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Analysing Consumer Behaviour towards Organic Food With Special reference cities - Mumbai & Thane

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Abstract

Business of Organic food and Organic Farming is gaining momentum world over and India is not an exception. Many states like Sikkim, Madhya Pradesh, Himachal Pradesh have taken big leap in this area. Maharashtra seems to be lagging behind. Considering the subsistence nature of majority farms, weak policy support, growth of organic food business essentially needs to be demand driven. In spite of growing awareness about harmful effects of conventional food and farming, growth in demand for organic food is surprisingly low. This paper essentially tries to analyse factors affecting consumer demand for organic food in two most populated cities of Maharashtra – Thane & Mumbai. Survey of 580 respondents was taken by using structured questionnaire and data was analysed by using simple average method and percentage analysis. High price, low educational background, faulty supply chain management were found to be reasons for less demand.

Key Words: Conventional farming, Conventional food, Organic food, Organic Farming

1.1:INTRODUCTION

Growing health & environmental problems have compelled as average Indian consumer to think about the
'the food with chemical residue' which is being produced under the title of modern technology and consumed. Growing cost of chemical farming, deceleration of farm productivity, shrinking profits and hazardous impact of chemical farming on health of farmer's families have made more and more farmers to shift from chemical farming to organic farming.

The shift may be desirable, but not easy. It takes minimum three years for a chemical farm to get converted into organic farm. Thus farmer is expected to treat these three years as transitional period, be ready for further fall in productivity and in fact treat these years as an investment for profitable & healthy future. However, things are not so easy and attractive as they look. Considering total operational land holdings of India, 67% land holdings are 'Marginal' (less than 1 hectare) and 18% are small (1 to 2 hectare) in 2010-11 (NABARD,2014). With such a small holding farming has become subsistence farming for majority Indian farmers. Under these circumstances, waiting period of three years is too long in the absence of strong governmental support. Making such costly investments becomes less feasible if market demand for such products fall short. Rather, presence of strong demand for organic food would be a biggest driving force for all farmers to shift from chemical to environmentally safer organic farming. Though India had largest number of organic producers – 6,50,000 in 2015 (Willer,2015), in case of market size for organic food, India is lagging behind. According to FIBL & IFOAM survey in 2011, per capita consumption of organic food in India was just 0.1 Euros. Barely 10% total organic food is sold in domestic market (Jaivik, 2012), 2.07% is exported whereas more than 80% of total organic produce in India is sold in local market, not as 'organic' but as regular food with or without premium price (MOFF/OFAI,2012).

The data clearly indicates lag in demand for organic food. In absence of demand no business will grow, let it be the business of organic food. No producer will produce a commodity simply because it is good for health and environment. It will be produced only when it becomes 'economically feasible'. Organic farming in the long run may give 'cost advantage' to farmers but for , farmer has to give short run survival test. It will be far easier for them to shift to organic farming if demand for organic food grows at the rapid rate the way it is growing in many countries of the world.

Indian Government already has formulated organic farming policies. Sikkim has become 100% organic. Other states too have started journey towards organic farming. Consumers are getting information related to harmful effects of conventional farming, conventional food and superiority of organic food through various TV, radio shows, and newspapers. Information seem to be growing rapidly but growth in demand is too slow. Thus it is necessary to analyse consumer behaviour by locating various factors affecting demand. Such analysis would help sellers as well as policy makers to plan future business and marketing strategies.

1.2.REVIEW OF LITERATURE

Relevant and notable research is reviewed below.
Esna, Seval and Nuri (2016) studied factors affecting demand of 500 consumers for organic food in city of Ankara, Cankaya district, Turkey. Married, graduated consumers without children of age group of 18 to 49 were found to be buying organic food because that is grown in natural way, healthy and certified. One third consumers were ready to pay premium of 50% on the price of organic food. The study indicated awareness about benefits of organic food in Turkey is more among educated, financially secured people.
Sangeetha (2015) found out that consumers demand for organic food is strongly influenced by knowledge and attitude of consumers, price as well as food attributes of organic products.
Mr. Sathis Kumar and Dr. E. Muthukumar (2016) found out that consumers in Nilgiri district gave more importance to factors like health, environmental safety, knowledge and culture where organic food was concerned. However, they were indifferent towards attributes of organic food like taste, colour of the food etc.
Santhi and Jerinabi (2011) studied behaviour of 200 consumers from Coimbatore district. According to the study, food habits, vegetarianism, social interaction and higher price were factors affecting consumer demand for organic food.
Bonti and Yirido (2006) in their final report on Meta-analysis, noted down following points regarding consumer's perception & preferences regarding organic food.

1) Consumers tend to buy organic food on the grounds of quality, naturally grown, and healthier food

2) Some studies had indicated that some consumers from the same state have clear idea of organic food and some have vague idea about it.

3) Though consumers had shown willingness to pay premium price, very few were ready to pay high premium.

After reviewing the literature an attempt is made to analyse level of knowledge that consumers of Maharashtra had about organic food. At the same time locate reasons due to which demand for organic food is not growing fast.

