Impact of COVID-19 on consumption of FMCG products in Rural vs. Urban India

Kartik Krishna Bhat[1], Dr.Shilpa Parkhi[2]

[1] Student, Symbiosis Institute of Operations Management, Nashik, Symbiosis International (Deemed University), Pune, India
[2] Deputy Director, Symbiosis Institute of Operations Management, Nashik, Symbiosis International (Deemed University), Pune, India
Email: [2]deputy.director@siom.in

ABSTRACT

Increasing COVID-19 cases in the country has forced the government to take strict measures including complete lockdown which was imposed at the earlier stages of virus spread. This study will focus on the Impact of COVID-19 on consumption of FMCG products. The consumption behaviour of consumers in rural and urban regions of India will be compared. The changes in customer buying patterns towards FMCG products during COVID-19 lockdown will be explained in detail. Data for this research has been collected by floating a google form and also directly asking questions to people in person and via phone calls. Hypothesis testing method is used for the data analysis and to interpret the results.

Keywords

FMCG, COVID-19, Supply Chain, Distribution Network, Consumption

Introduction

Fast-moving consumer goods (FMCG) sector is the fourth largest sector in the Indian economy after agriculture, industry and service sectors. There are three main segments in the FMCG sector – food and beverages, healthcare and household and personal care.

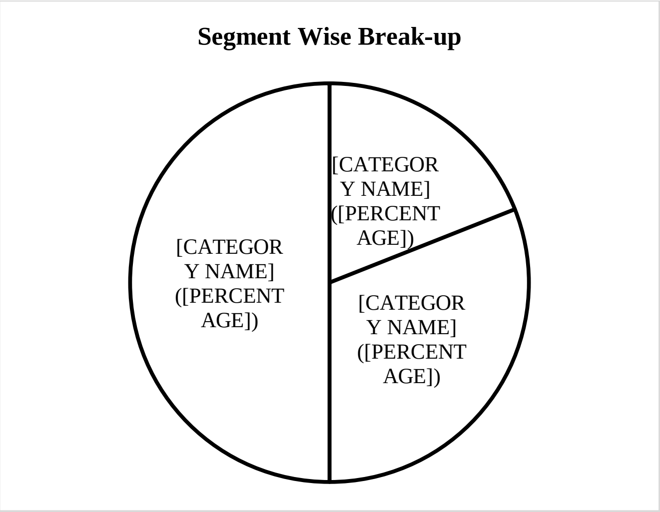

Figure 1: Segment wise break-up of FMCG sector. (Source: India Brand Equity Foundation)

The urban segment accounts for 55% of the total revenue while rural segment accounts for 45%. The urban segment is the biggest contributor to the total revenue generated by the FMCG sector in India. Nonetheless, over the most recent couple of years, the FMCG market has developed at a quicker pace in rural India contrasted with metropolitan India. Increasing awareness, simpler access and changing lifestyles have been the key development drivers for growth of FMCG in the rural India. Close to 66% of India's population live in rural areas according the 2011 census. India has over 6 lakh villages with over 88 crore population. It is a very significant market for FMCG products.

Rising income levels and increasing young population in India are the key drivers of the FMCG growth. Increasing disposable income in Rural India driving the sales of FMCG companies. Several government policies like allowing up to 100% FDI (Foreign Direct Investment) in single brand retail and up to 50% FDI in multi brand retail are boosting the FMCG growth in India. Indian FMCG sector witnessed FDI inflows of over $16 billion during April 2000 to March 2020. (FMCG Industry Analysis, India Brand Equity Foundation)

FMCG industry is expected to grow from $52.75 billion in FY2018 to an estimated $103.70 billion in FY2020. Rural FMCG market is expected to grow from $23.63 billion in FY2018 to an estimated $220 billion by FY2025. India's increasing number of online users and growth of E-commerce driving the growth of FMCG sector. Online users in India are expected to grow from 90 million in 2017 to estimated 200 million in 2020 it is expected to cross 850 million in 2025.

