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Consumer's Preferences and Perspectives towards Plastic Packaging used for Food Delivery Services

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ABSTRACT:

The Online Food Delivery Market is expected to grow multi-fold in the coming years, thereby leading to increased consumption of Plastics which are harmful to the environment. Climate change and sustainability have been prioritized at all levels by all countries. The United Nations have also included this in their Millennium Development Goals. With the Packaging industry significantly contributing to Global Plastic Waste, it becomes crucial to understand the perspectives of Customers to shift to Eco-Friendly Packaging. **Methodology:** Literature has been reviewed and data has been collected from a sample respondents of two hundred from the District of Madurai, Tamil Nadu. **Findings & Conclusion:** The consumers are congenial and flexible to change to Eco Friendly Packaging at additional cost and effort.

Keywords: *Sustainability, Plastic Packaging, Food Delivery Service*

INTRODUCTION:

Food Delivery Service is analogous to Courier Service, in which the food ordered by the customer either through Online or Phone is delivered by the restaurant at the doorstep of the customer. Therestaurants deliver food either directly through their delivery people or with the help of Online Food Delivery Partners like Swiggy, Zomato and more. The food delivery service has been welcomed by everyone as it helpful during hectic work schedules or during periods of sickness.

The COVID-19 forced people to stay at home and did not give them a chance to visit the restaurants. The families affected by COVID also needed help with food. This caused an acute demand for food through online delivery services. The online food delivery services used in Madurai are pre- dominantly are Swiggy and Zomato.

According to the report published by Statista (Keelery, 2022) in September, the Food Delivery Market in India was worth three billion U.S. Dollars and is expected to reach by nearly 13 billion U.S. Dollars by 2025. Also FSSAI reports that approximately 40 million orders are generated in a month, aggregating all regions of India, thereby generating 22,000 metric tons of plastic waste. In an alarming situation like this, it thrusts the importance to study the awareness of Delivery Partners, Consumers and Restaurants in the usage of Plastics. This paper aims to study the awareness of consumers on the usage of Plastics in Online Food Delivery Services and check if they have the state of mind to adapt to Eco-Friendly Packaging.

OBJECTIVES OF THE STUDY:

1. To Study the Economic Profile of Consumers using Online Food Delivery Services.
2. To explore their awareness on the usage of Plastics in Online Food Delivery Services.
3. To analyze their perception towards changing to Eco-Friendly Packaging.

STATEMENT OF THE PROBLEM:

Food Delivery Service in India has been rapidly growing since the COVID-19 pandemic. Restaurants which did not provide delivery services earlier have started delivering food from pandemic times and still continue to do. Also the customers due to their hectic work schedules and many personal reasons find it convenient to order food Online. This has led to a steady growth of the Food Delivery Services Market in India which is expected to reach 13 billions U.S. dollars by 2025. As the Industry is expected to grow, it is important to make this business adapt Eco-Friendly Practices. Though various Online Food Delivery Partners are taking efforts to reduce Plastic Usage, the industry still generates 22,000 metric tons of Plastic Waste. It will be helpful to understand the perceptions of the End Consumers towards changing to Eco-Friendly Packaging.

LITERATURE REVIEW:

The Production of Plastics is a huge threat to the environment and is not just an issue in India but globally. The listing of Sustainability as one of the MDGs by the United Nations substantiates the same. The amount of *Plastic Production has increased rapidly* over the last fifty years to 288 million tons in 2012 as compared to 1.5 million tons in 1950s. (Abreo & D.Macusi, 2016). More than half of the Plastic Waste come from Single Use Plastics, which are thrown away after use and only ten percent of the plastics get recycled and re-purposed. The COVID-19 had sped up the usage of Plastics in order to avoid the spread of infections. (Song, 2020)

The customers consider Physical Characteristics of the Containers and quality of the containers as most important requirements. The customers who give importance to the material of packaging take packages made with Paper Material. In India, most of the Plastic Containers used for Food Packaging are made of Styrofoam or Plastic. Deliver Zero in USA, has introduced a system to reduce Carbon Foot Print in which food will be delivered in good quality plastic containers at a deposit fee to the customers. Customers can claim their deposit fee by returning the containers during the next delivery or at fixed collection centers. The UK based company called Deliveroo

apart from adding a Customer Opt-In feature has also extended Eco-Friendly alternatives to its restaurant partners. TheCups, Napkins and cutlery provided are made from Plant Based Materials. (ChangeStarted.com, 2021). It is important that this Industry finds eco-friendly alternatives as the statistics points out that Plastic Waste generation from Packaging Industry is equal to the Plastic Waste generation caused by various other sectors.