1.3.RESEARCH DESIGN

1.3.1: Sample area

Considering the fact that main market for organic food is urban market, pilot survey was taken of 50 respondents from cities of Mumbai, Pune, Thane, Nashik & Ratnagiri districts. Consumer responses were found to be similar across all cities of these districts. Thus for further survey, two cities- Mumbai and Thane were chosen as an area of research since both cities belonged to most populated districts of Maharashtra according to 2011 census.

1.3.2: Sample size

Samples were purposive samples and sample size was 580 respondents, where majority were female members of families since food buying decision was found to be mainly taken by female members of the family. Close ended questionnaire was used to collect data of consumers of different age, education, occupation & income groups.

1.3.3: Hypotheses

The data was collected to test following hypotheses -

Hypothesis 1: Domestic demand for organic food is less due to lack of awareness among the consumers about benefits of organic food.

Hypothesis 2: Domestic demand for organic food is limited due to supply constraints

Hypothesis 3: High price of organic food is another factor that affects demand for organic produce in India.

Hypothesis 4: Consumers buy less organic food because they are not sure of authenticity of available organic food in market.

Hypothesis 5: Effective marketing will lead to fast growth in organic business

1.3.4: Statistical tools:
Percentage analysis of the data acquired- the percentages across sub-categories were vastly different and hence no other statistical significance tests were used.

1.4.DATA ANALYSIS AND HYPOTHESES TESTING

Detailed data analysis is as follows:

1.4.1.Socio-economic profile of respondents and their knowledge of organic food

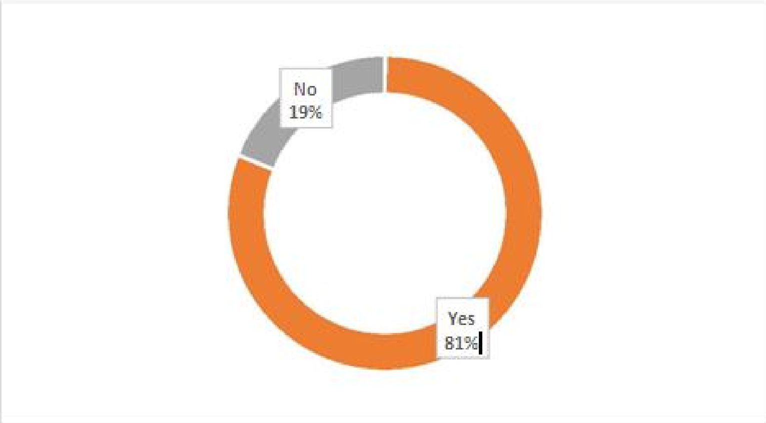

Figure 1.1: Knowledge of Organic food

As shown in figure 1.1, wide majority 81% consumers were found to be knowing about 'organic food'& only 19% were found not to be knowing existence of organic food. So the earlier assumption that consumers in urban area may not be aware of the concept of 'organic' food was proven as invalid.

When socio-economic profile of 580 respondents was analysed following facts were located.

Table 1.1: Age -wise distribution of Respondents

Age - Groups	20-30	30-40	40-50	50-60	60+	Total
Number of Respondents	218	117	113	78	54	580
No. of respondents who 'Know'	186	93	90	63	40	472
% of respondents who 'Know'	85%	79%	80%	81%	74%	81%

As seen in the table across the different age groups there is fairly high percentage of consumers who had knowledge of organic food.

Table 1.2: Educational Profile of Respondents

	illiterate	below secon	secondary	H.Secondar	graduates	PG	Professional	Total
Number of Resondents	18	36	51	53	256	89	77	580
No. of respondents who 'Know'	10	24	38	44	214	77	65	472
% of respondents who 'Know'	56%	67%	75%	83%	84%	87%	84%	81%

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As shown in the table, direct relationship was located in level of education and knowledge of organic food.
Though difference was not too large, as can be seen in table 1.2, comparatively less number of respondents with lower educational level were found to have less knowledge of organic food and vice versa.

Table 1.3: Occupational properties of respondents

	service	business	retired	housewife	student	labourer	total
Number of Resondents	**265**	**70**	**43**	**106**	**67**	**29**	**580**
No. of respondents who 'Know'	**231**	**58**	**34**	**84**	**53**	**12**	**472**
% of respondents who 'Know'	**87%**	**83%**	**79%**	**79%**	**79%**	**41%**	**81%**

Likewise, of age-wise distribution, occupation-wise distribution of respondents was found equitable as shown in the table 1.3. It means occupation of a person and knowledge of organic food has no relationship. Similar situation was found in income-wise analysis of respondents.

Table 1.4: Income – wise distribution of respondents

	>10,000	10-20,000	20-30,000	30-40,000	40-50,000	50-60,000	60-70,000	<70,000	<1,00,000	total
Number of Resondents	**49**	**88**	**82**	**69**	**82**	**63**	**47**	**50**	**50**	**580**
No. of respondents who 'Know'	**31**	**74**	**72**	**52**	**68**	**51**	**36**	**43**	**45**	**472**
% of respondents who 'Know'	**63%**	**84%**	**88%**	**75%**	**83%**	**81%**	**77%**	**86%**	**90%**	**81%**

After studying socio-economic profile of respondents, except for 'level of education', none other variables seemed to have impact on knowledge of organic food. Respondents with lower education seemed to have less knowledge of organic food.

