ORGANIC FOOD INDUSTRY – PERSPECTIVE, PROSPECT AND PROBLEMS

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ABSTRACT

Conventional methods of growing food have come under heavy criticism for excessive use of chemical fertilizers causing deadly diseases like Cancer. The 2020 WHO report reveals that one out of 10 Indians will develop cancer during their lifetime and one out of 15 will die from the disease. Organic products are grown under an arrangement of agriculture without the utilization of chemical fertilizers and pesticides with an ecologically and socially dependable methodology. This is a technique for cultivating that works at grass root level safeguarding the conceptive and regenerative limit of the soil, great plant nutrition, and sound soil management, produces nutritious food rich in vitality that has protection from diseases. This article looks at the strategic positioning of the organic food industry in India along with its prospects and problems. Primary data has been collected from 100 health care experts. Findings suggest that for a country like India that is at a high risk of cancer, the organic food industry holds huge potential as an alternative to conventional methods of growing food. At the same time, some problems will have to be addressed.

KEYWORDS: Conventional methods, Organic food, Cancer, Fertilizers, Pesticides.

1. INTRODUCTION

In recent years the quantity of health-conscious individuals has gone up. The focus of comfort food has moved to healthy food. Individuals have begun seeing the hurtful impacts of adulterated food and henceforth, their inclination towards healthy or normally grown food has expanded. Because of this evolving mentality, individuals have begun to accept the idea of "going back to your roots". This term is particularly formulated for Organic food.

The Organic food move is constrained to metro urban communities like New Delhi, Mumbai, and Bangalore. Even though individuals in rural territories develop these yields, they are surely not mindful of the unsafe impacts of expectedly grown food. As the clinical cases are growing each year, individuals have understood the significance of keeping up with great health. The uplifting news for the health-conscious masses is that most way of life diseases are avoidable. The fear of becoming ill is convincing individuals to begin playing it safe and maintain a strategic distance from unhealthy food. Contributing to making mindfulness around the ramifications of having unhealthy food, numerous superstars are spreading the word about having a healthy way of life and controlling individuals to change their inclination to organic eating regimens. Many individuals have begun revealing about increment in the level of

contaminations in water and soil in recent years. The majority of the parents are in the dread of taking care of food to their newborn children and kids as organic products, vegetables, dairy products delivered through ordinary cultivating are undependable. Some of them are as yet not mindful of normally grown nourishments.

The adjustment in the Organic food industry was first seen in the products, for example, sugar, maida, and other factory products that were grown organically with the name of 'Organic' on them. The initial phase toward the Organic food Industry was the Jaivik Bharat affirmation. As per this accreditation, any brand which asserts that they produce their nourishments or products organically must be ensured. This was a significant activity by the administration to arrange the Organic food market. The current situation expresses that the current affirmed and sorted out the organic market is around Rs.2,500 crore and is expanding at a CAGR of 20 percent. To make it consistent, the business should be analyzed cautiously and constrained by utilizing laws. The primary point is to pick up consumer's trust in products and to keep up the unrivaled nature of these products. Half of the Indian fabricated products are Organic naturally because of little and dry land for cultivating.

Nourishments that effectively meet all requirements to be a piece of Organic Category are terrace poultry, Indian sheep and goat, jackfruit, timberland delivered and tamarind. Jaivik Bharat Certification was the underlying stage to carry guidelines to the Organic food industry. In India, we have to make more guidelines to present what might indicate Organic Food. The need to reinstruct ranchers is significant, particularly coming back to the old methods of cultivating in India. The northern piece of India has still not completely found the Organic Food Industry. The organic food industry is developing thus numerous new brands are entering the business. True to form in the coming scarcely any years the consumer rate will increase and will become familiar with Organic food. Organic food industry development will prompt better environmental practices. Condition cognizance is expected to develop with the Organic Food advertise, controlling individuals progressively about Organic food and its advantages to the earth. Organic nourishments give different advantages to our health just as our condition. As the organic food industry develops it will lead us to a healthy lifestyle fabricating a better future. This article looks at the strategic positioning of the organic food industry in India along with its prospects and problems. Opinion from 100 healthcare experts constitutes the primary data for the study. Bhalla (2020) feels that the organic food industry in India will usher in the years to come. He has given four reasons for the promising future for the organic food industry.

