

## **Understanding the Growth of Organic Food Industry in India**

**\*Harleen Kaur    \*\*Chhavi Kiran**

*\* Assistant Professor, University School of Business, Chandigarh University, Gharuan, Punjab*

*\*\*Assistant Professor, Department of Commerce, S.D. College (Lahore), Ambala Cantt, Haryana.*

### ***Abstract***

*This paper attempts to outline the growth of organic food industry in India. It explores the need for the organic food and trace path of organic agriculture to modern times. There are various compelling reasons such as environmental degradation, pest resistance, pollution and poverty among small farmers that have contributed to shift towards organic agriculture. Also health consciousness and higher disposable incomes of consumers have contributed to the growth of organic food industry in India. Government of India with its policy framework and support of organic agriculture has provided the required thrust in this area. There are several Indian ventures that provide certified organic products in domestic as well as international markets. So the scenario for organic food industry in India is not only promising but also much need of the hour.*

**Keywords:** Organic, Pesticides, Neurotoxin, Carcinogenic, Fertilizers, Pesticides.

### **Introduction: Organic Agriculture in India**

Agriculture contributes to 17.8% to India's GDP and still provides livelihood to 56.7% of total employments (World Bank, 2015). India with 52.8% of arable land is the second largest producer of agricultural products. Organic farming and its systematic evidence first finds mention in the Vedas of the "Later Vedic Period", 1000 BC to 600 BC (Randhawa, 1986 and Pereira, 1993). To live in partnership with nature is at the heart of this philosophy. The "Vrkshayurveda" (Science of plants), the "Krishisastra" (Science of agriculture) and the "Mrgayurveda" (Animal Science) are the main works, (Mahale and Soree 1999). In the English speaking world, Sir Albert Howard a botanist is considered as a pioneer of organic farming. He came to observe and later support the traditional Indian agriculture practices. He also was president of 13th session of the Indian Science Congress in 1926.

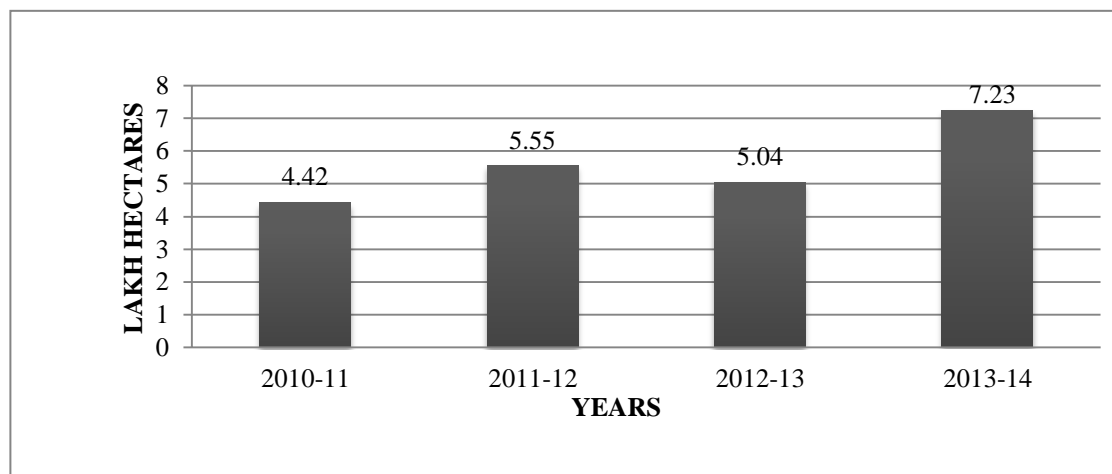
Organic agriculture received its first Centre in 1983 that was set up in Pondicherry under a project called Agriculture, Man and Ecology (AME). This project was put into operation by Educational Training Consultants, Leusden, Netherlands and financed by the Government of the Netherlands. The following year the first conference on organic farming was organized in October 1984, in Wardha for the propagation of indigenous genetic resources. In 1992, the Rajasthan College of agriculture organized a national seminar on natural farming. In the same year, the first known study on ecological agriculture in South India was published (Van der Werf and de Jager 1992). Since then, numerous farmers turned organic and important networks, such as ARISE (Agricultural Renewal in India for a Sustainable Environment), were established.

