Dabra and Neoli Kalan in Hisar and Kanina and Dewas from Mahendergarh. From each village, a total of 10 rural women were selected. Impact of training and workshop programs on KAP of rural women was assessed by using self- developed interview schedules on consumer behavior of rural women with regard to green products. The objective of study was providing training and workshops to rural women regarding eco friendly products. Results reveal that 52.5% of respondents within the age group of 27-33 years, 37.5% had completed senior secondary

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education, and 57.5% were married. About 45% to 65% of respondents reporting an 'average' level of awareness in both districts. Among respondents, 60% experienced the highest gain in knowledge regarding point-of-purchase and health benefits. The mean difference noted post-exposure consistently exceeded that observed pre-exposure, indicating significant improvements. Cent percent of respondents exhibited a favorable overall attitude and training and workshops had significantly enhanced respondents' attitudes towards various aspects of green products. The data also reveals a 10% to 15% rise in green product usage post-exposure, accompanied by a decrease in non-usage from 10% to 35% across all green product categories in both districts. Results also revealed that approximately 10% of respondents from each district perceived green and non-green product prices as similar on average. A majority of respondents from Hisar (75% always, 25% often) and Mahendergarh (70% always, 30% often) expressed willingness to purchase green products if priced equivalently to non-green alternatives. Conclusively results showed significant knowledge gain and favorable attitudes toward green products.

Keywords: Green products; awareness; exposure; significant.

#### 1. INTRODUCTION

Consumer awareness and perception towards green products play a key role in shaping sustainable consumption patterns and environmental conservation efforts. With increasing concerns about climate change, resource depletion, and environmental degradation, there has been a growing concern among consumers in adopting products and services that have minimal negative impacts on the environment. This shift towards "green" or environmentally friendly products reflects a broader societal trend towards sustainability and responsible consumption [1,2]. Green marketing refers to the practice of selling goods and services based on their environmental benefits. One way to make a product or service more environmentally friendly is to develop it and/or package it in an environmentally friendly way. It entails many steps, such as changing the making product itself. changes to the manufacturing process, designing environmentally friendly packaging [3].

The concept of green products encompasses a wide range of goods and services that are designed, manufactured, and marketed with considerations for environmental sustainability. These products may include energy-efficient appliances, organic foods, eco-friendly cleaning products, biodegradable packaging, renewable energy solutions, among others [4,5]. They are often characterized by attributes such as recyclability, reduced carbon footprint, minimal use of harmful chemicals, and ethical sourcing practices. The desire of customers to purchase eco-certified products was heavily influenced by their understanding of production eco-mark experience, conditions. attribute

associations, household income, and employment [6].

Nowadays, people worry more about harming the environment when they use products and services. This could be because they see changes in the weather, like it getting warmer, and notice more pollution in the air and water. So, when companies use green marketing, they can meet what customers want and help with environmental worries. This can also make them stand out from competitors and get more loyal customers. Consumer awareness and perception towards green products are influenced by various factors, including environmental knowledge, personal values, lifestyle choices, economic considerations, and marketing strategies [7-9].

Perceptions of green products are shaped by multiple factors, including product efficacy, quality, price, availability, and brand reputation. People are ready to pay more for eco-friendly products if they give them something extra. If companies make the product better and offer more value to customers, it can charge more money for it. Green marketing is still new in India and we need to do more research on it to see how much we can make use of it [10]. The environment is getting worse, which is bad for people's health, both in our country and around the world. Things like using too much plastic and dirty air are making our problems worse. Green products are good because they help the environment by reducing waste and using resources better.

Right now, lots of people want to buy green products. This paper aims to explore the dynamics of consumer awareness and perception towards green products, examining

key factors that influence consumer behavior and highlighting implications for businesses, policymakers, and environmental stakeholders. Through an analysis of existing literature, consumer surveys, and case studies, this study seeks to provide insights into consumer motivations, barriers, and opportunities for promoting sustainable consumption patterns in the marketplace.

# 1.1 Objective

- To study the personal and demographic profile of rural women.
- 2. To impart training/workshop among rural women regarding eco friendly green products.
- 3. To analyze the pre and post exposure towards eco friendly green products.