1.4.2: Buying behaviour of consumers having knowledge of organic food:
On the basis of earlier observation that 81% respondents from Mumbai and Thane cities were found to be knowing of organic food, it was perceived that almost 81% respondents must also b consuming it or buying organic food. However, this assumption too was proven invalid. As shown in the pie chart 1.2 & table 1.5 amongst those who were aware of organic food, 26% were found to be not buying at all, 60% were buying it occasionally and only 14% were found to be buying 'only organic' food.

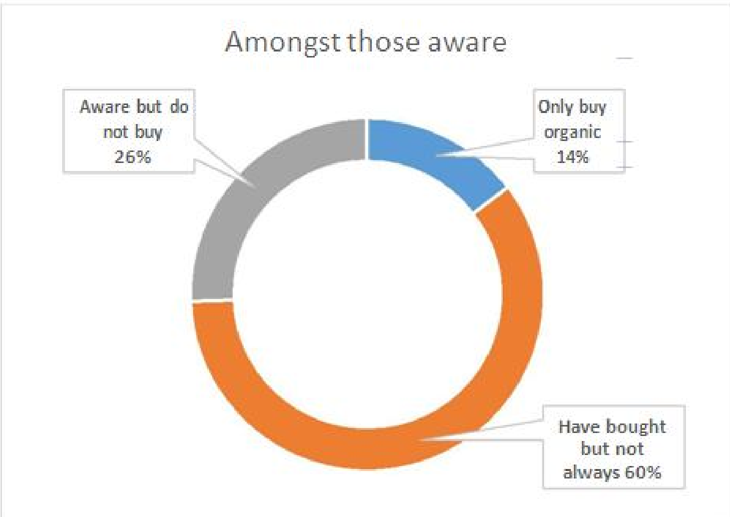

Figure 1.2: Buying behaviour of consumers aware of organic food

Table 1.5: Awareness & Buying behaviour of Organic food

	No of respondents
Do not know	108
Know but do not buy	121
Buy sometimes	282
Buy always	69
TOTAL	580

What data indicated was unexpected. Despite of knowing about the concept of organic food, consumers were not buying it regularly.

The possible reason for such situation could be that people were just aware that along with the regular food that they buy, something called 'organic food' too is available in market and they are indifferent to it.

Currently world over and also in some states of India like Sikkim, Madhya Pradesh, Rajasthan, organic movement is gaining momentum. So related news reach to masses through mediums like radio, TV, newspaper etc. Thus probability of knowing about 'organic food', as in, hearing about the concept 'organic food' is high. Just hearing the concept is not sufficient to alter buying behaviour of people. For that, one needs to understand superiority and importance of organic food over the food they are currently buying. At the same consumers need to know from where to buy and how to recognize organic food or differentiate organic food from conventional food. In short only knowing per se 'hearing the word 'organic food' is not sufficient for altering buying behaviour of consumers. They need to be fully aware of 'the concept' in terms of 'knowing benefits of organic food and significance of consuming food 'only organic'. Since out of 81% of respondents who 'knew' about organic food, only 14% claimed to be buying food' only organic', it was proved that demand for organic food in the most populated & popular cities of Maharashtra is too low. After reviewing existing literature and, keeping in view the small number of consumers buying organic food regularly, it was assumed that lack of awareness about 'the significance of organic food for healthier life' along with awareness of how to distinguish organic food with conventional

& from where to buy it, could be a strong reason for less demand for organic food.

Thus along with knowing the number of people who had 'heard' of organic food, awareness of people was tested on the basis of number of people who knew –

a) Benefits of consuming organic food

b) Problems of conventional food that they are consuming currently

c) How to differentiate organic food from conventional food (the 'norms' applied)

d) From where to buy organic food called as 'sources' of organic food

1.4.3: Awareness about benefits of organic food

Respondents who were aware of the 'concept of organic food' were asked about their perceived benefits of organic food. All 472 consumers who were aware of the name of 'organic food' seemed to be well aware of benefits of organic food except for few consumers (3%). As shown in figure 1.3, 36% perceived organic food as food grown without using chemical fertilizers, 24% believed it as food not carrying chemical pesticides, 20% said it is safer than conventional food and 17% believed that consumption of organic food, decreases cancer risk.