Chemicals based agriculture is recent phenomena in India. It was promoted in 1960-70 by the government as a part of green revolution. The green revolution brought forth crops that were higher in yield but also required more water and pesticides. Indian government subsidized the fertilizers and pesticides and consequently India became largest producer and consumer of fertilizers and pesticides. The failures of chemical based agriculture included resistance of pests, pollution of waterways, loss of biodiversity, smaller and less productive farms and increased farmer debt. This pattern of agriculture with costly inputs combined with smaller land holding of farmers and their high indebtedness became unsustainable. During such times the option of organic agriculture had become an attractive option for the farmers.

According to Codex Alimentarius (FAO/ WHO), organic agriculture is a holistic production management system which promotes and enhances agro ecosystem health, including biodiversity, biological cycles and soil biological activity.

Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles, and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfill any specific function within the system." (FAO/WHO Codex Alimentarius Commission, 1999).

**Figure 1: Area under Organic Farming**



Source: Annual Report 2014-15, Ministry of Agriculture, India

Organic agriculture has seen an unprecedented surge in India from 2003 to 2010 and the area under certified organic agriculture has increased manifold. Today India houses the largest number of organic farmers in the world (Sapna E. Thottathil, 2014). The 10<sup>th</sup> five year plan of Indian government aimed to promote organic farming systems with special focus on rural-urban

compost, crop residue utilization, and use of bio-fertilizers and bio-control of insect pests and diseases. Focus was increased on growing organic food, technology transfer and certification (Chandrasekhar, 2010). In the world wide rankings amongst top countries with land under organic certification, India ranks 10th. India's certified area includes 15% cultivable area spanning 0.72 million Hectares and 85% (3.99 million Hectare) under the forest for obtaining the minor forest produce. The total area under organic certification is 4.72 million hectares. Figure 1 shows the area under organic farming in different years in India. It shows that there is trend of increase in area of organic farming. From 4.42 lakh hectares in 2010-11, it has increased to 7.23 lakh hectares in 2013-14) (APEDA)

### **Objectives**

- To analyse the growth of Organic food industry in India
- To analyze the reasons for growth of Organic food industry in India
- To study the challenges faced by the Organic food industry.

### **Methodology**

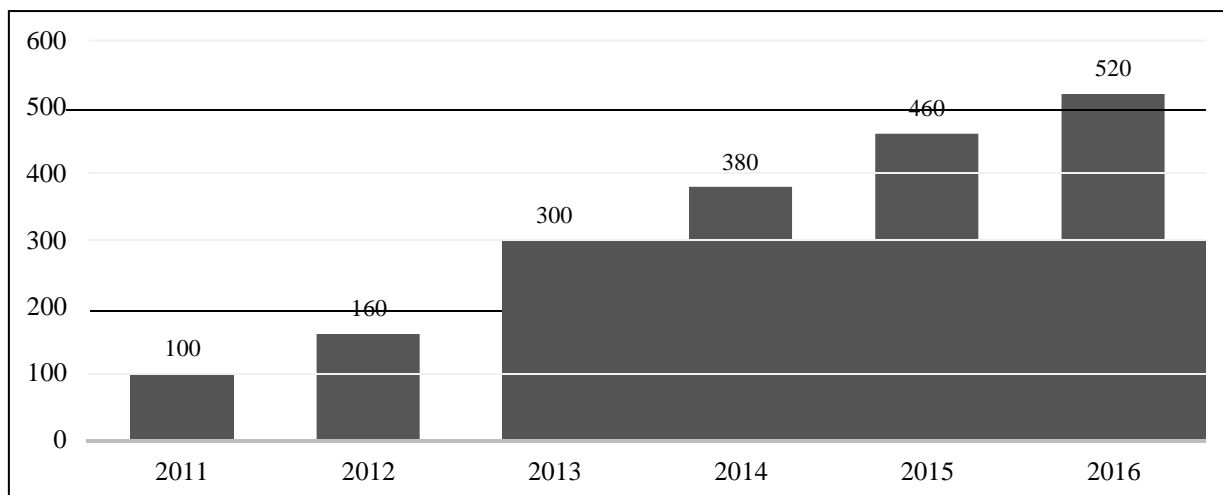
The paper is based on secondary data which has been procured from published sources like the websites of Ministry of Agriculture, International Federation of Organic Farming Movements (IFOAM), research papers, books and periodicals and newspaper reports.