#### 2. METHODOLOGY

The study was carried out in Hisar and Mahendergarh districts of Haryana during the period of 2022-23. The focus was on providing training and workshops to rural women who expressed willingness to participate in such programs and exhibited poor to fair knowledge levels and neutral to unfavorable attitudes towards green practices during the pre-test stage. Impact of training and workshop programs on KAP of rural women was assessed by using self- developed interview schedules (that was also used during objective 1) on consumer behavior of rural women with regard to green products.

In each district, two villages were chosen: Dabra from Block I and Neoli Kalan from Block II in Hisar, and Bawania from Block Kanina and Dewas from Block Mahendergarh. From each village, a total of 10 rural women were selected, resulting in a sample size of 20 rural women aged between 20 to 40 years from Hisar district, and another 20 rural women from Mahendergarh district.

In District Hisar held a two-day workshop in Neoli Kalan village (Block II, Hisar) on December 21st and 22nd, 2022, to teach rural women about "Green Consumerism for a better environment" and also organized a three-day training session in Dabra village (Block I, Hisar) from April 4th to April 6th, 2023, to help people understand the importance of eco-friendly products.

In District Mahendergarh gave a training to teach farm women about green shopping in Bawania

village (Kanina area) from November 3rd to 5th, 2022. Another training program on green shopping awareness was arranged at KVK Mahendergarh campus for Dewas village residents (Mahendergarh area) from January 5th to 7th, 2023.

The aim of the study was to assess demographic profile of respondents and impact of training/workshops on enhancing awareness and attitudes towards eco-friendly practices among rural women through pre and post exposure of knowledge.

### 3. RESULTS AND DISCUSSION

The results concerning the personal and demographic profile of rural women in Hisar and Mahendergarh districts are summarized in Table 1. In terms of age distribution among rural women surveyed during the post-test stage, it was observed that in Hisar, 45% fell within the age range of 27-33 years, followed by 29% in the 34-40 years category, with the remaining 35% aged between 20-26 years. Similarly, in Mahendergarh. the maiority (60.0%)was aged 27-33 years, 25% were in the 20-26 years range, and 15% were in the 37-40

Regarding educational achievement, the data presented in Table 1 and Fig. 2 indicated that 15% of rural women in Hisar district were graduates, while 5% were had postgraduate degrees whereas in Mahendergarh district, 10% of respondents were graduates and 5% for postgraduates. Regarding marital status, it was found that more than half of the rural women in both districts were married.

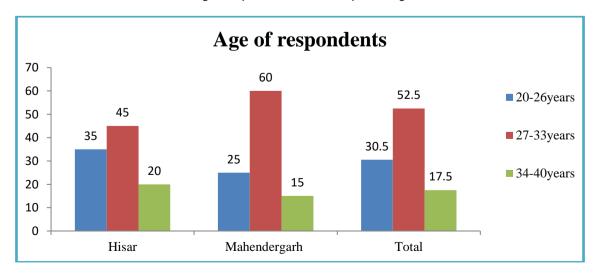
Regarding the occupation of rural women, the data and Fig. 4 showed that 30% of respondents in Hisar district and 40% in Mahendergarh were housewives, while the same percentage in both districts were engaged in agriculture. Moreover, 25% of rural women in Hisar and 15% in Mahendergarh were employed in the service sector. A smaller proportion, comprising 10% in Hisar and 20% in Mahendergarh, were involved in small business activities such as running shops.

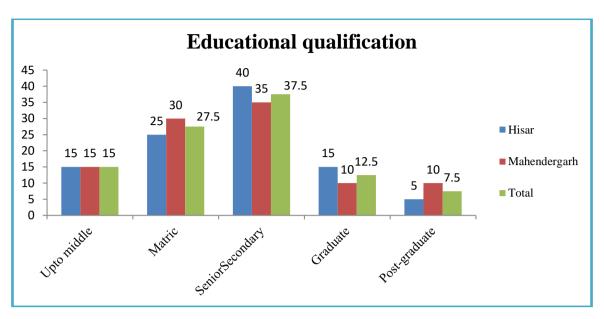
In terms of family type and size, the majority of rural women70% in Hisar and 65% in Mahendergarh, were belonged to nuclear family systems with small to medium-sized families. Furthermore, a significant portion 65% in Hisar and 82% in Mahendergarh, report a monthly family income of ≥20,000.

