P-ISSN: 2618-0723
E-ISSN: 2618-0731

NAAS Rating (2025): 5.04
www.extensionjournal.com

International Journal of Agriculture Extension and Social Development

Volume 8; Issue 11; November 2025; Page No. 51-56

Received: 13-09-2025
Accepted: 17-10-2025

Indexed Journal
Peer Reviewed Journal

Assessing consumer awareness of green packaging practices in fast-food outlets in Kamrup Metropolitan District

Prajwalita Neog and Bipasa Saikia

MBA (Agri Business), Assam Agricultural University, Jorhat, Assam, India

DOI: https://www.doi.org/10.33545/26180723.2025.v8.i11a.2618

Corresponding Author: Prajwalita Neog

Abstract

The concept of green products was first introduced in the 1990s; however, consumer awareness remains limited. This study investigates consumer awareness regarding green packaging materials in the most visited fast-food outlets across Kamrup Metropolitan District, Assam. A detailed questionnaire was prepared and circulated among 16 fast-food outlets, collecting responses from 115 consumers aged below 18 years to above 59 years. The collected data were analyzed using statistical tools, including cross-tabulation, Pearson's correlation, and the Chi-square test, to examine the relationship between awareness levels and demographic variables such as age, gender, income, educational background, occupation, location, and marital status. The results indicate that consumers in the age groups II to V exhibit higher levels of awareness. Females demonstrated higher awareness than males. Graduates were more aware than postgraduates, while government employees showed the highest awareness levels, followed by business employees. Urban consumers were more aware than their rural counterparts, and married couples demonstrated higher awareness of green packaging materials. Pearson's correlation analysis revealed that age and educational level exhibit a strong positive correlation with awareness, whereas gender shows a negative correlation. The Chi-square test was employed to examine the relationship between monthly expenditure on green products and age groups. The observed Chi-square value was greater than the tabulated value at 15 degrees of freedom, indicating a significant relationship.

These findings provide valuable insights for policymakers, marketers, and businesses aiming to improve the adoption and promotion of green products among consumers.

Keywords: Awareness, education, age, green packaging, consumer

1. Introduction

The concept of green marketing was introduced in the 1990s; however, consumer awareness of green products remains limited. The increasing popularity of fast-food restaurants in today's fast-paced lifestyle has led to the generation of large amounts of packaging waste. Much of this waste is non-biodegradable, causing pollution of soil and water resources—a major environmental concern today. In response, many major fast-food chains have started using green packaging materials, and some have even transformed into fully green restaurants to protect the environment and promote sustainability. This study focuses on examining the awareness level of consumers regarding green packaging products in the Kamrup Metropolitan District of Assam. Kamrup Metro is one of the most densely populated and largest districts in Assam, catering to a high concentration of fast-food outlets. Understanding consumer awareness in this region is crucial for promoting sustainable consumption practices and guiding businesses toward environmentally responsible practices.

2. Materials and Methods

It analyzes research information using various techniques and procedures. It also aids in interpreting the data, facilitating the achievement of research objectives. The study was conducted in the Kamrup Metropolitan district of Assam, covering the financial year 2024-25. Primary data was collected from September to October 2024.

Sampling Design

The sampling technique used is the Simple Random sampling.

Selection of Green products

The study focuses on market research regarding consumer awareness and their purchasing intentions towards green products. The green products included in the study are packaging materials, cutlery, napkins and plates used for serving food in the selected outlets.

Sample selection

A total of 16 food outlets were randomly selected from Guwahati city, with 115 consumers participating in the study.

Table 1: General characteristics of the consumers

General Information	Categories	No. of consumers (N=115)	Percentage (%)
Age	Under 18 (AG-I)	2	1.74
	18-28 (AG-II)	36	31.30
	28-38 (AG-III)	48	41.73
	38-48 (AG-IV)	9	7.83
	48-58 (AG-V)	10	8.69
	Above 58 (AG-VI)	10	8.69
Gender	Female	72	63.00
	Male	43	37.00
Education	Higher Secondary	8	6.95
	Graduate	53	46.08
	Post-Graduate	52	45.21
	Doctorate	2	1.73
Occupation	Student	63	54.78
	Government Employee	22	19.13
	Private Employee	14	12.17
	Business	14	12.17
	Retired	3	2.61
Monthly income	None	63	54.78
	Below 25,000	8	6.95
	25,000-50,000	17	14.78
	50,000-75,000	11	9.56
	Above 75,000	16	13.91
Marital status	Single	79	68.70
	Married	35	30.43
	others	1	0.87
Location	Rural	26	22.61
	Urban	89	77.39
Total		115	100

Analytical tools and techniques followed

The collected data were analyzed using various statistical techniques.