### **Indian Organic Food Market**

In 2014, the size of the organic food market, which is highly unorganized, was \$0.36 billion, and organic pulses and food grains took the lion's share of the market (TechSci Research 2014). The size of the market for organic foods in India in 2012 was about Rs 1,000 crores (YES Bank Report, 2013). India organic food and beverages market can be segmented on the basis of domestic and exports market, different types of products such as tea, pulses, wheat, oil and others. Additionally, the market is segmented on the basis of geography as to which major cities consuming organic products and major distribution channels along with online market of organic food and beverage products (Ken Research Report, 2015). Currently over 300 products in the organic category are available in some 20 product categories: from tea, spices, fruit, rice, corn and vegetables to finished products and organic cotton. More than 40% of the products are exported to Europe, and other trading partners are Canada, the USA, Australia, New Zealand, Japan, Switzerland, Korea and countries in the Middle East and Southeast Asia. (YES Bank Report, 2013). Exports is the mainstay of organic marketing with realization around 403 million

US \$ including 183 US \$ organic textiles registering a 7.73% in the year 2013-14 (APEDA 2013-14)

**Figure 2: Market Size of Packed Organic Food and Beverages (in INR million)**



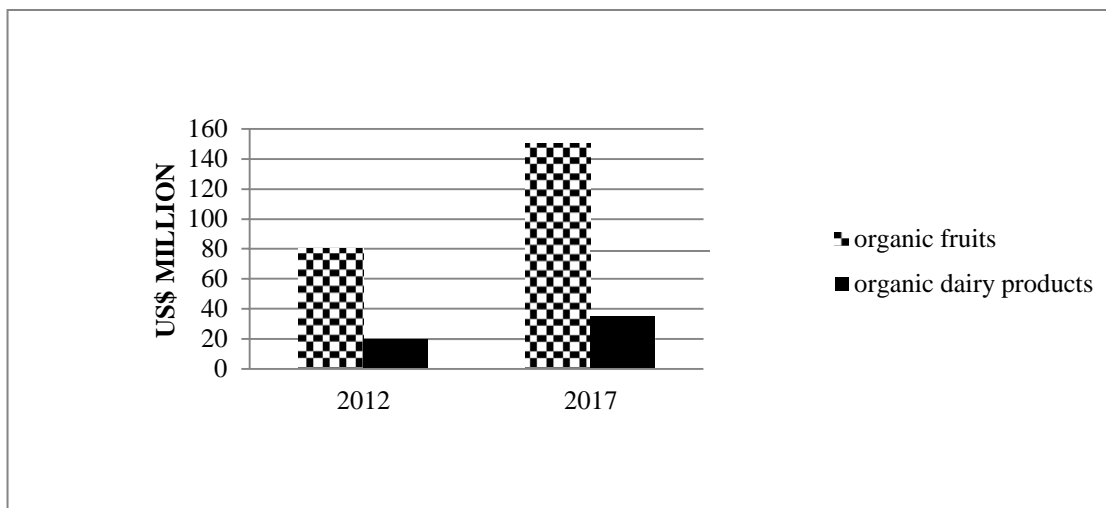
**Source: Euro Monitor International**

### **Growth of Indian Food Market**

According to India Organic Food Market Forecast & Opportunities 2020, the organic food market revenues in India are expected to grow at a CAGR of around 25% during 2014-19 (PR Newswire report, 2015). To ensure the quality standards of organic products INDOCERT a nationally and internationally recognized certification body was introduced by Government of India, under National Programme for Organic Production (NPOP). Organic certification can be obtained at any step in the whole value chain; food production can be certified, including seed suppliers, farmers, food processors, retailers and restaurants. Factors contributing to the rapid growth of the Indian organic food market include a rising health-consciousness among Indian consumers, rising disposable income due to globalization of markets, and an expanding middle class in the nation of 100 crore plus people. (Pandey et al, 2019).