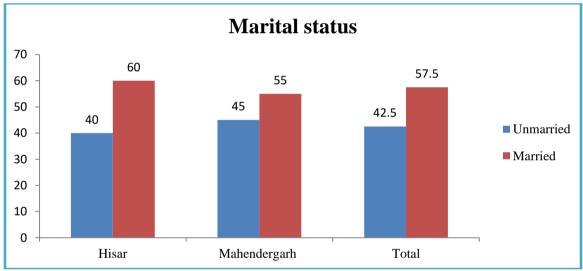
Table 1. Personal and demographic variables of rural women at Post Stage (n=40)

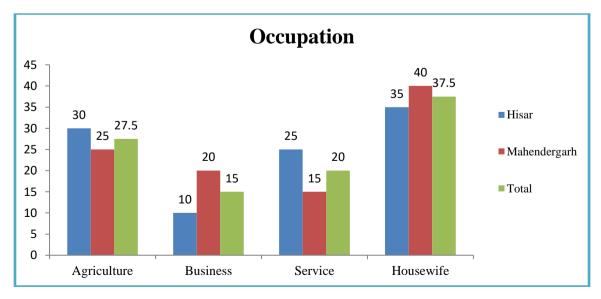
Sr. No.	Variables	Hisar (n=20) f (%)	Mahendergarh (n=20) f (%)	Total (n=40) f (%)					
1		Age(Years)							
	20-26years	7 (35.0)	5 (25.0)	12 (30.5)					
	27-33years	9 (45.0)	12 (60.0)	21 (52.5)					
	34-40years	4 (20.0)	3 (15.0)	7 (17.5)					
2	Educational qualification								
	Upto middle	03 (15.0)	03 (15.0)	6 (15.0)					
	Matric	05 (25.0)	06 (30.0)	11(27.5)					
	Senior Secondary	08 (40.0)	07 (35.0)	15 (37.5)					
	Graduate	03 (15.0)	02 (10.0)	5 (12.5)					
	Post-graduate	01 (05.0)	02 (10.0)	3 (7.5)					
3	-	Marital status	5						
	Unmarried	08(40.0)	09 (45.0)	17(42.5)					
	Married	12(60.0)	11 (55.0)	23(57.5)					
4	Occupation								
	Agriculture	06 (30.0)	05(25.0)	11 (27.5)					
	Business	02 (10.0)	04 (20.0)	06 (15.0)					
	Service	05 (25.0)	03 (15.0)	08 (20.0)					
	Housewife	07(35.0)	08(40.0)	15 (37.5)					
5		Family type							
	Nuclear	14 (70.0)	13 (65.0)	27 (67.5)					
	Joint	06 (30.0)	07 (35.0)	13 (32.5)					
6		Family size							
	Upto4 members(Small)	10 (50.0)	08(40.0)	18(45.0)					
	5-7members(Medium)	04 (20.0)	03 (15.0)	07 (17.5)					
	8membersandmore (Large)	06 (30.0)	09(45.0)	15 (37.5)					
7		Family income(mo	onthly)						
	≥20,000	13 (65.0)	14 (82.0)	27 (67.5)					
	20,001-40,000	5 (25.0)	4 (11.0)	9 (22.5)					
	≤40,001	02 (10.0)	02 (10.0)	4(10.0)					

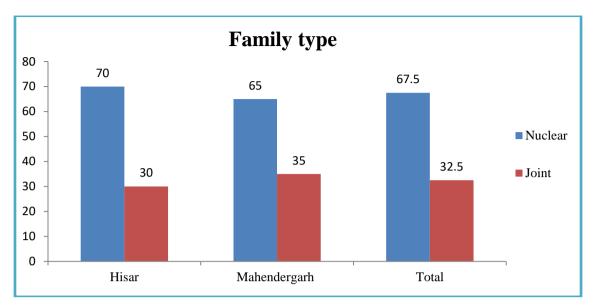
\*Figure in parenthesis indicate percentage