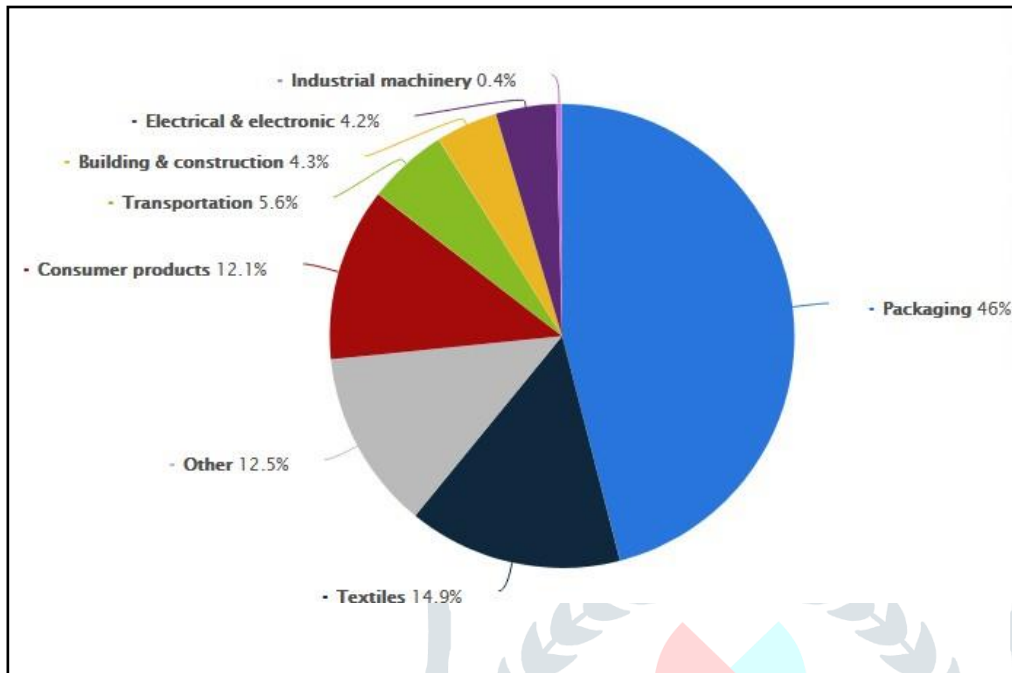


Figure 1: Global Plastic Waste Production by Sector

Source: (Tiseo, 2021), Global plastic waste production breakdown 2018, by sector. Statista. Available at <https://www.statista.com/statistics/1166582/global-plastic-waste-generation-by-sector/>

DATA ANALYSIS & FINDINGS:

The research was conducted with the help of Primary Data collected through a Survey using a questionnaire. Perceptions of the respondents were collected with the intention of understanding their perception to change to Eco-Friendly Packaging at an additional cost and effort. The questionnaire collected 100 responses through Google Forms. The data collected has been presented in Table 1 shown below.

Table 1 : Demographic Information and responses of the Respondents			
Measure	Items	Frequency	%
Age	Below 20 years	5	5
	21 to 30 years	60	60
	31 to 40 years	23	23
	41 to 50 years	11	11
	Above 50 years	1	1
Gender	Male	44	44
	Female	56	56

Marital Status	Single	60	60
	Married	40	40
Accommodation Type	Private Hostel	6	6
	College Hostel	11	11
	Paying Guest Accommodation	0	0
	Residential House without family	2	2
	Residential House with family	81	81
Family Size	1 to 2 members	7	7
	3 members	20	20
	4 members	52	52
	5 members	9	9
	More than 5 members	12	12
Frequency of Order	Once a month or rarely	69	69
	Once in two weeks	5	5
	Once a week	16	16
	Twice a week	9	9
	Everyday	1	1
Prefer placing orders through	Swiggy	44	44
	Zomato	33	33
	Restaurant Delivery Service	14	14
	Private Delivery Service	9	9
Awareness on the Grade of Plastic Used	Strongly Disagree	8	8
	Disagree	14	14
	Neutral	26	26
	Agree	39	39
	Strongly Agree	13	13
Awareness on the Harmful Effects of Plastic Used	Strongly Disagree	5	5
	Disagree	10	10
	Neutral	14	14
	Agree	42	42
	Strongly Agree	29	29
Comfort in Using Single-Use Plastics	Strongly Disagree	18	18
	Disagree	24	24
	Neutral	19	19
	Agree	25	25
	Strongly Agree	14	14
Willingness to Pay Extra for Eco-Friendly Packaging	Strongly Disagree	2	2
	Disagree	7	7
	Neutral	8	8
	Agree	46	46
	Strongly Agree	37	37
Interested in Supporting and Contributing to Green Initiatives	Strongly Disagree	3	3
	Disagree	0	0
	Neutral	8	8
	Agree	31	31
	Strongly Agree	58	58

Source: Primary Data, n = 100 respondents

The above table helps to understand the Socio-Economic Profile of respondents.