Online FMCG market is expected to grow from \$20 billion in 2017 to \$45 billion in 2020.India's total rural income is expected to reach \$1.8 trillion in FY2021. FMCG rural revenue has grown 11-12 percent in FY2019.

Rural distribution network is important for the growth of any FMCG company. Strong rural supply chain will result in increased market share and increased profits. Even during COVID-19 lockdown it has been observed that Rural consumption of FMCG products has been increased compared to the urban consumption. Companies having robust rural distribution network has been benefitted compared to companies which doesn't have a strong rural supply chain.

Rural customers trust their retailers and trust factor plays very important role in customer purchasing behaviours (Md. Abbas Ali, et el., 2012). Some companies believe in myths associated with the rural market. Some of those myths are: 1) Rural market is not a significant market, 2) Rural market is only about low-priced goods, 3) Rural customers are reluctant to switch brands, 4) One marketing strategy will cover all rural markets, 5) Rural market is all about distribution (Prashanth Sagi, 2011)

During the lockdown period personal consumption of FMCG products has been increased while business consumption was severely impacted due to shutdown of the businesses like hotels, resorts, food stalls, spas, saloons and others.

COVID-19 pandemic has impacted major economies and health systems of the world. Manufacturing and service sectors are the worst hit sectors in India. Indian FMCG sector faced several hurdles due to dropping and uncertain demand and also changing customer behaviour.

FMCG industry which was expected to grow at 9-10% in FY2020 is now revised lowered to 5-6% in April (Nielsen, India). Q2 (Apr, May & Jun) of 2020 was the worst hit quarter in the recent times. In April and May sales of FMCG products contracted 27.7%, with a small growth of 4.5% in June as the commercial activities started to pick up due the unlock process.

Literature Review

COVID-19 poses grave challenges to businesses and governments around the world. It changed the way the businesses work and the world hasn't faced such challenges even during war times (Michael et el.,2020). Pandemics and disasters like COVID-19 clearly influence consumption behaviours and purchase patterns. Changes in the availability of products and services to which the customers are already accustomed leads to complex customer buying patterns.

Before imposing the lockdown, many food suppliers and governments around the world promised people that essential goods and food supplies won't be affected. However, in the initial weeks of the lockdown many customers began to panic buy and started stockpiling essential goods, canned foods, instant cooking products such as noodles, pasta and also sanitizers and handwashes (Rosemarie et el., 2020).

Panic buying is a generally observed response from the people in the times of crisis or disasters due to fear and uncertainty about the future. It can be seen as rational behaviour

(e.g., accumulating essential goods that are in limited supply) or irrational behaviour (e.g., accumulating nonessential products that are not in limited supply) (Rosemarie et el., 2020). Even when supply of the products is functioning normally, panic buying caused by the rumours of material shortage itself might cause shortage of products and this behaviour might leave the supermarket shelves empty within hours. Emergency situations created by the news channels and fake rumours circulating in the social media are major reasons for this panic buying.

In the starting days of lockdown in March 2020, people responded to the corona pandemic with anxiety and fear, which lead to panic buying of essentials and hygiene products. Many urban residents, most of them who are working from home are reluctant to step into crowded public places and shopping areas. They are moving into online platforms to buy FMCG products (indianexpress.com). Online shopping has seen a growth of more than 10 per cent during the pandemic globally (Mckinsey & Co). Decreasing income levels, job cutdown by several companies coupled with low hopes about recover of the economy is forcing Indian people to spend more on essentials, such as grocery and household supplies which are on limited supply and spend less on confectionaries. A survey by Mckinsey & Co stated that about 61% of Indians became more conscious about their spending habits and 45% are moving to less expensive products (indianexpress.com).