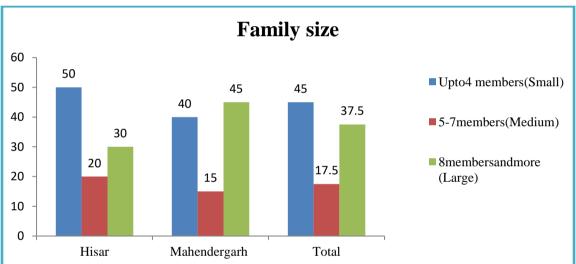












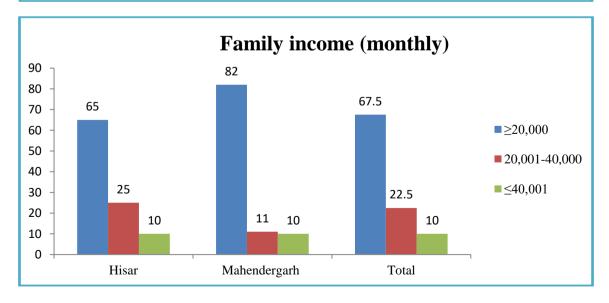


Fig. 1. Personal and demographic variables of rural women at Post Stage

Awareness about green products among the rural women at pre and post exposure stage: Table 2 presents the data on the knowledge level of rural women about green products in both Hisar and Mahendergarh districts. Knowledge levels were assessed on a scale of 1 to 5, ranging from 'very low' to 'very high' awareness. For analysis, the categories were into three levels: low to low), fair (average), and good (high to very high).

It is evident from the Table 2 that initially, more than half of the rural women in both districts had a poor level of knowledge regarding various aspects of green products, including health and environmental benefits, points of purchase, green brands offering products, symbols/certificates indicating green products (Pre knowledge). However, after exposure to and workshops, all respondents exhibited an improvement in knowledge (Post knowledge). Significant gains were recorded across all aspects of green products, with percentages ranging from 45% to 65% of respondents reporting an 'average' level of awareness in both districts.

These findings suggest that while the majority of rural women initially had low to very low levels of knowledge about green products, the training programs resulted in a considerable increase in knowledge, shifting many from low to average levels (5% to 70%). Consequently, it can be inferred that rural women in Hisar and Mahendergarh demonstrated improved knowledge regarding green products as a result of the training initiatives.

Knowledge of rural women about green products at Pre and Post exposure stage: Table 3 illustrates the data regarding the knowledge level of rural women about green products in Hisar and Mahendergarh. Knowledge was assessed using a scale from 1 to 5, where option 1 denoted 'very low', option 2 'low', option 3 'average', option 4 'high' and option 5 'very high' awareness. It is evident from Table 3 that prior to any interventions, more than one-third of rural women in both districts possessed a low to very low level of knowledge regarding various aspects of green products, including health and environmental benefits, points of purchase, products, brands offering green symbols/certificates indicating green products (Pre knowledge).

Post-exposure to training and workshops, all respondents had remarkable improvement in

knowledge. Significant gains were recorded across all aspects of green products (Post knowledge). Respondents from 41% to 61% reporting an 'average' level of awareness regarding green products in both Hisar and Mahendergarh. These findings suggest that although the majority of rural women initially had a low to very low level of knowledge about green products, the impact of training programs was significant, resulting in a considerable increase in knowledge levels from low to average (5% to 70%). Thus, the data indicate that rural women in both Hisar and Mahendergarh experienced an enhancement in their knowledge level regarding green products.

Mean differences in knowledge of rural women about green products at Pre and Post exposure stage: Table 4 compares the respondents' knowledge levels before and after exposure to training. The mean scores for knowledge about green products were higher post-exposure in both districts, indicating the positive impact of the training workshops on the respondents' knowledge.

Attitude of rural women towards green products at Pre and Post exposure stage: The data presents scores as mean ± standard deviation (S.D.). The change in attitude indicates the difference between the pre-test and post-test scores. Table 5 indicates that all respondents experienced an improvement in attitude postexposure. Significant improvements in attitude were observed across all components. Additionally, the mean differences in attitude scores regarding green products for respondents in Hisar and Mahendergarh districts are depicted in Table 5. Highly significant differences in respondents' observed for attitudes were perceived environmental benefits, willingness to use, trust in green products, and willingness to pay, perceived product performance, and overall attitude towards green products at the five percent level of significance.

Distribution of rural women according to their overall attitude towards green products: Table 6 depicts the percentage distribution of respondents' attitudes towards green products following the training and workshop sessions. The data indicates that 100% of respondents exhibited favorable attitudes. Therefore, it can be concluded that the training and workshops significantly enhanced respondents' attitudes towards various aspects of green products.