Cross- tabulation

A cross-tabulation table, also known as a two-way table, is a multidimensional table that displays the number of consumers with specific characteristics. In this table type, one variable is represented in the rows and the other in the columns. The cells within the table indicate the frequency and percentage of consumers for each combination of the two variables.

Pearson Correlation Coefficient

The correlation coefficient is a statistical measure that quantifies the linear relationship between two sets of data. It assesses both the strength and direction of the relationship between the two variables. Developed by Karl Pearson, the correlation coefficient values range from +1 to -1. A value of +1 indicates a perfect positive correlation, while a value of -1 indicates a perfect negative correlation. A value of 0 suggests that there is no correlation or dependency between the two variables. The positive or negative sign signifies the direction of the relationship (Ramli & Maysari,2020) [8]. The formula for Pearson Correlation Coefficient:

$$r = \frac{[n(\Sigma xy) - (\Sigma x)(\Sigma y)]}{\sqrt{\{[n\Sigma x^2 - (\Sigma x)^2][n\Sigma y^2 - (\Sigma y)^2]\}}}$$

where, $\sum x$= Sum of scores of Demographic variables
$\sum y$ = Sum of scores of Consumer awareness
$\sum x^2$ = Sum of squares of Demographic variables
$\sum y^2$ = Sum of squares of Consumer awareness
$\sum xy$ = Sum of product of Demographic variables and consumer awareness

Chi square test

It evaluates the independence of two categorical variables by comparing the observed frequency with the expected frequency.
The formula for Chi-Square (X^2) statistic:

$$\chi^2 = \frac{\Sigma\,[(Observed\ value - Expected\ value)^2}{Expected\ value}$$

If your Chi-square calculated value is greater than the Chi-square critical value, then you reject your null hypothesis. If your Chi-square calculated value is less than the Chi-square critical value, then you "fail to reject" your null hypothesis (Asha & Rathiha, 2017) [1].

3. Results and Discussion

Consumer awareness towards Green products

Consumer awareness refers to the understanding of products, their benefits, and the process of making informed decisions based on this knowledge. It evaluates whether consumers are aware of the green products available in the market, their features, and the advantages they provide. This awareness can encourage sustainable consumption habits and promote environmental responsibility. The consumer level of awareness is analyzed using various demographic variables. The awareness level among consumers was categorized into five groups: Very Low, Low, Average, High, and Very High.

Awareness level and Demographic variables

Consumer awareness regarding green products across different demographic variables.

Age

The data indicates that the highest level of awareness was found in Group AG-V, where 90 percent of consumers fall into the 'High' awareness category. In contrast, most respondents from Groups AG-II and AG-III displayed an average level of awareness, representing 30.55 percent and 35.41 percent of the total respondents, respectively. In Group AG-I, 50 percent of participants demonstrated a low level of awareness, while the other 50 percent showed a moderate level. Similarly, in Group AG-VI, 50 percent of respondents exhibited an average level of awareness, and the remaining 50 percent were classified as having a high level of awareness. Around 39.40 percent represents a high level of awareness, while 33.04 percent indicates an average level of awareness. In contrast, 2.61 percent denotes a very low level of awareness, followed by 15.65 percent for low level and 11.30 percent for very high level of awareness.

Table 2: Consumer awareness level across Age groups

Level of Awareness	AG-I (n=2)	AG-II (n=36)	AG-III (n=48)	AG-IV (n=9)	AG-V (n=10)	AG-VI (n=10)	Overall (N=115)
Very low	-	2 (5.55)	1 (2.08)	-	-	-	3 [2.61]
Low	1 (50.00)	9 (25.00)	7 (14.58)	1 (11.12)	-	-	18 [15.65]
Average	1 (50.00)	11 (30.55)	17 (35.41)	3 (33.34)	1 (10.00)	5 (50.00)	38 [33.04]
High	-	10 (27.78)	16 (33.34)	3 (33.34)	9 (90.00)	5 (50.00)	43 [37.39]
Very high	-	4 (11.12)	7 (14.58)	2 (22.24)	-	-	13 [11.30]

