Consumer Awareness, Sentiments and Behavioural Changes Related to Food Items During COVID-19 Pandemic

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ABSTRACT

Outbreak of the COVID-19 pandemic has not only disrupted the agriculture supply chain but also affected consumer behaviour towards agriculture goods and services. Though there have been many studies on consumer behaviour in the past, its study during such an extra-ordinary situation may yield some unique outcomes. To assess consumer awareness, sentiments and behavioural changes, an online survey was conducted and data were collected from 156 urban residents of Maharashtra. The results show that consumers' sentiments and behaviour in Maharashtra has been changed over the period of the lockdown. The results show that consumer behaviour towards agriculture goods and services was affected by various demographic, social and psychological factors.This study can help researchers, agri-business enterprises and policy makers to understand consumer behaviour during a pandemic so that they can take appropriate measures.

Keywords: *Consumer behaviour, Awareness, Aentiments, Covid-19*

INTRODUCTION

The COVID-19 pandemic has affected more than 210 countries across the globe, whole world is in turmoil because of its highly infectious nature. In order to contain its spread many restrictions have been imposed like Government of India declared a nationwide lockdown on 24th March 2020. Its impact can be observed on all the sectors of Indian economy and Agriculture is no exception to it. Lockdown and subsequent measures affected the supply chain of agricultural commodities. Situation has also affected the consumers' behaviour towards agricultural goods and services. Consumer behaviour is influenced by various personal, psychological and sociological factors. Therefore, the present study tries to understand the awareness of consumers about agriculture supply chain, their sentiments for supply chain as well as direct marketing and to identify changes in consumer behaviour as result of Covid-19 crisis and subsequent lockdown measures.

METHODOLOGY

Data were collected from 156 urban residents of Maharashtra (9-11May 2020) state through google form, link for which was shared to them through various platforms like email and WhatsApp groups. Maharashtra state was selected purposively as many success stories of direct marketing emerged in state during lockdown period. Online surveys are cheap, simple to set up and do not require a physical contact between the interviewers and the respondents. However, they cannot reach people who are not comfortable with technology or do not have access to technology and in-depth analysis is not possible. Limitation of the study is that because of the non-probabilistic sampling design, the sample cannot be considered as representative of the all adult population. Similar sampling method was used by Abeliotis *et al. 2014*. However, we have tried to include representative within the groups of urban population. Obtained data were analysed using SPSS software and to identify major factors determining changes in consumer behaviour (panic buying, direct purchasing etc.), LOGIT regression model was used.

RESULTS AND DISCUSSIONS

Data about socio personal characteristics of respondents showed that 76 per cent of the respondents are men, 41 per cent are aged between 21 – 30 years, 58 per cent are married, 71 per cent live in households with more than 3 to 5 members and annual income of 42 per cent respondent's ranges from Rs. 5 lakhs to 10 lakhs.

Table 1
Socio personal characteristics of respondents

Particulars	Categories	Frequency	Percentage
Gender			
	Male	119	76.3
	Female	37	23.7
Age			
	Below 20	10	6.4
	21 to 30	64	41.0
	31 to 40	54	34.6
	Above 40	28	17.9
Marital status			
	Married	91	58.3
	Unmarried	65	41.7
Family size			
	Below 3	10	6.4
	3 to5	111	71.2
	Above 5	35	22.4
Annual income			
	Below 300000	25	16.0
	300001 to 500000	50	32.1
	500001 to 1000000	66	42.3
	Above 1000000	15	9.6

In terms of difficulty faced by consumers, it was observed that respondents faced problems for the initial weeks of lockdown as transportation of agricultural produce affected in first two weeks. Lately, it has been observed that consumers had adopted themselves within the pandemic circumstances as majority of respondents (62.82%) have not reported difficulty in getting food items. According to consecutive surveys conducted by community platform Local Circles (www.economictimes.com, www.indiatimes.com), the problem of availability of essential goods across offline and online channels is getting worse during lockdown. Major difficulty faced by consumers reacted to food items during lockdown was non-availability (24%), followed by non-accessibility (15.38 %), other difficulties (13.46%) and payment difficulties (11.54%).