Table 2. Awareness about green products among the rural women at pre and post exposure stage (n=40)

Sr.	Particulars		Hisar r	n=20	Mahendergarh n=20			
No.		Pre test	Posttest	Increase in awareness	Pre test	Posttest	Increase in awareness	
		1.Conside	eration regardin	g green products while n	naking shop	ping		
Yes		06(30.0)	15(75.0)	09(45.0)	05(25.0)	12(60.0)	7(35.0)	
No		14(70.0)	05(25.0)	09(45.0)	15(75.0)	08(40.0)	7(35.0)	
		2.Wh	atoccurstoyour	mindonhearingthetermgro	eenproducts	3		
1	Environmental friendly	6(30.0)	13(65.0)	7(35.0)	5(25.0)	9(45.0)	4(20.0)	
2	Bio-degradable	5(25.0)	11 (55.Ó)	6(30.0)	6(30.0)	11(55.0)	5(25.0)	
3	Recyclable	10(50.0)	16(80.0)	6(30.0)	8(40.0)	16(80.0)	8(40.0)	
4	Energy saving	8(40.0)	14 (70.0)	8(40.0)	7(35.0)	15(75.0)	8(40.0)	
5	Non-toxic	12 (60.0)	16 (80.0)	4(20.0)	7(35.0)	14(70.0)	7(35.0)	
6	Low carbon	01(5.0)	6 (30.0)	5(25.0)	3(15.0)	8(40.0)	5(25.0)	
7	Water efficient	06 (30.0)	09(45.0)	3(15.0)	6(30.0)	16(80.0)	10(50.0)	
8	Green in color	05 (25.0)	11 (55.Ó)	4(20.0)	4(20.0)	10(50.0)	6(30.0)	

Table 3. Knowledge of rural women about green products at Pre and Post exposure stage (N=40)

Sr.	Particulars		Hisar (n=20)	Mahendergarh (n	Mahendergarh (n=20)					
No		Pre knowledge	Post knowledge	Gain in knowledge	Pre knowledge	Post knowledge	Gain in knowledge			
1.			General	knowledge about gre	en products					
	Poor	11 (55.0)	0	-	12 (60.0)	0	0			
	Fair	09 (45.0)	12 (60.0)	03(15.0)	8(40.0)	07(35.0)	1(5.0)			
	Good	0	08 (40.0)	08(40.0)	0	13(65.0)	13(65.0)			
2.			,	Health benefits		, ,	,			
	Poor	15(75.0)	0	-	13(65.0)	0	-			
	Fair	05(25.0)	12(60.0)	07(35.0)	07(35.0)	14(70.0)	07(35.0)			
	Good	0	08(40.0)	08(40.0)	0	06(30.0)	06(30.0)			
3.				Environmental benef	fits					
	Poor	12(60.0)	0	-	09(45.0)	0	-			
	Fair	08(40.0)	10(50.0)	02(10.0)	11(55.0)	08(40.0)	03(15.0)			
	Good	0 ` ′	10(50.0)	10(50.0)	0 ` ′	12(60.0)	12(60.0)			
4	Point of purchase									
	Poor	9(45.0)	0	-	12(60.0)	0	-			
	Fair	11(55.0)	08(40.0)	03(15.0)	08(40.0)	10(50.0)	02(10.0)			
	Good	0	12(60.0)	12(60.0)	0	10(50.0)	10(50.0)			
5.			Bra	ands offering green pr	oducts					
	Poor	13(65.0)	0	-	14(70.0)	0	-			
	Fair	07(35.0)	11(55.0)	04(20.0)	06(30.0)	13(65.0)	07(35.0)			
	Good	0	09(45.0)	09(45.0)	0	07(35.0)	07(35.0)			
6.			Symbols/cer	tificates declaring the	product as green					
	Poor	14(70.0)	01(5.0)	-	16(80.0)	0	-			
	Fair	06(30.0)	11(55.0)	05(25.0)	04(20.0)	10(50.0)	06(30.0)			
	Good	0	08(40.0)	08(40.0)	0	10(50.0)	10(50.0)			
7			Overa	all knowledge of green	products					
	Poor	12(60.0)	0	-	13(65.0)	0	-			
	Fair	08(40.0)	11(55.0)	03(15.0)	07(35.0)	10(50.0)	03(15.0)			
	Good	0	09(45.0)	09(45.0)	0	10(50.0)	10(50.0)			

Table 4. Mean differences in knowledge of rural women about green products at Pre and Post exposure stage