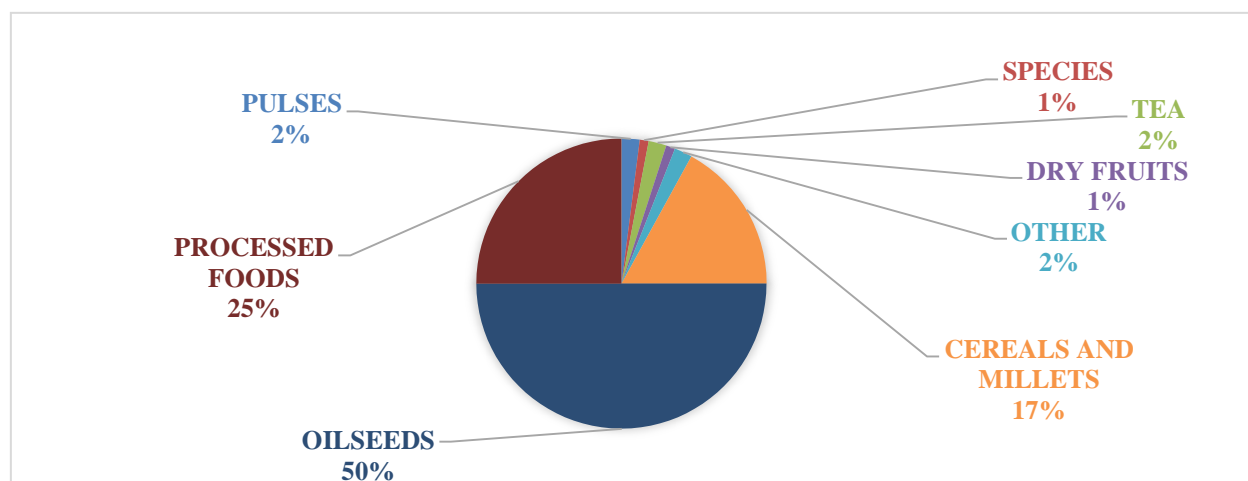
The market for organic food is nascent in India at present, with very few active brands and low penetration even among urban consumers. Figure 3 shows the market size of organic products in 2012 and market size in the year 2017. While the Market size of organic fruits and dairy products in 2012 was US\$ 80 million and US\$ 20 million respectively. Organic fruits and dairy products are expected to grow at a CAGR of 13-14% and 10-11% respectively over the next five to six years. Market for Organic Produce is increasingly preferred by developed countries and major urban centers in India. The global trade of organic produce is currently USD 60 billion (Rs. 3, 60,000 crore) and may touch USD 100 billion (Rs. 6, 00,000 crore). Trade in India may reach Rs. 5000- 6000 crore, which is about 1% of the global trade.

**Figure 3: Market Size of Organic Food Market (US \$ Million)**



Source: Organic Food Market in India 2011-12 (TECHNOPARK)

**Figure 4: Export of Organic Products in FY 2016**



Source: APEDA

### Need for Organic Products

Organic Products are environment friendly and also safe for the health of the consumers. Growing organic products is a labor intensive work hence it can generate more employment opportunities and better economic conditions for farmers especially the women farmers. They have high export potential and thus they can lead to economic growth and prosperity. Table 1 summarizes the benefits obtained from the organic products.

**Table 1: Benefits of Organic Products**

Parameter	Potential benefits
Agriculture	Increased diversity, long-term soil fertility, high food quality, reduced disease, self-reliant production system, stable production
Environment	Reduced pollution, protection of wildlife, less dependence on non-renewable resources, enhanced compatibility between environment and production
Social conditions	Better education, increased employment, improved health status, gender equality
Economic conditions	Stronger local economy, lower risks, improved returns.

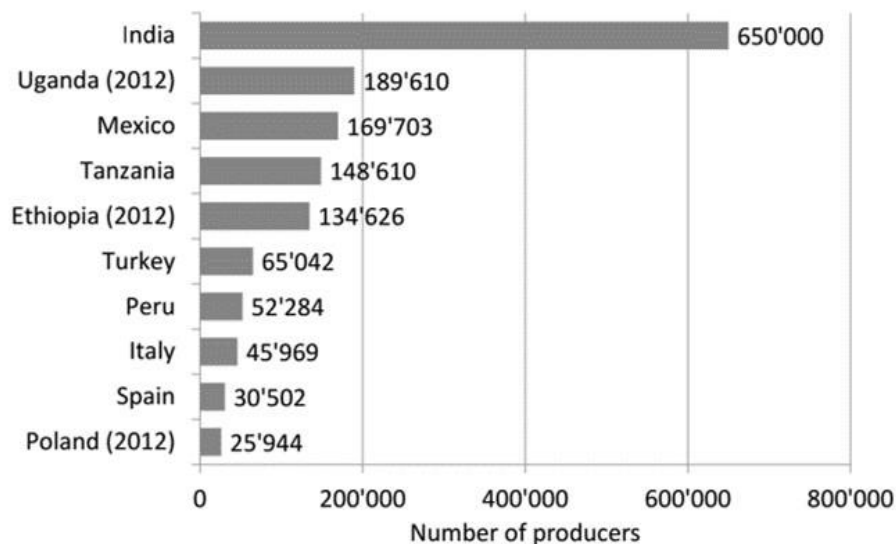
Source: Singh (2009), Stoll (2002), Crucefic (1998)

**Organic products are nutritionally better.** The organic products have a higher dry matter and lower nitrate content and contain less pesticide residues. They also have higher vitamin C content (Muthukumaran, 2006). The study found that organic orange juice was perceived as tasting better than conventional orange juice; however, no differences were found between organic and conventional milk.