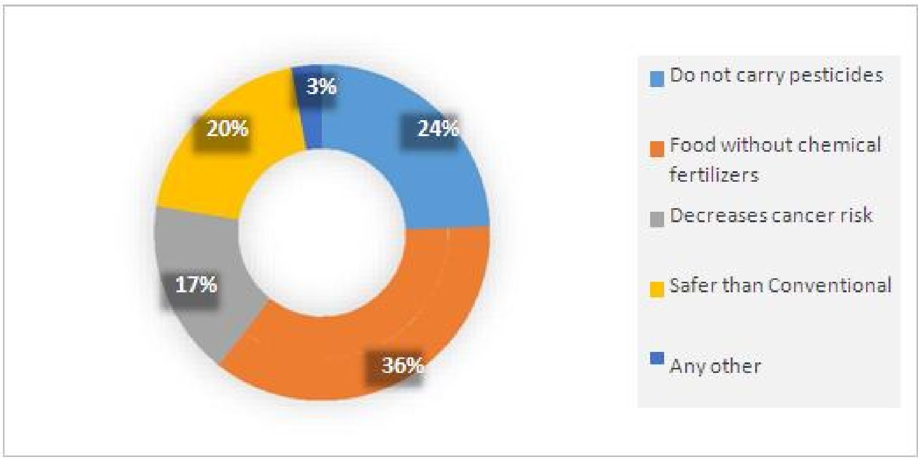

Figure 1.3: Perceived benefits of organic food

Considering the analysis of perceived benefits of organic food, 81% of urban population should be consuming organic food regularly. However, reality found, was different. There were three categories of respondents who 'knew' about organic food –

A. Those who claimed to buy all food organic were 14%

B. Those who claimed to buy organic food sometimes were 60%

C. Those who never bought it were 26%

Thus comparative analysis of two groups who claimed to be buying organic food – Buy only organic and buy occasionally was done on the basis of different parameters to check if there is any relationship between, degree of awareness and demand for organic food.

1.4.4: Comparative Analysis of awareness of people claiming to buy all food organic and people who buy occasionally:

Perceived benefits of organic food was compared between two groups. All four benefits of the list were strong enough and any one benefit chosen by consumer is enough to prove their awareness. From that point both categories of consumers were equally aware of benefits of organic food but a large group still consumed it occasionally.

Table: 1.6: Perceived benefits of organic food

Benefits	do not carry pesticides	without chemical fertilizers	decreases cancer risk	safer than conventional
only organic	25%	52%	19%	35%
not only organic	50%	68%	34%	38%

Further, number of products consumers of both categories bought were analysed on the basis of which an attempt was made to find whether consumers claiming to buy all food only organic, do so in reality.

Table 1.7: Number of products bought

Number of products	Only Organic	%	Occasionally Organic	%
Whichever product available	3	4%	80	28%
Only 1 product	29	42%	166	59%
Only 2 products	7	10%	55	20%
3 products	11	16%	32	11%
4 products	5	7%	17	6%
5 products	8	12%	6	2%
6 products	6	9%	2	1%

Interestingly, 42% of consumers buying all food only organic were found to be buying mostly only one product 'only organic' and not all food. Only 9% of the consumers are buying 6 products. From that perspective, only 6 consumers of 69, seemed to buy only organic and 63 consumers claiming to buy only organic food too become occasional buyers of organic food**. So considering this fact, almost all 351 respondents who buy organic food, buy it occasionally.**

These findings made it necessary to locate further gaps in reality and perception of people in case of organic food. Thus, more analysis was done about people's recognition norms of organic food. In short, we tried to understand, how people differentiate organic food from conventional food. The analysis was done on two bases – 1) Source from which they buy organic food 2) Norms that they apply to recognize organic food

1.4.5: Gap in reality and perception of consumers:

1) Sources of Organic food: There are five different sources of buying food in India.
Organic food stores
Rationing
shops Super
market
Grocery
Stores Farm

Table: 1.8: Sources used for buying organic food

Buy from	super market	%	grocery store	%	Farm	%	Organic Food Store	%	Rationing Shop	%
only organic	37	54%	9	13%	6	9%	31	45%	8	12%
Occasionally Organic	116	41%	30	11%	56	20%	107	38%	17	6%
Total	153	44%	39	11%	62	18%	138	39%	25	7%

a) Organic Food Stores: are stores that sell organic food by default and thus are 100% authentic source. In this case, we need not check their organic food recognition norms. Thus, we can claim that 45% of respondents from 'only organic group', 38% occasionally organic group' thus in all 39% are fully aware of organic food, and its sources.

b) Rationing Shops: Are the 'fair price shops' under Government's 'Public Distribution System' where subsidized food is made available for low income group households. In these shops food procured from farmers by Government agencies is sold. There is no scheme in Maharashtra, where

Government agency procures organic food. Thus option of buying from 'rationing shop' is certainly not authentic. It involves three possibilities –

1) The respondent may have confused 'rationing shop' as grocery store
2) The respondent is not aware of how to recognize organic food since in Maharashtra, no rationing shop sells organic food.
3) Respondent's understanding of rationing shop as well as organic food is unclear.

However negligible number of respondents, 12% of 'only organic', 6% 'occasionally organic', and only 7% in all fall in this category.