S.	Exposure stage	Hisar (n=20)			Mahendergarh	(n=20)	
No.	Parameters of Knowledge	Mean at pre exposure stage	Mean at post exposure stage	t value	Mean at pre exposure stage	Mean at post exposure stage	t value
1	General knowledge about green products	1.60±0.78	4.00±0.72	10.11*	1.50±0.65	4.05±0.67	12.22*
2	Health benefits	0.70±0.56	2.70±0.61	10.80*	0.60±0.55	2.30±0.48	10.41*
3	<b>Environmental Benefits</b>	1.00±0.44	2.60±0.40	12.03*	0.80±0.51	2.50±0.50	10.64*
4	Point of purchase	0.90±0.38	2.50±0.49	11.54*	0.75±0.39	2.20±0.47	10.62*
5	Brands offering green products	0.65±0.46	2.35±0.41	12.34*	0.65±0.53	2.00±0.49	8.36*
6	Symbols/certificate declaring the product as green	0.80±0.52	2.20±0.63	7.66*	0.62±0.61	2.45±0.58	9.72*
7	Overall knowledge of green products	9.95±1.05	15.80±1.28	15.50*	9.75±1.08	14.75±1.33	13.05*

Table 5. Mean differences in attitude of rural women about green products at Pre and Post exposure stage

Sr.	Factor	Statements		Hisar (n=2	20)	N	/lahenderga	rh (n=20)
No.			Pre	Post	t	Pre	Post	T
			Test	test	value	test	test	value
1	Perceived Benefits	Green products and non green products	2.88	4.05	7.01*	2.55	3.86	6.73*
	for environment	are alike	±0.40	±0.63		±0.64	±0.59	
		State Governments should make rigorous	3.00	4.25	8.64*	2.95	4.05	5.32*
		efforts to promote manufacturing and marketing of green products.	±0.32	±0.55		±0.58	±0.72	
		Deterioration of the environment is a	2.85	4.22	5.31*	3.00	4.01	5.94*
		serious issue and Green products can contribute in saving the environment.	±0.63	±0.52		±0.63	±0.68	
		Environment deterioration is bound to	2.69	4.10	5.94*	2.85	3.65	5.61*
		happen and green products cannot help In protecting it	±0.44	±0.62		±0.42	±0.48	
2. <b>W</b>	Willingness to use	Using green products gives a sense of	2.60	4.05	9.24*	2.44	4.15	11.26*
	_	satisfaction.	±0.46	±0.53		±0.46	±0.50	
		I want to be a part of green movement by	2.75	4.03	3.96*	2.82	3.85	4.31*
		using green products.	±0.60	±0.48		±0.61	±0.88	
		Manufacturing of green products must be	3.00	4.12		2.68	4.00	
		highly subsidized so that more	±0.55	±0.61	5.83*	±0.65	±0.54	5.03*
		companies can enter into manufacturing of green products.						
	Trust in green	Manufacturing/Production of green	2.89	3.50	3.31*	2.65	3.03	1.61
	products	products is totally Environment friendly.	±0.64	±0.52		±0.74	±0.75	
		Green products are true to Their	2.92	3.80	4.27*	2.38	3.16	4.02*
		environment friendly claims.	±0.61	±0.69		±0.68	±0.54	
		I prefer green products Over non green	2.84	4.02	6.19*	2.49	3.83	7.70*
		products.	±0.66	±0.54		±0.56	±0.54	
ļ	Willingness to pay	I would agree to pay even extra price for	3.00	3.98	6.36*	2.79	3.67	4.42*
		environment friendly products to save our environment.	±0.43	±0.52		±0.61	±0.65	
		Performance of green Products justifies	2.94	3.91	5.02*	2.81	3.88	6.39*
		its price.	±0.52	±0.69		±0.42	±0.56	

Sr.	Factor	Statements		Hisar (n=2	20)	N	Mahendergarh (n=20)		
No.			Pre	Post	t	Pre	Post	T	
			Test	test	value	test	test	value	
5	Perceived product	I am doubtful about the working	3.00	4.15	7.56*	2.95	4.10	6.42*	
	Performance	performance of green products	±0.42	±0.52		±0.61	±0.52		
		Claims of green products About health	2.60	4.16	4.76*	2.75	4.20	5.40*	
		benefits are usually exaggerated	±0.61	±0.53		±0.51	±0.60		
		Paying premium price for green products	3.00	4.11	5.52*	3.00	4.05	3.79*	
		is a mere Wastage of money	±0.56	±0.59		±0.66	±0.59		
6	Overall attitude towa	rds green products	2.86	4.03	4.63*	2.74	3.83	5.25*	
		-	±0.71	±0.88		±0.62	±0.69		