Finding 1: Significant number of respondents belong to the Age category of 21 to 30 years and are single. However they order food only once a month or rarely.

Finding 2: Significant number of respondents use Swiggy and Zomato for food delivery.

Finding 3: Significant number of respondents are aware of the Grade of Plastic used in Packaging for Food Delivery.

Finding 4: Significant number of respondents are willing to pay extra for Eco-Friendly Packaging and support Green Initiatives.

Analysis of Variance (ANOVA):

Anova between Perspective towards Plastic Packaging and Gender category of the respondents

STATEMENTS		N	Mean	Std. Deviation	F value
I am aware of the Grade of Plastic used for Single Use Plastic Packaging used for Food Packaging.	Male	44	3.136	1.1532	2.900
	Female	56	3.518	1.0786	
	Total	100	3.350	1.1225	
I am aware of the harmful effects of Single Use Plastic Packaging used for Food Packaging.	Male	44	3.750	1.1639	.155
	Female	56	3.839	1.0917	
	Total	100	3.800	1.1192	
I am interested in supporting and contributing to Green and Sustainability Initiatives.	Male	44	4.205	1.0248	4.460*
	Female	56	4.571	.7099	
	Total	100	4.410	.8773	
I am comfortable using Single – Use Plastic Packaging used for Food Packaging.	Male	44	3.000	1.3468	.214
	Female	56	2.875	1.3357	
	Total	100	2.930	1.3353	
I am willing to pay extra for Eco-Friendly Packaging.	Male	44	4.045	1.0105	.170
	Female	56	4.125	.9158	
	Total	100	4.090	.9545	

*Significant at five percent level

The above table reveals that significant differences were found between the dimensions “supporting and contributing to Green and Sustainability Initiatives” and Gender category of the respondents. Mean score comparison reveals that female respondents were found to have a higher score on the dimension.

Finding 4 : Female respondents are more interested in supporting Green Initiatives.

Anova between Perspective towards Plastic Packaging and Marital Status of the respondents

STATEMENTS		N	Mean	Std. Deviation	F value
I am aware of the Grade of Plastic used for Single Use Plastic Packaging used for Food Packaging.	Single	60	3.133	1.1419	5.863*
	Married	40	3.675	1.0225	
	Total	100	3.350	1.1225	
I am aware of the harmful effects of Single Use Plastic Packaging used for Food Packaging.	Single	60	3.617	1.1658	4.153*
	Married	40	4.075	.9971	
	Total	100	3.800	1.1192	
I am interested in supporting and contributing to Green and Sustainability Initiatives.	Single	60	4.367	.9909	.364
	Married	40	4.475	.6789	
	Total	100	4.410	.8773	
I am comfortable using Single – Use Plastic Packaging used for Food Packaging.	Single	60	3.050	1.3203	1.214
	Married	40	2.750	1.3540	
	Total	100	2.930	1.3353	
I am willing to pay extra for Eco-Friendly Packaging.	Single	60	3.967	1.0887	2.544
	Married	40	4.275	.6789	
	Total	100	4.090	.9545	

The above Table reveals that significant differences were found between the dimensions “Awareness of the Grade of Plastic used” and “Awareness of the harmful effects of Single Use Plastic” in terms of the marital status of the respondents. Mean score comparison reveals that Married respondents were found to have a higher score on both the dimensions.

Finding 5: Married respondents are more aware of the Grade of Plastics used in Packaging for Food Delivery Services.

Finding 6: Married respondents are more aware of the harmful effects of Plastics used in Packaging for Food Delivery Services.

SUGGESTIONS:

The above analysis shows that Consumers are willing and ready to change to Eco-Friendly Packaging in Food Delivery Service at an additional cost and effort. Therefore the below can be suggested:

1. Introduce Eco-Friendly Packaging that are made from Natural Materials.
2. Introduce the system of “Buy and Return” boxes used for packaging for Food Delivery Service. The customers may be charged a deposit fee while buying the boxes and claiming the deposit when returning the boxes to the delivery partner.
3. Educate youngsters and Single people on the alternate Green initiatives that can be adopted in their day to day lives.

CONCLUSIONS:

The study was conducted to analyze the Awareness level of Climate Change among respondents and understand their perspective towards shifting to Eco-Friendly Packaging. It is obvious that Eco-Friendly Packaging and Eco-Friendly Practices in the Food Delivery Services will require the consumer to bear additional cost and take additional efforts. The study reveals that a significant number of Consumers are willing to bear the additional efforts and cost on their part to shift to Green Practice. Now the Government, Delivery Partners and restaurants have to work in ways as suggested above to bring about a change and make Food Delivery system Eco-Friendly.

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