Hygiene products saw a giant rise in demand in March 2020: hand sanitizers by nearly 350%, hand washes by ~60%, floor cleaners by ~25%. Immunity boosters also saw a rise in demand: turmeric experienced a demand rise of ~40% in March 2020. Packaged healthy foods also saw a 35% increase in their demands (EY analysis). Confectionery products and consumer durables saw a decline in demand of 25-35% and 55% respectively in March 2020.

Consumers are concerned about health and wellbeing of their family, uncertainty over availability of food and cleaning products and impacts of this crisis on their life. COVID-19 might impact some aspects of consumer's life temporarily and some aspects might experience long term impacts. This will have a huge impact on product category dynamic and how product companies operate. Short-term changes in consumer behaviour such as increased demand for sanitizers and cleaning products will stabilize over time.

As the COVID-19 situation is still evolving, it is difficult to quantify its total impact on the FMCG sector as of now. This situation is forcing the FMCG companies to invest in advanced analytics platforms to understand the customer sentiments better. They need to be agile in this changing business environment.

Objective of the Study

To identify the impact of COVID-19 on customer buying patterns towards FMCG products in urban and rural India.

Hypothesis and Explanation

Hypothesis 1

There is a shift in purchase behavior towards FMCG products in urban residents due to COVID-19 crisis

Urban residents who usually spend more on high range FMCG products, shifted their focus on buying only essentials. Several incidents of urban residents hoarding essential supplies and hygiene related products were observed during the lockdown. Urban residents became more frugal considering uncertainty about their future and jobs. Rural residents who usually buy non branded products and essentials continue to do the same even during the lockdown. There wasn't much change in their purchasing patterns even during the COVID-19 crisis

Hypothesis 2

Online shopping of FMCG products and digital payment have been increased considerably in urban areas due to COVID-19

Urban residents preferred card payments and online deliveries over cash payment and in person shopping. Urban residents who are already accustomed to buying products online found it even more convenient during the lockdown. Increasing number of smartphone and internet users fuelled this growth in online shopping. Rural residents preferred in cash and in person shopping as for most of them online payments and online deliveries are a new thing to adjust to. Also, lot of companies don't deliver to rural areas. They haven't set up their supply network in rural areas due to low demand.

Hypothesis 3

Purchase of hygiene related products are on rise due to COVID-19

People became more health conscious and cleanliness of body and surroundings became the most important task to curb the spread of COVID-19. Hygiene and cleaning related products were on high demand during the initial days of lockdown. Incidents of mass hoarding of sanitizers and stockouts at supermarkets were reported

Research Methodology

Population Profile

The population considered for the research, includes the both rural and urban consumers of FMCG products across India.

Sample Profile

A survey was floated across online platform to collect responses of FMCG product consumers. Several direct contacts and phone calls were also made to collect the responses.

Questionnaire

Questionnaire was prepared to capture the customer sentiments towards purchasing FMCG products during COVID-19. The responses were used to test the hypothesis stated above

Following questions have been included in the questionnaire

1. Area of residence – Urban or Rural **(To check whether it will impact purchase behavior)**
2. Gender
3. Occupation
4. Age
5. Have you changed your regular brands while buying FMCG products? **(to relate to hypothesis 1)**
6. Have you increased your spending on essential goods and staples during COVID-19? **(to relate to hypothesis 1)**
7. Have you reduced your spending on confectionery items (chocolates, candies etc.) during COVID-19? **(to relate to hypothesis 1)**
8. Have you preferred online shopping of FMCG products during COVID-19? **(to relate to hypothesis 2)**
9. Have you preferred digital payment over cash payment during COVID-19? **(to relate to hypothesis 2)**
10. Have you increased your spending on hygiene related products such as sanitizers, handwashes, floor cleaners etc. during COVID-19? **(to relate to hypothesis 3)**

Data analysis tools

Data analysis was conducted on Microsoft Excel using the date collected through the survey. A chi square test was performed on the data set considering 'Area of Residence-Urban/Rural' as the basic categorical variable. p-Value is obtained by inputting the observed and expected frequencies to the chi-square function. Alpha value of 0.05 is used with 95% significance.