Note: Figures in the () parenthesis indicate percentage to the Column total
Figures in the [] parenthesis indicate percentage to the Row total

Gender

The analysis of consumer awareness levels reveals interesting patterns based on gender. Among females (n=72), the largest group, comprising 37.5 percent, falls into the "high awareness" category. This is followed by 30.56 percent categorized as having "average awareness" and 19.45 percent labeled as having "low awareness." A smaller proportion of females demonstrate "very high awareness" (11.12%) or "very low awareness" (1.39%). For males (n=43), a similar trend is observed: 37.21 percent fall into the "high awareness" category, while 32.56 percent have "average awareness" and 16.28 percent are classified as having "low awareness." As with females, a smaller percentage of males display "very high awareness" (11.63%) or "very low awareness" (2.33%). When considering the combined data (N=115), it shows that 37.39 percent of consumers fall into the "high awareness" category, making it the most common level of awareness. Following this, 31.30% are categorized as having "average awareness." Notably, 18.26 percent have "low awareness," while 11.30 percent exhibit "very high awareness," and only 1.74 percent are categorized as having "very low awareness." Overall, this analysis suggests that most consumers possess a moderate to high level of awareness, with minimal differences between genders, as both males and females show similar distributions across the various awareness levels.

Table 2: Consumer awareness level across the Gender of the respondents

Level of Awareness	Female (n=72)	Male (n=43)	Overall (N=115)
Very low	1 (1.39)	1 (2.33)	2 [1.74]
Low	14 (19.45)	7 (16.28)	21 [18.26]
Average	22 (30.56)	14 (32.56)	36 [31.30]
High	27 (37.5)	16 (37.21)	43 [37.39]
Very high	8 (11.12)	5 (11.63)	13 [11.30]

Note: Figures in the () parenthesis indicate percentage to the Column total
Figures in the [] parenthesis indicate percentage to the Row total

Educational level

The table 3 reveals that awareness levels about green products vary significantly across different educational qualifications. Among higher secondary respondents, half exhibit a low level of awareness, indicating limited exposure or understanding at this stage. Graduates and postgraduates demonstrate higher awareness levels, with 41.50 percent and 36.53 percent, respectively, reporting a high level of awareness, showcasing the influence of education on familiarity with green products. Interestingly, postgraduates also have a notable proportion (32.70%) with average awareness. Doctorate-level respondents, though few, show extreme variations, with one indicating very high awareness and another showing average awareness. Most respondents (36.52%) report high awareness, followed by average awareness (31.30%). However, a small fraction (2.61%) remains at a very low awareness level, highlighting areas for targeted awareness campaigns to bridge the knowledge gap, especially among less educated groups.

Table 3: Consumer awareness level across Educational level

Level of Awareness	Higher secondary (n=8)	Graduate (n=53)	Post Graduate (n=52)	Doctorate (n=2)	Overall (N=115)
Very low	1 (12.50)	1 (1.88)	1 (1.92)	-	3 [2.61]
Low	4 (50.00)	11 (20.75)	7 (17.30)	-	22 [19.13]
Average	2 (25.00)	16 (30.18)	17 (32.70)	1 (50.00)	36 [31.30]
High	1 (12.5)	22 (41.50)	19 (36.53)	-	42 [36.52]
Very high	-	3 (5.66)	8 (15.38)	1 (50.00)	12 [10.43]

Note: Figures in the () parenthesis indicate percentage to the Column total
Figures in the [] parenthesis indicate percentage to the Row total

Occupation

The table 4 illustrates the differences in awareness levels regarding green products among various occupational categories. Among students, the most common awareness level is average (38.09%), followed by high awareness at 28.57 percent, while very low awareness is rare, comprising only 1.58 percent. Government employees show the highest percentage of individuals with high awareness (59.09%), along with a notable 18.18 percent reporting very high awareness, indicating strong exposure to green products within this group. Private employees mainly exhibit average awareness (42.85%), with a substantial 35.71 percent also

reporting high awareness; however, a small minority (7.14%) indicates very low awareness. Business respondents tend to have high awareness levels (57.14%), followed by average awareness at 7.14 percent and very high awareness at 14.28 percent, suggesting a strong focus on green product knowledge in entrepreneurial settings. Retired individuals exhibit a more polarized pattern, with one reporting very low awareness and another reporting low awareness. Overall, the majority of respondents (38.26%) display high awareness, followed by those with average awareness (29.57%), while very low awareness remains minimal at 2.61 percent. This distribution highlights the need for targeted awareness strategies, especially for groups with lower familiarity, such as retired individuals and some private employees.