The above data throws light on one more fact which confirms conclusion drawn out of earlier analysis that consumers claiming to be buying all food organic are occasional buyers in reality. They responded as

'buying only organic; due to less conceptual clarity. 12% only organic group claims of buying that food from

'rationing shop'. It means 12% respondent of the group definitely does not know exactly what organic food is.

c) Supermarket: Is a large self-service shop that sells foods and household goods. Super market has conventional, organic food packet as well food packets with a title of 'natural 'food. Many times consumer may perceive 'natural' as organic which is a wrong perception. Any food that comes from nature or soil is 'natural', let it be produced by soil under chemical farming system or organic farming system. Thus 'natural' food does not become 'organic' food by default. Organic food can be sold with a tag of 'organic' or 'chemical free' food and not with tag as 'natural'. Thus respondents who said to be buying organic food from supermarket may or may not be actually buying organic food. It needed to be cross verified by finding out exactly what is 'organic food' for them through data collected about recognition norms of consumers. Respondents who bought organic food from supermarket were from the group of 'only organic' were 54%,' occasionally organic' were 41% and all respondents taken together were 44%.

d) **Grocery store**: is a small retail store that primarily sells food items. Grocery stores too keep few organic food products and 13% 'only organic',11% of occasionally organic group & 11% overall claimed to be buying organic food from grocery store. Authenticity of this source too need to be cross verified with recognition norms used by respondents.

e) **Farm:** However, 9% of only organic group, 20% occasionally organic group and 18% overall consumers claimed to be buying food from 'farm'. These consumers may not have conceptual clarity. Farm fresh food may be perceived as 'organic' food. However, it can be farm fresh chemical food. Fresh food bought directly from farm cannot make it organic by default. Thus further conceptual clarity will be achieved only after cross verifying recognition norms.

Thus where source is concerned,

Organic food store is the only source that ensures that respondents are buying organic food**.** Rationing shop is the source that ensures that respondents do not know what organic food really means.

In case of supermarket, grocery store and farm, the food bought is really organic needed to be cross verified.

Thus source of food data was analysed in the light of recognition norms used by respondents.

2) **<u>Sources and norms applied for recognising organic food:</u>** Label, stamp or certification printed on the packet of food item, are called valid norms of differentiating organic food from conventional food

However, organic food recognition norms can be called as 'less authentic' in case they recognize food as 'organic' on the basis of –

a) Food was bought directly from farm where they were clueless whether the farm was conventional or organic

b) Food was bought on the basis of friend's or relative's endorsement where friend's perception of organic food was not known

c) Food was bought as 'organic' on the basis of the word 'natural' printed on packet, whereas all food that comes from soil, chemically or organically grown, can be called as 'natural'.

So when authenticity of sources was cross verified by using norms, organic food selected on the basis of label, stamp & organic certification from the sources of supermarket, grocery store makes it as authentic as food directly bought from organic food store is. However, authenticity of farm fresh food would be debatable unless consumer is certain that the farm is organic farm. Organic food bought from rationing shop certainly makes the food 'not organic'. In the light of these facts, the data was further analysed.

The table given below has segmented entire data of only organic group & occasionally organic group of respondents, source and norm-wise.

Since the respondents were asked to choose all options that they have used in case of sources as well as norms, respondents had chosen more than one option. As a result, while doing data analysis, though percentages are used, those percentages hadn't summed up to 100%. The analysis was done on the basis of relatively higher percentage of responses given for a specific source & specific norm.

As discussed earlier**, Organic food store** is fully authentic source since it is a specialized store. Thus 138 respondents who purchase from organic food store are fully aware of organic food.

Rationing shop doesn't sell organic food. So 25 respondents who chose rationing shop as a source, certainly weren't buying organic food and they do not have conceptual clarity and thus are not aware of what exactly organic food is. They just 'know' or have 'heard' of the word 'organic' but are not aware of its significance. So 25 respondents definitely go in the list of unaware people.

Source of **'Farm'** becomes debatable since farm can be chemical as well as organic. Since none of the respondents were clear about the type of farm from which the food was bought, analysis of their selected 'norms' was done. Out of 63 respondents, majority had used 'we bought directly from farm' norm. only three respondents had chosen label, stamp & certification norm. Thus out of 63, except of those three, all other 60 respondents were placed in the category of 'unaware of organic food concept and significance'.

Besides organic food store, other authentic sources of organic food are super stores & grocery stores. However, the respondents who had selected these sources cannot be called as knowing of significance of organic food since, super market and grocery stores sell organic as well as conventional food. Thus these sources were analysed in the light of recognition norms used by respondents while choosing food from these sources.

Maximum respondents (153) had chosen '**super market'** as the source. Out of these a small minority had gone with the selection norm of 'farm purchase' (11%, 17 consumers)), 'natural word' (16%,24 consumers), friend's endorsement (8%, 13 consumers). Whereas majority had used 'label' (40%, 60 consumers), stamp (19%, 30 consumers) & organic certification (41%, 63 consumers) which indicated that these consumers fall in the category 'know significance of organic food'.