Table 6. Distribution of rural women according to their overall attitude towards green products (N=40)

Overall attitude towards green products	Hisar n=100 f(%)		Mah	endergarh n=100 f(%)	
	Pre	Post	Pre	Post	
Unfavorable (Mean Score<3)	15 (75.0)	0	18 (90.0)	0	
Neutral (Mean Score=3)	05 (25.0)	0	02 (10.0)	0	
Favorable (Mean Score>3)	0	20(100.0)	0	20(100.0)	

<sup>\*</sup>Figure in parenthesis indicate percentage

Table 7. Perception towards usage/non usage of green products (N=40)

Sample	Parameter	Organic	food	Organic	clothes	Cosmet persona care	_	Electrica	al appliances	Househ cleaning	old g materials
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Hisar	User	6	12	2	5	4	6	8	11	7	14
n=20 f (%)		(30.0)	(60.0)	(10.0)	(25.0)	(20.0)	(30.0)	(40.0)	(55.0)	(35.0)	(70.0)
(,,,)	Non-user	14	8	18	15	16	14	12	9	13	6
		(70.0)	(40.0)	(90.0)	(75.0)	(80.0)	(70.0)	(60.0)	(45.0)	(65.0)	(30.0)
Mahende rgarh	User	6	10	7	4	4	7	6	9	5	11
n=20 f(%)		(30.0)	(50.0)	(35.0)	(20.0)	(20.0)	(35.0)	(30.0)	(45.0)	(25.0)	(55.0)
` '	Non-user	14	10	13	16	16	13	14	11	15	9
		(70.0)	(50.0)	(65.0)	(80.0)	(80.0)	(65.0)	(70.0)	(55.0)	(75.0)	(45.0)

\*Figure in parenthesis indicate percentage

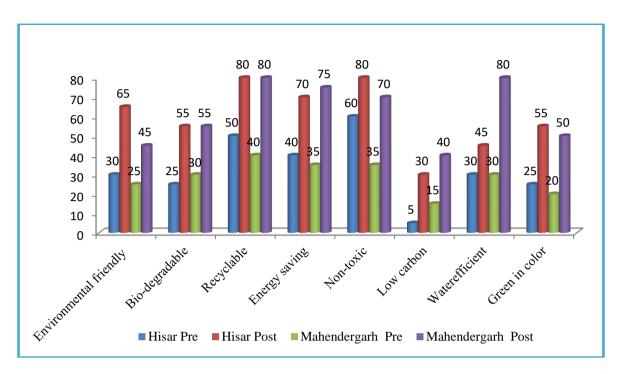


Fig. 2. Awareness about products at pre and post stage

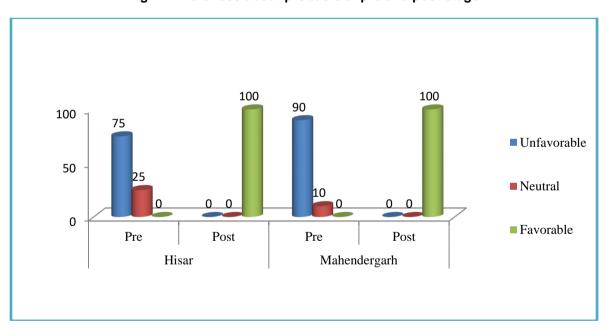


Fig. 3. The distribution of rural women's attitudes towards green products

Perception towards usage/non-usage of green products: Drawing from relevant literature, this study focused on five prevalent categories of green products: organic food, organic clothes, organic cosmetics and personal care products, green electrical appliances, and household cleaning materials. Following training sessions on the usage of eco-friendly products, the impact was evaluated in terms of rural

women's adoption or non-adoption of green products post-exposure. To assess the respondents' usage or non-usage of green products, a multiple response scale comprising the aforementioned categories was devised. Table 7 illustrates that among a total of 20 respondents from both Hisar and Mahendergarh districts, there was a noticeable 10% to 15% increase in the usage of green products post-

exposure. Additionally, for those respondents who were previously not considering green products, their proportion in terms of non-usage decreased from 10% to 35% across all categories of green products in both districts.