1.1 Advanced literacy and e-commerce help

Because of the flood of PDA utilization India, combined with ease web, there has been an expansion in access to data about organic food. Included with this, web-based business platforms acted like a facilitator connecting with potential clients the nation over. This is the motivation behind why the development of organic food was at first bridled by Tier I urban communities, yet the industry in the long run connected with potential clients in Tier II and Tier III urban areas. Online business platforms additionally made the segment serious with an ever-increasing

number of players going into the organic food industry. Specialists are foreseeing an expanded infiltration of organic food into Tier II and III urban communities in the years to come, prompting interest for organic food at a constantly expanded rate.

1.2 Insignificant price difference

The price difference between organic and inorganic food is insignificant; when contrasted with the health benefits conveyed by organic food. While organic food may be estimated higher by a couple of pennies, it keeps the body from the unnecessary admission of pesticides and fertilizers. This further chops down the danger of health risks and pointless clinical costs in the more extended run.

1.3 Indian government supporting the organic food industry

The Indian government is supporting and advancing organic farming by stretching out monetary assistance to ranchers embracing organic farming. Different government plans like Mission for Sustainable Agriculture (NMSA), Mission for Integrated Development of Horticulture (MIDH), National Food Security Mission (NFSM) and Rashtriya Krishi Vikas Yojana (RKVY) have been executed to advance the part. GOI likewise executed the National Program for Organic Production (NPOP) which includes accreditation programs for affirmation bodies, measures for organic production, the advancement of organic farming, and so on.

1.4 Increment in export

The interest for Indian organic food has seen a consistent ascent in India as well as it is accepting gratefulness on a worldwide stage. Because of India's ideal agro-climatic conditions combined with the acquired custom of organic farming, the nature of organic food to export is high. According to reports, the interest for Indian organic food is on the consistent increment around the world; India exported organic products worth $515 million in the financial year 2017-18. The export trend will increment in the following five years. At the same time, some issues are bottlenecks in the growth of the organic food industry. Lack of awareness, misconceptions, and myths are some of the prominent barriers.

1.5 Objectives of the study

This article has been written with the following objectives:
   a. To assess the prospects for the organic food industry in India
   b. To assess the problems for the organic food industry in India
   c. To find out if the prospects outweigh the problems for the organic food industry in India

Following research questions were addressed:
   • RQ1 – What are the prospects for the organic food industry in India?
   • RQ2 – What are the problems for the organic food industry in India?
   • RQ3 – Do the prospects outweigh the problems for the organic food industry in India?

2. REVIEW OF LITERATURE

There are numerous empirically determined influential factors known to control organic food purchase behavior. Of these known factors- health, product quality, and worry for common environmental deterioration are viewed as the significant thought processes behind the organic food purchase. We, hence, endeavored to explore the most conspicuous reason(s) for purchasing organic food, utilizing the meta-analyses of studies distributed during the most recent 25 years as our reason for conviction. Multilevel meta-analyses were applied to the examinations in review, to locate the major reason(s) for the acquisition of organic staple, milk, products of the soil. Even though the three inspirational components referenced above have been resounded since the commencement of organic food purchase research, the health factor has consistently beaten the priority chart (Rana and Paul, 2019).

Nowadays, consumers are progressively disposed towards a healthy way of life. They comprehend the quality of food consumption legitimately influences their health. Devouring organic food is a decent choice accessible to them. India being a major maker of organic food has begun indicating enthusiasm towards the utilization of organic food. Comprehension of consumers is significant for advertisers for the all-encompassing development of the organic food market. The point of this study is to comprehend the key factors influencing the purchase goal of Indian organic customers. This study has utilized a semi-structured questionnaire on 200 organic customers and proposed a research model. The data analysis has utilized confirmatory factor analysis (CFA) and distinguished that all the latent factors have reflected their hidden constructs. In the wake of experiencing CFA, it is additionally settled that the satisfactory fit to the data has been reflected by the measurement model. Also, way analysis was utilized to check the anticipated causal relationship among the latent constructs (auxiliary model). Commitment to the manageable environment is the objective of develop organizations. The proposed relationship model for purchase goals may help organizations dealing in an organic food market (Pandey *et* al., 2019).