Table 1.9: Norms & sources - wise analysis of consumer behaviour

Table 1.10: Consumers fully aware of concept, significance & sources of organic food

	Only Supermarket			Only Grocery Store			Both SM + GS			Only OFS			Both SM + OFS			Both GM + OFS			Total
	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	of awar
None of the below	3	23	26	5		5		2	2	4	19	23	1	3	4	1	1	2	23
Only Label	13	24	37	10		10	1	1	2	1	18	19	1	2	3	1	1	2	73
Only Stamp	3	8	11	3		3		2	2	3	6	9							25
Label + Stamp							3		3	1	2	3		1	1				7
Only Cert	5	30	35	1		1		1	1	13	35	48	1	6	7				92
Label + Cert	1	2	3					1	1	2	2	4	1	2	3				11
Stamp + Cert		2	2								4	4	1	2	3				9
Label + Stamp + Certification		2	2				3	2	5		2	2		1	1				10
Total of Consumers fully aware of concept, significance & sources of organic food																			250

In order to locate the number of respondents who were falling under the category of fully aware organic consumers known as 'knowing the concept as well as significance of organic food', most authentic sources as well as authentic norms were cross analysed as follows.

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Table 1.10: Consumers fully aware of concept, significance & sources of organic food

	Only Supermarket			Only Grocery Store			Both SM + GS			Only OFS			Both SM + OFS			Both GM + OFS			Total
	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	O.Or.	Occ.Or	Total	of awar
None of the below	3	23	26	5		5		2	2	4	19	23	1	3	4	1	1	2	23
Only Label	13	24	37	10		10	1	1	2	1	18	19	1	2	3	1	1	2	73
Only Stamp	3	8	11	3		3		2	2	3	6	9							25
Label + Stamp							3		3	1	2	3		1	1				7
Only Cert	5	30	35	1		1		1	1	13	35	48	1	6	7				92
Label + Cert	1	2	3					1	1	2	2	4	1	2	3				11
Stamp + Cert		2	2								4	4	1	2	3				9
Label + Stamp + Certification		2	2				3	2	5		2	2		1	1				10
Total of Consumers fully aware of concept, significance & sources of organic food																			250

As shown in the table, first row, 'none of the below' gives count of respondents who have used less authentic sources & norms of recognising organic food. However, in the same row, 23 respondents had selected less authentic norms. However, they had bought organic food from organic store that sells exclusively organic food. Thus though norms are not authentic but source is most authentic, these 23 respondents too were included in the number respondents using most authentic sources & norms. On the basis of both tables, following observations were recorded.

The number of respondents who were buying organic food were 351 in all.

Out of 351, 69 consumers had claimed to be buying all food organic. However, analysis of the buying behaviour of these consumers, only 6 were found to be buying almost all food organic. That makes 345 people out of 351 were buying organic food, that too hardly one or two products occasionally.

With the assumption that these consumers are buying food occasionally because they are not fully aware of significance & sources of organic food, data was further analysed. Findings were

- Out of 351 respondents, 250 were proved to be 'knowing the concept as well as significance of organic food'. That makes it a wide majority of 71% consumers.
- A small minority of 42 consumers who purchased from farm, 8 consumers who claimed to be buying from rationing shop, makes it 50 (14%) consumers were 'not aware of significance of organic food'.
- Remaining 15% consumers fell in the category of 'may be or may not be knowing significance of organic food'.

<u>So the hypotheses - Domestic demand for organic food is less due to lack of awareness among the consumers about benefits of organic food is not true and thus is rejected.</u>

Despite the knowledge, respondents were found not consuming or buying organic food or buying very less organic food. Reasons for not buying organic food under the circumstances, could be –

1) Supply constraints or faulty supply chain management.
2) Problem of affordability
3) Consumers may have issues about authenticity of available food.

Data was analysed further to find reasons for not consuming organic food regularly.

1.4.6: Faulty Supply Chain Management – reason for less consumption of organic food:

While collecting consumers' data, consumers were asked to provide reasons for not buying or buying less of organic food. Out of 11 different reasons listed, reasons like 'not available easily in our regular stores', 'Often stocks are limited' and 'limited choice' indicated supply constraints of organic food. At the same, respondents were asked about what types of organic food items they buy. In the list 8 options of the question, the last (8th) option was 'whichever product is available'. The option indicated that consumer wanted to buy all food organic, but due to unavailability, they bought all items that were available. This option indicated willingness of consumers to buy and problems from supply side. While analysing level of awareness and conceptual clarity of people who claimed to be knowing about organic food, (81% of total respondents) three categories were found as discussed earlier – 1) consumers who claimed of not buying at all 2) consumers who claimed to have bought sometimes 3) consumers who claimed to buy few food items only organic. However, analysis done so far had proved that buyers who claimed of buying only organic food too were occasional buyers. Thus amongst 81% (472) of respondents who were found aware of the organic food, two categories were made – 1) aware but not buying at all (121) 2) buying occasionally (351)

Table1.11: Reasons For Not Buying

Reason	**Consumers not buying**	%	**Consumers Occasionally buying**	%
non available in regular stores	**64**	**53%**	**171**	**49%**
limited stocks	**10**	**8%**	**82**	**23%**
limited choice	**12**	**10%**	**52**	**15%**

As shown in the table 53% respondents were not buying organic food since the food is not easily available in the local stores, 10% have faced problem of less choice, whereas 8% had faced problem of 'no stock'.