In terms of sources of food items, in the weeks following the lockdown, sales of all categories of food items were impacted. It has been inferred that percentage of consumers availing food items from farmers/FIG has increased from 27 to 32 per cent. Wherein, street vendor, grocery shops it has decreased slightly. On contrarily drastic decrease in case of supermarket has been observed from 45 to 19 per cent. It has been concluded that farmers/FIG have shown resilience during lockdown time.

While studying panic buying by consumers, it was observed that only 39 per cent of respondents admitted panic buying amid corona pandemic and lockdown. While the lockdown resulted in panic buying and consumers' hoarding essential items such as pulses, cereals, fruits and vegetables etc., (Jribi *et al.* 2020) report suggests that people did not stock up much oil and other food items, but only rushed to stock up on essentials. On this line Your Story, a start-up has gathered data and recorded similar observations (www.youthstory.com).

The corona virus cases spreading across the state have brought several noticeable changes in consumer behaviour viz. the way consumers consume and spend on food items after the enforcement of lockdown. Around 48 per cent of consumers have reported no change in consumption whereas expenditure of food items has increased for 37 per cent respondents.

Table 2
Sources from which consumer accessed food items

Sources	**Before lockdown**		**After lockdown**	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Street vendor	49	31.41	48	30.77
Grocery Shop	96	61.54	84	53.85
Supermarket	70	44.87	29	18.59
Farmers/FIG	42	26.92	50	32.05
Online	1	0.64	4	2.56

Table 3
Change in behaviour of consumers after lockdown

Particulars	**Categories**	**Frequency**	**Percentage**
Change in consumption			
	No Change	75	48.1
	Increased	33	21.2
	Decreased	48	30.8
Change in expenditure			
	No Change	49	31.4
	Increased	58	37.2
	Decreased	49	31.4

The widespread of virus has forced consumer to enquire about the source of food items. Interestingly 38 per cent of consumer have never communicated with the farmers while similar number of them had sometimes checked the food traceability. It has been observed that only 25 per cent of consumers have always communicated with farmers to trace the source of food items.

Table 4
Consumers communicating with farmers to trace source of food items

Communication with farmers	**Before lockdown**		**After lockdown**	
	Frequency	**Per cent**	**Frequency**	**Per cent**
Never	74	47.4	59	37.8
Sometimes	50	32.1	58	37.2
Always	32	20.5	39	25.0
Total	156	100.0	156	100.0

When asked about the price change in lockdown, approximately 85 per cent of consumers believed that prices of food items have increased during lockdown And when asked about approximate increase, majority (35 %) reported the increase in prices of food items in the range of 20-30%, followed by less than 20 per cent increased perceived by 28 per cent of the respondents.

Source of information has become more important considering the shortage of food items during lockdown. It has been reported that 65 per cent of consumers get proper information about food items during lockdown. Majority of them have received it directly from farmers/FIGs (41.67%), followed by social media (35.26%) and government sources (30.77%).

So far as awareness and sentiments of consumers are concerned, majority of consumers are aware of the farmers' role in lockdown. This pandemic has certainly made them more aware and concerned about the source and hygiene of the food items. Surprisingly only 53 per cent wants to hear about food safety measures taken by farmers during pandemic situation. Their concern is interesting, given that they appear to be at relatively lower risk of having serious health consequences if they were to contract the virus, according to most experts. This is also the generation of consumers whose behavioural changes, we posit, could most clearly define "the new normal" of everyday activities on the other side of this global crisis. PYMNTS put a study into the field to a census-balanced panel of roughly 2,128 U.S. consumers to know about its impact on how consumers day to day life and learned parallel results (www.payments.com).

Table 5
Awareness and sentiments of consumers

Particulars	Response	Frequency	Per cent
Awareness			
	Yes	151	96.8
	No	5	3.2
Change in perception			
	Yes	140	89.7
	No	16	10.3
Change in awareness			
	Yes	152	97.4
	No	4	2.6
Concern about hygiene			
	Yes	143	91.7
	No	13	8.3
Consumer willingness to hear about food safety during pandemic from farmers			
	Yes	145	92.9
	No	11	7.1
Consumer wants to hear about food safety during pandemic from farmers			
	Always	82	52.6
	Sometimes	61	39.1
	NA	13	8.3
think there should be proactively communicate about safety and quality supply of food			
	Yes	138	88.5
	No	18	11.5