Even though the interest in organic food is developing all around, the standard utilization of organic food is far less. The current research endeavors to comprehend the fundamental explanations behind consumer opposition toward devouring organic food utilizing the theoretical framework of innovation resistance theory (IRT). The examination further looks at the relationship between various consumer barriers and purchase choices (purchase intentions, moral utilization intentions, and choice conduct) at various levels of buying inclusion and environmental concerns. The gathered data, comprising of 452 consumers, were dissected by the auxiliary equation modeling approach. The outcomes indicated that the esteem barrier imparted a negative relationship to purchase intentions and moral utilization intentions. Moral utilization and purchase intention were found to affect choice conduct. Furthermore, the connection between moral utilization intention and choice conduct is interceded by purchase intention. No critical contrasts have risen dependent on the level of buying contribution and environment concerns (Kushwah *et* al., 2019).

Multiple regression analysis was utilized on the key determinants, of which: environmental concerns, health and way of life, product quality, support towards neighborhood farmers, comfort and value, security and trust, and abstract standards, impacted consumer purchase intentions. Besides, the absence of consumer openness to organically delivered products was a significant issue for industry advancement and this requires further examination. Results likewise alluded to an unmistakable requirement for promoting experts to concentrate on featuring the consumer benefits of organically delivered nourishments - to quickly develop this significant market. Study suggestions propose the requirement for strategy creators to instruct and emphatically elevate organically delivered nourishments to consumers. Further, a quick worry for the Indian government – is to consider creating proper systems towards animating business sector development and spurring consumer purchase intentions towards expanding sustainable production and consumption of organically delivered products across India (Basha and Lal, 2019).

Social media discussions, ratings and reviews shape Chinese consumers' perspectives towards organic food and decidedly influence their online impulse buying in this market. Site highlights are basic for scattering data on organic food. Educational site pages including product quality and accreditation have a more noteworthy directing impact on buy. Information cues, for example, nutritional substance; production and handling methods, and environmentally amicability likewise influence consumers' perspectives and therefore impulse buying choices (Tariq *et* al., 2019).

Promoting consumer purchase conduct of eco-friendly products is critical to environmental support. This research aims to examine how various factors may improve or block youthful consumers' intentions to purchase a particular sort of eco-friendly product, for example, organic food. Data were collected from 289 respondents in a developing business sector economy, for example, Vietnam. Multivariate data analysis utilizing basic equation modeling uncovered that sanitation concern, health cognizance, and media presentation to food messages assumed basic jobs in the development of demeanor towards organic food. Strangely, consumers' environmental concerns and food taste were of little incentive in anticipating their demeanor. Notably, perceived barriers (for example significant expense, insufficient accessibility, poor branding, and extra time required) altogether hindered both mentality and purchase intention towards organic food (Pham *et* al., 2019). Studies in the Indian context are relatively limited and hence this research.

3. METHODS
3.1 Data collection
The following methodology was designed for the study to collect primary data.

    a. Select using random sampling 100 health care experts
    b. Design and validate a 10-point each questionnaire for prospects and problems
    c. Seek responses on a 5-point agree-disagree scale
    d. Conduct the survey

    e. Summarize the responses

    f. Apply a t-test at 95% confidence level

    g. Analyze the results

3.2 The hypotheses

The hypotheses set in this regard were as under –

- H_{o1} – There are no significant prospects for the organic food industry in India
- H_{a1} - There are significant prospects for the organic food industry in India
- H_{o2} - There are no significant problems for the organic food industry in India
- H_{a2} - There are significant problems for the organic food industry in India
- H_{o3} – The prospects do not outweigh the problems
- H_{a3} – The prospects outweigh the problems