**Health and Environment concerns** are the most significant motivations for buying organic products. Studies done in UK show more than half of organic shoppers cite healthy eating (55%) and avoiding chemical residues (53%) as reasons to purchase. Nearly half are motivated by care for the environment and nature (44%), while around a third mentions the taste of organic food (35%) and animal welfare (31%). Organic foods promote sustainable ecology and is quite suitable for delicate ecosystems of North East India.

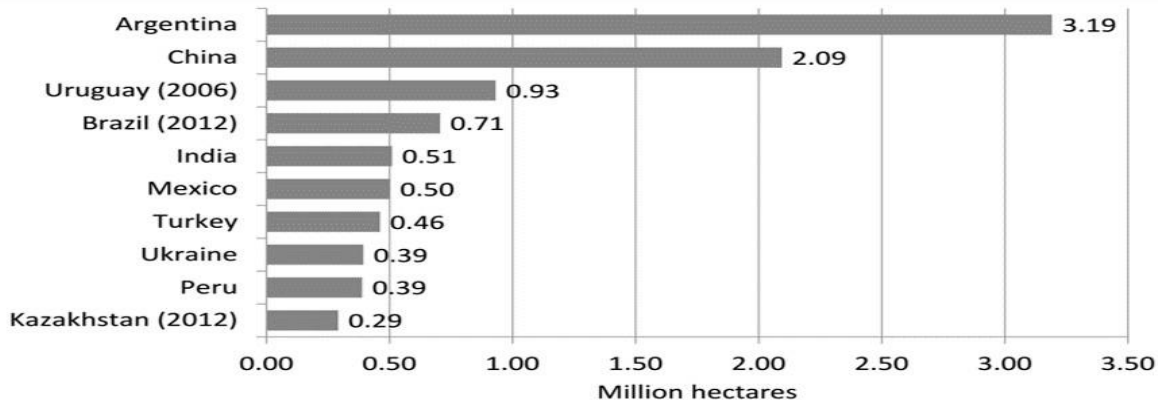
**New consumer lifestyle** trend has emerged regarding attitude of consuming organic food. There is rise in consumer awareness about natural, clean and good healthy food. Consumers try to avoid foods with unsafe additives, preservatives, flavour and coloring. Study indicates that in case of organic food, a consumers' perceived value and level of health consciousness strongly affects the purchase intention. Additional variables such as freshness, presentation, taste and innovativeness of organic food need to be further explored. (Shaharudin et al, 2010, Paul and Rana, 2012).

**FIGURE 5: TOP 10 COUNTRIES WITH LARGEST NUMBER OF ORGANIC PRODUCTS**



**SOURCE: FIBL-IFOAM Survey 2015**

**FIGURE 6: TOP 10 COUNTRIES WITH LARGEST AREA OF ORGANIC AGRICULTURAL LAND 2013**



**SOURCE: FIBL-IFOAM Survey 2015**

### **Trends for Organic Products Globally**

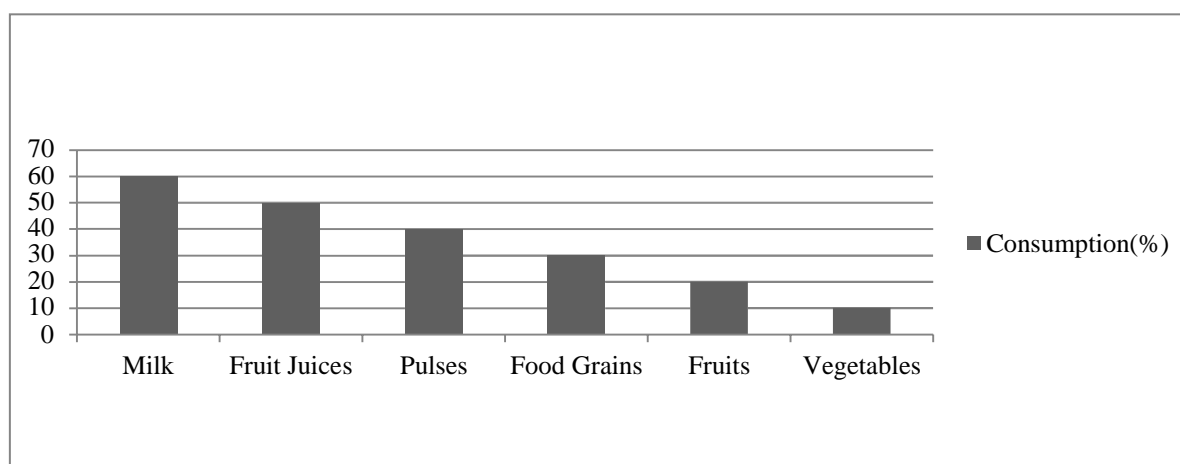
Figure 5 shows the list of top 10 countries having largest number of organic products with India being highlighted as the top having 6, 50,000 organic product producers. Along with it figure 6 shows that in terms of area under organic agricultural land, India is behind Argentina, China,