Table 4: Consumer awareness level across different Occupation

Level of Awareness	Student (n=63)	Government employee (n=22)	Private employee (n=14)	Business (n=14)	Retired (n=2)	Overall (N=115)
Very low	1 (1.58)	-	1 (7.14)	-	1 (50.00)	3 [2.61]
Low	14 (22.23)	2 (9.09)	-	3 (21.42)	1 (50.00)	20 [17.39]
Average	24 (38.09)	3 (13.63)	6 (42.85)	1 (7.14)	-	34 [29.57]
High	18 (28.57)	13 (59.09)	5 (35.71)	8 (57.14)	-	44 [38.26]
Very high	6 (9.52)	4 (18.18)	2 (14.28)	2 (14.28)	-	14 [12.17]

Note: Figures in the () parenthesis indicate percentage to the Column total
Figures in the [] parenthesis indicate percentage to the Row total

Monthly income

Among individuals with no income, 33.34 percent are classified as having an average level of awareness, while 30.15 percent fall under the high level of awareness. Additionally, 22.23 percent are categorized as having a low level of awareness, and 12.70 percent are classified as having a very high level of awareness. For consumers with an income below Rs. 25,000, 50.00% are at the average level of awareness, while the remaining 25.00 percent are divided evenly between the low and very high levels of awareness. Among those with an income between Rs. 25,000 and Rs. 50,000, 58.82 percent fall into the high level of awareness category, with 11.76 percent in each of the low, average, and very high levels of awareness. For individuals earning between Rs. 50,000 and Rs. 75,000, 36.37 percent are classified as having a high level of awareness, while 27.28 percent are at the average level. The remaining respondents are evenly split, with 18.18 percent in the low level and very high level of awareness categories. Among those earning Rs. 75,000, 50.00 percent display a high level of awareness, while 37.5 percent and 12.5 percent represent the low level and average level of awareness, respectively. Overall, the maximum awareness level observed is high, at 37.39 percent, followed by the average level of awareness at 33.04 percent. Only 1.74 percent exhibit a very low level of awareness.

Table 5: Consumer awareness level across different Monthly income

Level of Awareness	None (n=63)	Below Rs. 25,000 (n=8)	Rs.25,000-50,000 (n=17)	Rs.50,000-75,000 (n=11)	Above Rs.75,000 (n=16)	Overall (N=115)
Very low	1 (1.58)	-	1 (5.88)	-	-	2 [1.74]
Low	14 (22.23)	2 (25.00)	2 (11.76)	2 (18.18)	2 (12.50)	22 [19.13]
Average	21 (33.34)	4 (50.00)	2 (11.76)	3 (27.28)	6 (37.50)	38 [33.04]
High	19 (30.15)	2 (25.00)	10 (58.82)	4 (36.37)	8 (50.00)	43 [37.39]
Very high	8 (12.70)	-	2 (11.76)	2 (18.18)	-	12 [10.43]

Note: Figures in the () parenthesis indicate percentage to the Column total
Figures in the [] parenthesis indicate percentage to the Row total

Marital status

The table reveals differences in awareness levels about green products based on marital status. Among single respondents, the majority exhibit average awareness (34.17%), followed by high awareness (30.37%), while very low awareness is minimal (2.53%). Married individuals predominantly report high awareness (45.71%), suggesting a greater familiarity or interest in green products among this group. The "Others" category, represented by a single respondent, reports average awareness, contributing minimally to the overall distribution. Overall, the majority of respondents (34.78%) exhibit high awareness, followed closely by average awareness (33.04%), while very low awareness remains rare (1.74%). These findings indicate a generally good level of awareness across marital statuses, with married individuals showing slightly higher levels of

familiarity compared to singles. Targeted outreach could further enhance awareness, particularly for groups with lower representation in higher awareness categories.