In case of consumers who claimed to have bought organic food occasionally, 49% respondents were not buying organic food since the food is not easily available in the local stores, 15% have faced problem of less choice, whereas 23% had faced problem of 'no stock'.

Supply constraints was found to be main reason even among the respondents who consume organic food occasionally.

26% of organic food consumers responded that they bought whatever organic food was available at the store at the time of their visit. It clearly indicated that consumers wanted to buy all food organic but generally food is less available in the shops.

So second hypothesis: Domestic demand for organic food is limited due to supply constraints was proved to be true.

1.4.7: High price of Organic Food – one of the main reasons for less demand.

Out of 121 consumers who had not bought organic food ever, 52 consumers (43%) gave one of the main reasons for not buying organic food as they found it too expensive. Overall, out of 472 respondents who 'know about' organic food, 163 (43%) found the food very expensive.

Table: 1.12: Wiliness For Premium Price

% of Premium	No of Respondents	% of Respondents
5%	176	37%
5-15%	109	23%
15-25%	74	16%
No Premium	113	24%

As can be seen in the above table, 24% of respondents were not ready to pay any premium to organic food. Considering food inflation in India, paying premium on already higher food prices would be difficult. 37% respondents are ready to pay premium only up to 5%. It means majority respondents 61% are not ready to pay high price.

Further data was analysed to find if there was any relationship between monthly income and willingness to pay premium price. As shown in the table two variables, willingness to pay premium price and family income were found directly related. However, the relationship was not very significant. 11% respondents of low income category were ready to pay high premium, whereas 23% respondents of high income group were ready to pay high premium.

Table: 1.13: Relationship between income and wiliness to pay premium

	Up to 40000	%	40 to 70000	%	above 70000	%
Num.	229		155		88	
up to 5%	153	67%	91	59%	44	50%
5 to 15%	51	22%	35	23%	24	27%
15 to 25%	25	11%	29	19%	20	23%

<u>Third hypothesis: High price of organic food is another factor that affects demand for organic produce in India was proved true</u>

1.4.8: doubts on the part of consumer about authenticity of Organic food – as a reason for less demand:
Respondents who had knowledge of organic food also seem to had doubt of authenticity of organic food sold. Out 472 respondents, 121 respondents (24%) had expressed worry that they may be buying food that is not completely organic, as 'organic'. However, such consumers are only 24%. <u>So the hypothesis, Consumers buy less organic food because they are not sure of authenticity of available organic food in market was rejected.</u>

1.4.9: Need for better marketing strategies in business of Organic food:
Marketing is 'a process' where goods and services that are just 'concepts', get transformed from concept to product or service that consumer demand. It is done through coordination between four elements – 1) identification, selection & development of the product 2) Fixing the price 3) fixing distribution channels 4) deciding promotional strategy.
In case of Organic food, in order to find out possibilities of marketing problems, nature of the problem, we decided to do demand side as well as supply side analysis. On the basis of consumer survey we tried to find out –

1) Were respondents aware of concept of organic food?
2) Were they knowing the real benefits of organic food?
3) Through which medium they received information about organic food?
4) Were they ready to accept the price at which organic food was sold?
5) Were they happy about the availability of Organic food?

On the basis of consumer survey, following were the observations

Table: 1.14: Marketing Norms of organic food from consumer's perception point of view

sr.no	Variables	frequency	percentage
1	**People aware of concept of organic food**	**472/580**	**81%**
2	**people aware of benefits of organic food**	**451**	**96%**
3	**medium that gave knowledge of organic food**	**out of 472**	**%**
	T.V.	**112**	**24%**
	radio	**13**	**3%**
	newspaper	**113**	**24%**
	magazine	**34**	**7%**

	internet	**145**	**31%**
	in store	**70**	**15%**
	friends	**165**	**35%**
	not sure	**44**	**9%**
4	**Price Related response**	**out 472**	**%**
	5%	**176**	**37%**
	5-15%	**109**	**23%**
	15-25%	**74**	**16%**
	no premium	**113**	**24%**
5	**reasons for not buying**	**out of 472**	**%**
	Do not know from where to buy	**92**	**19%**
	Not available easily in our regular stores	**233**	**49%**
	It is very expensive	**160**	**34%**
	Often stocks are limited	**92**	**19%**
	Risk of getting cheated	**112**	**24%**
	Limited Choice	**64**	**14%**

Awareness of organic food: Majority people are well aware of concept of organic food as well as its benefits. In case of price of organic food, 61% people want food either at market price or at small premium of 5% only. So high price can be the hurdle which suppliers can remove either by having direct marketing system where producers sell directly to consumers or cost cutting through large scale production.

Another important marketing related problem of organic food is elated to supply chain management. Improvement in supply will be a key to success.

Consumers want organic food provided it is not too expensive, and they should have easy access to food.

Thus the fifth hypothesis, **Effective marketing will lead to fast growth in organic business was accepted.**

1.5: Key Summary Findings:

Majority consumers were aware of organic food, its benefits and problems associated with conventional food. However, this awareness was relatively more among educated respondents.