Findings & observation

A total of 233 responses where received out of which 152 are urban residents and 81 are rural residents.

Hypothesis 1a – FMCG brand shift during COVID-19

Null Hypothesis – Urban residents haven't changed their regular FMCG brands during COVID-19.

	Observed Frequencies		**Expected Frequencies**	
Area of Residence	**Yes**	**No**	**Yes**	**No**
Urban	100	52	75.02	76.98
Rural	15	66	39.98	41.02
Total	**115**	**118**	**115**	**118**

Alternate Hypothesis – Urban residents have changed their regular FMCG brands during COVID-19.

P value obtained is 6.28E-12, which is less than 0.05

Hence, we reject the null hypothesis

Hypothesis 1b – Consumer behavior towards essential goods and staples during COVID-19

Null hypothesis – Area of residence (urban/rural) didn't influence the shift in consumer behavior during COVID-19

Alternate hypothesis – Area of residence (urban/rural) influenced the shift in consumer behavior during COVID-19

	Observed Frequencies		**Expected Frequencies**	
Area of Residence	**Yes**	**No**	**Yes**	**No**
Urban	130	22	99.16	52.84
Rural	22	59	52.84	28.16
Total	**152**	**81**	**152**	**81**

P value obtained is 5.14E-19, which is less than 0.05

Hence, we reject the null hypothesis

Hypothesis 1c – Consumer behavior towards confectionery items during COVID-19

Null hypothesis – Consumers cut down their spending on confectionery items during COVID-19

Alternate hypothesis – Consumers didn't cut down their spending on confectionery items during COVID-19

	Observed Frequencies		**Expected Frequencies**	
Area of Residence	**Yes**	**No**	**Yes**	**No**
Urban	120	32	117.42	34.58
Rural	60	21	62.58	18.42
Total	**180**	**53**	**180**	**53**

P value – 0.398, which is greater than 0.05

Hence, we fail to reject the null hypothesis

Hypothesis 2a – Online shopping

Null hypothesis – Area of residence (urban/rural) didn't influence the surge in online shopping of FMCG products during COVID-19

Alternate hypothesis – Area of residence (urban/rural) didn't influence the surge in online shopping of FMCG products during COVID-19

	Observed Frequencies		**Expected Frequencies**	
Area of Residence	**Yes**	**No**	**Yes**	**No**
Urban	138	14	103.73	48.27
Rural	21	60	55.27	25.73
Total	**159**	**74**	**159**	**74**

P value is 4.145E-24, which is less than 0.05

Hence, null hypothesis is rejected

Hypothesis 2b – Digital payments

Null hypothesis – Rural people were not reluctant to change to digital mode of payments during COVID-19

Alternate hypothesis – Rural people were reluctant to change to digital mode of payments during COVID-19

	Observed Frequencies		**Expected Frequencies**	
Area of Residence	**Yes**	**No**	**Yes**	**No**
Urban	140	12	97.85	54.15
Rural	10	71	52.15	28.85
Total	**150**	**83**	**150**	**83**

P value is 9.684E-34, which is less than 0.05

Hence the null hypothesis is rejected

Hypothesis 3 – Hygiene and cleaning products

Null Hypothesis – Area of residence (urban/rural) didn't influence the rise in demand for hygiene and cleaning products during COVID-19

Alternate Hypothesis – Area of residence (urban/rural) didn't influence the rise in demand for hygiene and cleaning products during COVID-19

	Observed Frequencies		**Expected Frequencies**	
Area of Residence	**Yes**	**No**	**Yes**	**No**
Urban	130	22	127.21	24.79
Rural	65	16	67.79	13.21
Total	**195**	**38**	**195**	**38**

P value is 0.298, which is greater than 0.05

Hence the null hypothesis can't be rejected

Conclusion

Based on the data analysis conducted and observations in the sample we can say that area of residence had a huge influence on shift in customer purchase behavior towards FMCG products due to COVID-19. It is evident that urban residents have shifting from spending more on confectionery items to spending more on essentials and staples. Online shopping and digital payments are on the rise in urban areas. Rural residents still prefer in person shopping and in cash payments; they continue to buy same products as they used to do before. Hygiene and cleaning related products saw a huge demand during COVID-19.