Table 6: Consumer awareness level across Marital status

Level of awareness	Single (n=79)	Married (n=35)	Others (n=1)	Overall (N=115)
Very low	2 (2.53)	-	-	2 [1.74]
Low	16 (20.25)	5 (14.28)	-	21 [18.26]
Average	27 (34.17)	10 (28.57)	1 (100)	38 [33.04]
High	24 (30.37)	16 (45.71)	-	40 [34.78]
Very high	10 (12.65)	4 (11.42)	-	14 [12.17]

Note: Figures in the () parenthesis indicate percentage to the Column total
Figures in the [] parenthesis indicate percentage to the Row total

Location

The table reveals distinct patterns in awareness levels about green products between rural and urban respondents. Among rural individuals, the largest proportion (38.46%) exhibits high awareness, followed by average awareness (26.92%), and a significant percentage (19.23%) reports very high awareness. Interestingly, no rural respondent falls under the very low awareness category, indicating a baseline familiarity with green products in rural areas. Urban respondents also predominantly exhibit high awareness (28.70%), though the proportion is slightly lower compared to rural respondents. Average awareness accounts for 26.08 percent, while very low awareness is minimal at 2.24 percent, suggesting that urban respondents have a more diverse spread of awareness levels. Overall, high awareness is the most common level (37.39%), followed by average awareness (32.17%). Very high awareness (10.43%) is more prevalent among rural respondents compared to urban ones. These findings indicate that while urban areas may have a broader range of awareness levels, rural respondents show a stronger concentration in higher awareness categories, presenting unique opportunities for tailored awareness initiatives in both segments.

Table 7: Consumer awareness level across different Locations

Level of Awareness	Rural (n=26)	Urban (n=89)	Overall (N=115)
Very Low	-	2 (2.24)	2 [1.74]
Low	4 (15.38)	17 (19.10)	21 [18.26]
Average	7 (26.92)	30 (26.08)	37 [32.17]
High	10 (38.46)	33 (28.70)	43 [37.39]
Very high	5 (19.23)	7 (7.86)	12 [10.43]

Note: Figures in the () parenthesis indicate percentage to the Column total
Figures in the [] parenthesis indicate percentage to the Row total

Pearson's correlation coefficient and demographic variables

The correlation analysis highlights varying degrees of association between demographic variables and awareness levels about green products. Educational qualification shows the strongest positive correlation (r=0.9958), explaining 99.10 percent of the variation, with a highly significant relationship (p=0.0041). Similarly, age exhibits a strong positive correlation (r=0.8222), accounting for 67.60 percent of the variation (p=0.0446). Gender shows a strong negative correlation (r=−0.9790), explaining 95.80 percent of the variation with a highly significant p-value (p=0.0000). In contrast, occupation (r=−0.6137) and marital status (r=−0.5544) display moderate negative correlations, but their relationships are not statistically significant. Monthly income has a weak positive correlation (r=0.4731), explaining only 22.30 percent of the variation, with no significant relationship (p=0.4209). These results suggest that educational qualification, age, and gender are key factors influencing awareness, while income, occupation, and marital status have weaker or insignificant impacts.

Table 8: Pearson's correlation coefficient and demographic variables

Sl. No.	Demographic variables	Pearson's correlation coefficient (r)	r^2	p-value	Covariance	t-statistics
1.	Age	0.8222	0.676	0.0446*	0.755	2.889
2.	Gender	-0.9790	0.958	~0.0000**	-0.005	-51.020
3.	Educational qualification	0.9958	0.991	0.0041**	0.890	15.402
4.	Occupation	-0.6137	0.376	0.2706	-0.920	-1.346
5.	Monthly income	0.4731	0.223	0.4209	0.175	0.930
6.	Marital status	-0.5544	0.307	0.6259	-0.150	-0.667

*Significant at 5% level, **Significant at 1% level

Monthly expenditure on Green products

The Table 9 provides insights into the monthly expenditure patterns across various income groups (AG-I to AG-VI). The majority of respondents (57.00%) report spending less than ₹2,000 per month, with AG-I (100%) and AG-II (75.67%) having the highest concentration in this category. AG-III also shows a significant proportion (55.31%) spending less than ₹2,000, while the percentage decreases progressively in higher income groups. Respondents in AG-V and AG-VI predominantly fall into the ₹2,000-4,000 expenditure range, accounting for 70.00 percent and 33.34 percent, respectively. Expenditure above ₹4,000 is rare, with only 6.10 percent spending between ₹4,000-6,000 and 4.34 percent spending more than ₹6,000, primarily seen in AG-V and AG-VI. The Chi-square test reveals an observed value of 27.62, which exceeds the tabular value (25) at 15 degrees of freedom, indicating a significant relationship between monthly expenditure and income groups. This suggests that expenditure patterns are strongly associated with income levels, with lower-income groups concentrating on minimal expenditure and higher-income groups showing a gradual shift toward higher expenditure categories.