However still majority buy conventional food and not organic regularly due to some prominent reasons like –

High price of goods

Lack of information related from where to buy.

Lack of easy as well as regular availability

Risk of getting cheated

So supply side factors are more responsible for lack of Demand for organic food.

1.6: Recommendations

Effective marketing of Organic food is required. It can be done by NGOs, Government agencies since it is safer & healthier food along with private businessmen

Improvement in supply chain management and production planning will solve the issues like irregular supply, limited stocks.

1.7: Conclusion

Demand driven growth of business of organic food and organic farming is need of time, especially for a country like India which already has required natural resources and skill sets for rapid growth of organic farming. In case of Maharashtra, a large number of people are aware of superiority of organic food over conventional, but are found to be consuming less. Higher demand is found to be a function of less price and better educational background. Surprisingly the most dominant reason for low demand is neither price nor illiteracy but less supply of organic food. So in Maharashtra, organic food consumption is found to be function of higher production and better supply. At the outset we recommend that this vicious circle should be broken by rigorous simultaneous efforts by policy makers, businessmen, farmers and NGOs. However, for such policies, production and supply related problems need to be identified which becomes future scope of the study.

Bibliography

[1]. Esna Btul Bugday, Seval Guven,Nuri Dogan (2016). Examination of Consumer's Consumption Patterns of Organic Food Products. The International Journal of Business and Management. Pp (344-353), Vol 4. Issue 3. ISSN 2321-8916 downloaded from the linkhttp://jgateplus.com/search/search/?q=Examination+of+Consumer%27s+Consumption+Patterns+of+Organic+Food+Products&peerReviewedJournal=true&professionalIndustryJournal=2&selectedSubjects=5%2C4%2C1%2C6%2C2%2C3&currentContext=allJournal&reqInitiator=basic

[2]. Government of Maharashtra State (2011). Population Census, downloaded from the link http://www.census2011.co.in/census/state/districtlist/maharashtra.html

[3]. Helga Willer and Julia Lernoud (2015). The world of Organic Agriculture 2015: Summary, FIBL and IFOAM (pp 24-29) downloaded from http://www.organic-world.net/yearbook/yearbook2015.html

[4]. Helga Willer and Julia Lernoud (2015). Current Statistics on Organic Agriculture World wide: Organic Area, Producers, Markets and Selected crops. The world of Organic Agriculture 2015: Summary, FIBL and IFOAM (pp 32-64) downloaded from http://www.organic- world.net/yearbook/yearbook2015.html

[5]. Jaivik India 2012 (2012). Indian Organic Foods market,Yes Bamk Ltd.pp (5-30) Downloaded from http://www.efreshglobal.com/efreshtrade/(S(gyimyg4502f1svbuedm5xviy))/PDFs/Indian%20Organic%20Foods%20Market.pdf

[6]. M. Sathis Kumar and Dr. E. Muthukumar (2016). Effect of Influential Factors on Consumers Attitude towards Organic Food Products. The International Journal of Business and Management. pp193-197 Vol 4. Issue 3. ISSN 2321-8916 downloaded from the link http://jgateplus.com/search/search/?q=Effect+of+Influential+Factors+on+Consumers+Attitude+towards+Organic+Food+Products&peerReviewedJournal=true&professionalIndustryJournal=2&selectedSubjects=5%2C4%2C1%2C6%2C2%2C3&currentContext=allJournal&reqInitiator=basic

[7]. MOFF and OFAI (2012). Why Organic Food? Downloaded from http://ofai.s3.amazonaws.com/Why%20Organic%20Food_English.pdf

[8]. NABARD Rural Pulse (2014). Agricultural Land Holdings Pattern in India. Department of Economic Analysis and Research. Issue 1, Jan-Feb 2014 pp (104) downloaded from the link https://www.nabard.org/Publication/Rural_Pulse_final142014.pdf

[9]. Samuel Bonti-Ankomah, Emmanuel K Yiridoe (2006). Organic and Conventional Food: A Literature Review of the Economics of Consumer Perceptions and Preferences. Report of Organic Agriculture Centre of Canada, Nova Scotia Agricultural College. Pp (1-39). Downloaded from the link http://www.organicagcentre.ca/researchdatabase/res_food_consumer.asp

[10]. Santhi,P, Jerinabi, (2011), Purchase Behaviour of Urban Residents Towards Organic Food Products. The Indian Journal of Commerce, Vol 64 No.2 ISSN 0019-512x downloaded from https://www.scribd.com/document/119169444/A-STUDY-ON-PURCHASE-BEHAVIOUR-OF-URBAN-RESIDENTS-TOWARDS-ORGANIC-FOOD-PRODUCTS

[11]. Sangeetha Natarajan (2015). Evaluation of the Perception and Buying Behaviour of the Consumers towards Organic Food in India. Journal of Exclusive Management Science. pp (1 to 12). Vol 4 Issue 11 - ISSN 2277 – 5684. Downloaded from the link

[12]. What is Marketing, Business dictionary.com, downloaded from the link http://www.businessdictionary.com/definition/marketing.html

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