Limitations

Results are based on the responses received from the online survey. Since the sample size is limited, the results and findings may not represent the sentiments of the complete population.

Scope for Future Research

Further research can be conducted on impact of COVID-19 on each of FMCG segments (Food & Beverages, Health care and Household & Personal care). Shift in consumer behavior for each of these segments can be studied.

References

[1] Prashanth Sagi. (2011). RURAL VERSUS URBAN MARKET & CHANGING RURAL CONSUMERS' BEHAVIOUR IN INDIA.

[2] Md. Abbas Ali, Venkat Ram Raj Thumiki & Naseer Khan. (2012). Factors Influencing Purchase of FMCG by Rural Consumers in South India: An Empirical Study

[3] India Brand Equity Foundation (Aug 2020). Indian FMCG Industry Analysis. Retrieved from *https://www.ibef.org/industry/Fmcg-presentation*

[4] Assocham (2020). Indian FMCG Market 2020. Retrieved from *https://www.techsciresearch.com/admin/gall_content/2016/11/2016_11$thumbimg102_Nov_2016_004628313.pdf*

[5] Gaurav Shetty, Shrey Nougarahiya , Dheeraj Mandloi & Tapesh Sarsodia. (2020). COVID – 19 and Global Commerce: An Analysis of FMCG, and Retail Industries of Tomorrow.

[6] Sucharita Debnath. (2020). Impact of COVID-19 on Consumer Purchase Behaviour in Retail Sector - Study Based in Kolkata Area.

[7] Ashwin Chouhan & Dr.Rajiv Gandhi. (2020). COVID 19: IMPACT ON FMCG SECTOR IN INDIA – A REVIEW.

[8] Vibhas Sukhwani , Sameer Deshkar, & Rajib Shaw. (2020). COVID-19 Lockdown, Food Systems and Urban–Rural Partnership: Case of Nagpur, India.

[9] Rashmi Gujrati & Hayri Uygun. (2020). Covid-19 Impact on Foreign Direct Investment (FDI) and Various Sectors.

[10] Sube Singh, Ramesh Kumar, Rohit Panchal & Manoj Kumar Tiwari. (2020). Impact of COVID-19 on logistics systems and disruptions in food supply chain

[11] Jagdish Sheth. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die?

[12] Bharat Patil1 & Nerita Patil. (2020). IMPACT OF COVID-19 PANDEMIC ON CONSUMER BEHAVIOUR

[13] Dr.Ganesh Pandit Pathak & Dr.Satish Warpade. (2020). Impact of Lockdown due to COVID 19 on Consumer Behaviour while selecting Retailer for Essential Goods

[14] Aman Jha. (2020). Resuming the Paused FMCG Sector in India

[15] Rosemarie Martin-Neuninger & Matthew B. Ruby. (2020). What Does Food Retail Research Tell Us About the Implications of Coronavirus (COVID-19) for Grocery Purchasing Habits?

[16] Dr.C.Vijai & P. NIVETHA. (2020). STUDY ON CORONAVIRUS (COVID-19) IMPACT OF CONSUMER BUYING BEHAVIOR WITH SPECIAL REFERENCE TO CHENNAI CITY

[17] Michael C. Hall, Girish Prayag, Peter Fieger & David Dyason. (2020). Beyond panic buying: consumption displacement and COVID-19

[18] Assets.ey.com (2020). COVID-19 and emergence of a new consumer products landscape in India. Retrieved from https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/consumer-products-retail/2020/06/covid-19-and-emergence-of-new-consumer-products-landscape-in-india.pdf?download