For direct marketing with farmers, consumers, see an opportunity to directly connect with farmers as it carries less risk and also saves their time and money. It has been reported by the consumers that there is certainly a huge difference in market and farmers food in terms of high quality and less price. The COVID-19 pandemic is evolving rapidly, deepening the uncertainty for consumers and the economies they sustain. According to a survey by McKinsey on Asian consumer sentiment during the COVID-19 crisis, consumer mind sets will continue to shift as governments and central banks introduce unprecedented countermeasures and stimulus packages to mitigate potential impacts (www.mckinsey.com).

Table 6
Opinion and perception of consumers for direct marketing

Particulars	**Response**	**Frequency**	**Percent**
Agriculture industry has an opportunity to connect farmers directly with consumers			
	Yes		96.2
	No		3.8
purchasing directly from farmers saves their time and money			
	Yes	151	96.8
	No	5	3.2
Belief that Food produced safely			
	Yes	114	73.1
	No	42	26.9
Belief that farmer's food carries less risk			
	Yes	144	92.3
	No	12	7.7
Consumer satisfaction of direct purchase from farmers			
	Yes	149	95.5
	No	7	4.5
Difference in market and farmers food			
	Yes	145	92.9
	No	11	7.1
Details about difference in market and farmers food			
	Less Price	9	5.8
	More Price	4	2.6
	High quality	13	8.3
	Poor quantity	1	0.6
	Less quantity	2	1.3
	More quantity	2	1.3

Consumer willingness to purchase food items directly from farmers and its determinants was also studied. Considering the impact of food hygiene on health, 98 per cent of consumers are willing to purchase food items at doorstep directly from farmers whereas only 29 per cent are ready to purchase it at higher price than market, 51.9 per cent were willing to pay at market price while 18.6 per cent were willing to pay at less than market price.

Lesser the age of respondents more difficulty they faced. Similarly, persons with a smaller number of family members reported more difficulty. Consumers with more contact with the farmers and traceability of the product faced less difficulty in obtaining food. Younger respondents, persons with a smaller number of family members, persons with less annual income and less communication with the farmers for traceability of product experienced more panic buying. Younger respondents were more willing to purchase from farmers directly than older respondents. Also, persons with small family size showed more willingness to pay for direct purchase from the farmers. More the income of the respondents and respondents with more the contact with farmers had more willingness to pay for direct marketing as compared to other counterparts.

Table 7
Factors affecting the difficulty faced by consumers, panic buying and willingness of consumers for direct purchase from farmers

Variables	Difficulty faced by consumers		Factors determining panic buying by consumers		Consumer willingness to purchase food items directly from farmers post lockdown	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
Age	-0.01802	0.026195	-0.01802	0.026195	-0.04041	0.02929
Sex	0.005682	0.41044	0.005682	0.41044	0.57191	0.479125
Marital status	0.028505	0.43786	0.028505	0.43786	0.559954	0.472393
Family members	-0.14152	0.092086	-0.14152	0.092086	-0.00341	0.08669
Annual income	-7.07E-07	5.52E-07	-7.07E-07	5.52E-07	4.36E-07	4.93E-07
Communication with farmers about traceability of product	-0.246	0.238809	-0.246	0.238809	0.333584	0.244227
Constant	1.518137	1.068246	1.518137	1.068246	-1.27902	1.14016

CONCLUSIONS

Most dramatic change in day to day activities of consumers has been seen amid lockdown. It has subsequently resulted into several changes in consumer awareness as well as behaviour. It has meritoriously forced consumers to switch to farmers and their groups over supermarkets to obey social distancing and movement restrictions norms even to get daily food items. Further most food tracing has become a necessity in these curious times and preference has been given to hygiene and source of food items. Most consumers believe that there is huge difference between farmers' food and market food and admit that the role of farmer is critical in the crisis. Majority of the consumers are willing to purchase food items at doorstep directly from farmers as it saves their time and money. This opens an opportunity for farmers and farmers' groups to come together and collectively fetch better prices and assured market for their harvest. This situation offers a real opportunity to expand their consumers and build a more secure franchise for those who have been fighting against the established competitors.

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