Perception towards prices of green products as compared to non-green products: Table 8 presents the post-stage data regarding perceptions concerning green product prices in Hisar and Mahendergarh. The percentages are derived from the number of respondents in each category out of a total of 20 respondents for each location.

In post-exposure, there was an increase in the number of respondents had perception that the prices of green products were higher compared to other products. Specifically, 17 out of 20 respondents (85%) from Hisar and 16 out of 20 respondents (80%) from Mahendergarh district shared this viewpoint. On the other hand, 10% of respondents from both districts believed that, on average, the prices of green products and non-

green products were similar. A small percentage of respondents (5% each) from both districts were not familiar with or unaware of price differentiation between green and non-green products.

Perception towards purchase of green products: Table 9 illustrates the perceptions towards purchasing green products when priced the same as non-green products, as observed in Hisar and Mahendergarh Districts post-exposure. The percentages are calculated based on the number of respondents in each category out of a total of 20 respondents for each location.

The perception towards purchasing green products also varies depending on how respondents prioritize this criterion. Table 9 reveals that a majority of respondents from Hisar (75% always, 25% often) and Mahendergarh (70% always, 30% often) were willing to purchase green products if their prices were the same as non-green products.

Table 8. Perception towards prices of green products as compared to non-green products (N=40)

Perception towards	Hisar n=20	) f (%)		Mahende	rgarh n=20 f	(%)
green product prices	Pre-test	Post-test	Gain	Pre-test	Post-test	Gain
Higher	7(35.0)	17(85.0)	10(50.0)	5(25.0)	16(80.0)	11(55.0)
Same/average	3 (15.0)	2(10.0)	1(5.0)	2(10.0)	2(10.0)	0
Don't know	10 (50.0)	1(5.0)	9(45.0)	11(55.0)	1(5.0)	10(50.0)
Lower	0 '	0	0	2(10.0)	1(5.0)	1(5.0)

\*Figure in parenthesis indicate percentage

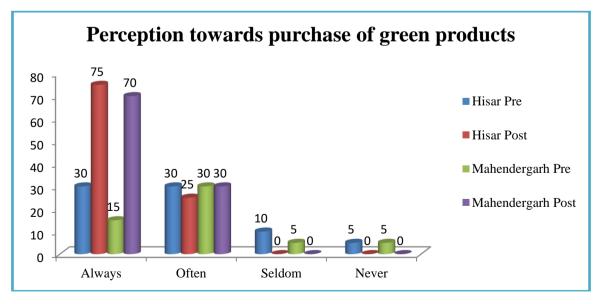


Fig. 4. Perception towards purchase of green products

Table 9. Perception towards purchase of green products (N=40)

Perception towards	Н	isar n=20 f(%	<b>6</b> )	Mahe	endergarh n=2	0 f(%)
purchase of green products	Pre-test	Post-test	Gain	Pre-test	Post-test	Gain
Always	06(30.0)	15(75.0)	9(45.0)	03(15.0)	14(70.0)	08(55.0)
Often	11(30.0)	5(25.0)	- ` ′	15(30.0)	6(30.0)	- ` ´
Seldom	2(10.0)	0	-	1(5.0)	0	-
Never	1(5.0)	0	-	1(5.0)	0	-

\*Figure in parenthesis indicate percentage

A careful examination of the Table 9 suggests that respondents have the intention and desire to contribute to environmental conservation but may lack awareness of practical steps to do so. This highlights the crucial role of marketers in raising awareness. In the area of green marketing, consumers are often willing to pay a premium for products that contribute to a cleaner and greener environment. This becomes even significant in developing countries like India. Therefore, there is a vital need to encourage consumers, manufacturers, and suppliers to minimize adverse environmental impacts through the adoption of green products.

#### 4. CONCLUSION

The research findings indicate a positive influence of trainings and workshops on the knowledge and attitudes of respondents towards various aspects of green products. At the post-exposure stage, the mean differences were consistently higher than those observed at the pre-exposure stage, signifying a significant improvement. Subsequent to the training and workshops, all respondents displayed a shift towards more favorable attitude categories. These observed enhancements in knowledge, attitude and perception can be attributed to the impact of the trainings and workshops dedicated to green products.

# **DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

I declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts. The submission has not been previously published; only want to publish in this journal.

## **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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