The study was conducted across India. The 10 prospects identified based on the literature review were as under:

Table 1: The 10 prospects assessed for the organic food industry in India	
Sr. No.	**Prospects**
1	Growing health-care consciousness
2	Pandemic like Corona pushes the case for health-care
3	The high growth rate of cancer in India
4	Not much of difference in price
5	Government initiatives to boost the sector
6	Potential for exports
7	Convenient buying through online mode
8	Governments thrust on fitness through Yoga
9	Improved awareness thanks to platforms like social media
10	Lands conducive for organic farming available in plenty

The 10 problems identified based on the literature review were as under:

Table 2: The 10 problems assessed for the organic food industry in India	
Sr. No.	**Problems**
1	A misconception that it is costly
2	No guarantee of quality
3	Problems with branding
4	More time required for organic farming
5	The typical short-term mentality of consumers
6	Lack of awareness
7	Supply chain issues
8	Lack of interest shown by online groceries
9	Inadequate promotion
10	Issues with storage

3.3 Scheme formed for testing of hypotheses

a. Responses would be collected under 2 sections (prospects and problems) of the questionnaire on a 5-point agree-disagree scale,

b. The responses under each of the sections would be aggregated under two groups of agree and disagree,

c. While doing so for each of the extreme responses, a weight of 2 would be to distinguish them from the non-extreme responses,

d. For each of the question, an average count will be calculated in the two opposites,

e. Percentages to questions under a particular section of the questionnaire will be averaged to get a single score for that section,

f. The section-wise average score percentage will be compared with a hypothesized mean of the population of 50% score connoting an event by chance and not due to statistical significance,

g. P-values will be calculated and the null hypotheses will be checked for rejection or non-rejection. These calculations would be done at a 95% confidence level using a t-test since the standard deviation (SD) of the population is not known.

4. RESULTS AND DISCUSSION

4.1 Descriptive analysis of the sample (Table set 5)

4.1.1 Domicile of respondents

Sr. No.	Area	Number of respondents-health care experts	Percentage
1	Mumbai	15	15%
2	Nagpur	12	12%
3	Chennai	11	11%
4	Delhi	10	10%
5	Hyderabad	10	10%
6	Bhopal	10	10%
7	Others	10	10%
8	Kolkatta	8	8%
9	Bengaluru	8	8%
10	Pune	6	6%
	Total	100	100%

4.1.2 Gender

Sr. No.	Gender	Number of respondents-health care experts	Percentage
1	Male	52	52%
2	Female	48	48%
	Total	100	100%

4.1.3 Age

Sr. No.	Age-group	Number of respondents-health care experts	Percentage
1	20-29 years	21	21%
2	30-39 years	46	46%
3	40-49 years	25	25%
4	>=50 years	8	8%
	Total	100	100%

4.1.4 Type of medical practice

Sr. No.	Type	Number of respondents-online business entrepreneurs	Percentage
1	Allopath	72	72%
2	Ayurved	25	25%
3	Homeopath	3	3%
	Total	100	100%

4.1.5 Experience in medical practice

Sr. No.	Experience	Number of respondents- health care experts	Percentage
1	< 5 years	12	12%
2	5-10 years	26	26%
3	>10 years	62	62%
	Total	100	100%

4.2 Inferential analysis

4.2.1 Agreement Percentages for prospects

Table 6: Agreements for prospects and testing of H_1 at 95% confidence level		
Sr. No.	**Prospects**	**Agree %**
1	Growing health-care consciousness	76%
2	Pandemic like Corona pushes the case for health-care	81%
3	The high growth rate of cancer in India	79%
4	Not much of difference in price	84%
5	Government initiatives to boost the sector	86%
6	Potential for exports	88%
7	Convenient buying through online mode	85%
8	Governments thrust on fitness through Yoga	92%
9	Improved awareness thanks to platforms like social media	93%
10	Lands conducive for organic farming available in plenty	91%
Average		86%
SD (Standard Deviation)		0.05681
H1 (Hypothesized Mean)		50%
Ho (Sample Mean)		0.86
n (Sample size)		100
t-value		62.49
p-value		0.0000

Given the p-value of <0.0001 the null hypothesis that there are no significant prospects for the organic food industry in India stands rejected.