Table 9: Monthly expenditure on Green products

Monthly expenditure	AG-I (n=2)	AG-II (n=37)	AG-III (n=47)	AG-IV (n=9)	AG-V (n=10)	AG-VI (n=12)	Frequency (N=115)
Less than Rs.2,000	2 (100)	28 (75.67)	26 (55.31)	3 (33.34)	1 (10.00)	5 (41.67)	65 [57.00]
Rs.2,000-4,000	-	6 (16.21)	18 (38.29)	3 (33.34)	7 (70.00)	4 (33.34)	38 [33.04]
Rs.4,000-6,000	-	2 (5.40)	1 (2.12)	1 (11.12)	1 (10.00)	2 (16.67)	7 [6.10]
More than Rs.6,000	-	1 (2.70)	2 (4.25)	-	1 (10.00)	1 (8.34)	5 [4.34]
Chi square (Observed value)			Chi square (Tabular value)			Degrees of freedom	
27.62			25*			15	

Note: The figures in the [] indicate percentage to Row total *0.05 level of significance
The figure in the () parenthesis indicate percentage to Column total

Conclusion

The study examines consumer awareness of green products among 115 consumers across 16 fast-food outlets in Kamrup Metropolitan District, Assam. It specifically focuses on green packaging and other eco-friendly serving materials. Demographic analysis reveals that the primary consumers of these products are young, educated, urban females, with the highest awareness observed in the 28-38 age group. Urban residents and higher-income individuals demonstrate significantly greater awareness, while notable gaps remain among rural, less-educated, and older populations, highlighting the need for targeted awareness programs.

Although many consumers are using green packaging products, they often lack understanding of their purpose and environmental benefits. A substantial portion of the population remains unaware of the importance of green packaging. Awareness campaigns, particularly those leveraging digital and social media platforms, could effectively reach underserved sections of society. By addressing key factors such as awareness, affordability, availability, and credibility, businesses can encourage broader adoption of green products and practices, ultimately contributing to a more sustainable marketplace.

References

1. Asha P, Rathiha R. Consumer awareness towards green products. Int J Manag. 2017;8(5):8-14.
2. Ayuningsasi AA, Saraswaty AN. Mapping of consumption of green products for urban society Denpasar City. J Tour Econ Policy. 2021;1(1):1-6.
3. Bhati B. A study on awareness and usage of green products. Int J Res Manag Bus Stud. 2021;8(2):9-13.
4. Kumar S. Green marketing in India: A sustainable perspective. Int J Trend Sci Res Dev. 2018;2(4):932-9.
5. Patowary B. Trends in green marketing and responsible consumerism in North-East. Int J Manag. 2020;11(12):4009-15.
6. Polonsky MJ. Transformative green marketing: Impediments and opportunities. J Bus Res. 2011;64(12):1311-9. doi:10.1016/j.jbusres.2011.01.016.
7. Polonsky MJ, Rosenberger PJ. Revaluating green marketing: A strategic approach. Bus Horiz. 2001;44(5):21-30. doi:10.1016/S0007-6813(01)80057-4.
8. Ramli Y, Maysari DP. The influence of customer attitude towards customer purchase decision by implementing green marketing. Int J Emerg Trends Soc Sci. 2020;8(2):42-50.
9. Rebello AA, *et al*. A study on customer awareness on green products in Kottayam district. Project work submitted to Mahatma Gandhi University, Kottayam, in partial fulfillment of the requirement for the award of Bachelor's Degree in Commerce; 2020.
10. Shamsi MS, Siddiqui ZS. Green product and consumer behavior: An analytical study. Pertanika J Soc Sci Hum. 2017;25(4):1545-54.
11. Singh P, Kumar A. Green marketing: Its impact on the global market. Int J Novel Res Dev. 2022;7(5):48-61. https://www.ijnrd.org.