4.2.2 Agreement percentages for problems

Table 7: Agreement for problems and testing of H_2 at 95% confidence level		
Sr. No.	**Problems**	**Agree %**
1	A misconception that it is costly	75%
2	No guarantee of quality	76%
3	Problems with branding	78%
4	More time required for organic farming	69%
5	The typical short-term mentality of consumers	65%
6	Lack of awareness	66%
7	Supply chain issues	74%
8	Lack of interest shown by online groceries	77%
9	Inadequate promotion	68%
10	Issues with storage	68%
Average		72%
SD (Standard Deviation)		0.04881
H1 (Hypothesized Mean)		50%
Ho (Sample Mean)		0.72
n (Sample size)		100
t-value		44.26
p-value		0.0000

Given the p-value of <0.0001 the null hypothesis that there are no significant problems for the organic food industry in India stands rejected. To test the 3rd hypothesis a two-sample test was performed and results were as under:

Table 8a: Summary statistics							
Variable	**Observations**	**Obs. with missing data**	**Obs. without missing data**	**Minimum**	**Maximum**	**Mean**	**Std. deviation**
Prospects	10	0	10	0.760	0.930	0.855	0.057
Problems	10	0	10	0.650	0.780	0.716	0.049

t-test for two independent samples / Two-tailed test: 95% confidence interval on the difference between the means: [0.089,0.189]

Table 8b: Summary statistics	
Difference	0.139
t (Observed value)	5.869
|t| (Critical value)	2.101
DF	18
p-value (Two-tailed)	< 0.0001
alpha	0.05

Test interpretation:

- H_0: The difference between the means is equal to 0.
- H_a: The difference between the means is different from 0.

As the computed p-value is lower than the significance level alpha=0.05, one should reject the null hypothesis H_0, and accept the alternative hypothesis H_a. The null hypothesis that the prospects do not outweigh problems stands rejected.

4.3 Discussion

The average agreement of the respondents for the prospects for the organic food industry in India was 86%. The maximum agreement 93% was recorded for the factor Improved awareness thanks to platforms like social media while the minimum agreement 76% was recorded for the factor Growing health-care consciousness. The standard deviation of the agreement percentages for the 10 prospects was 0.06. Thus, there was an overwhelming agreement in favor of the 10 identified prospects for the organic food industry in India. The average agreement of the respondents for the problems for the organic food industry in India was 72%. The maximum agreement 78% was recorded for the factor Problems with branding while the minimum agreement 65% was recorded for the factor typical short-term mentality of consumers. The standard deviation of the agreement percentages for the 10 problems was 0.05. Thus, there was an overwhelming agreement in favor of the 10 identified problems for the organic food industry in India. The agreement for prospects outweighed the agreement for problems with a significant difference of 14% between the two.

5. CONCLUSION

The ground for the organic food industry in India is very strong. The recent outbreak of the Corona pandemic has further strengthened the case for preferring organic food over conventionally grown food. Health risks are rapidly growing and people are becoming more and more health-conscious.

The prospects for the industry are strong. Factors like Growing health-care consciousness, Pandemic like Corona pushes the case for health-care, High growth rate of cancer in India, Not much of difference in price, Government initiatives to boost the sector, Potential for exports, Convenient buying through online mode, Governments thrust on fitness through Yoga, Improved awareness thanks to platforms like social media and Lands conducive for organic farming available in plenty vouch for a promising future for the industry. At the same time, problems will have to be addressed.

Prominent amongst these are - Misconception that it is costly, No guarantee of quality, Problems with branding, More time required for organic farming, Typical short-term mentality of consumers, Lack of awareness, Supply chain issues, Lack of interest shown by online groceries, Inadequate promotion and Issues with storage. The silver lining is that the prospect outweighs the problems and hence the industry should march ahead strongly.

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