Uruguay and Brazil. This highlights that with the increase in number of producers, the agricultural land used for organic farming needs to be increased. We have seen in figure 1 earlier also that there is substantial increase in the area under organic farming in year 2013-14 as compared to year 2010-11.

### **Trends for Organic Products in India**

In 2014, the size of the organic food market, which is highly unorganized, was \$0.36 billion, and organic pulses and food grains took the lion's share of the market (Assocham and TechSci Research, 2015). The size of the market for organic foods in India in 2012 was about INR 1,000 crores. (YES Bank Report, 2013)

**Figure 7: Percentage Consumption of HNWI of Organic Food, By Product Type (%)**



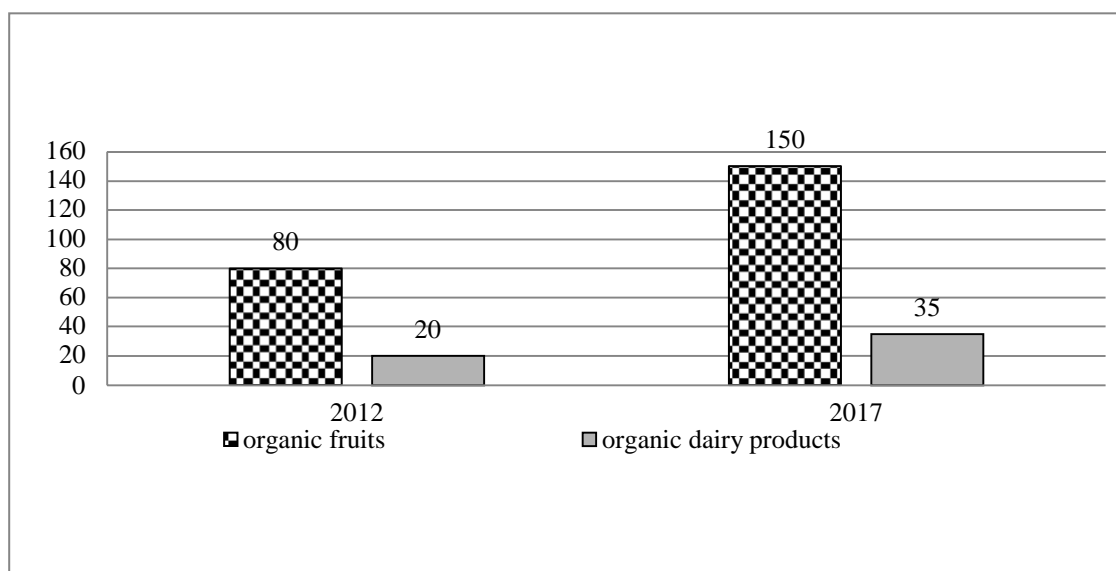
Source: TechSci Research (2012-13)

The market for organic food is still in embryonic stage in India .There are few active brands and the penertaition of products amongst consumers is quite low. Figure 8 shows the market size of organic products in 2012 and projected market size in the year 2017.Estimated Market size of organic fruits and dairy products in 2012 is US\$ 80 million and US\$ 20 million respectively. Organic fruits and dairy products are expected to grow at a CAGR of 13-14% and 10-11% respectively over the next five to six years. (Technopark 2011-12).

Market for Organic Produce Organic produce is increasingly preferred by developed countries and major urban centers in India. The global trade is currently USD 60 billion (Rs. 3, 60,000 crore) and may touch USD 100 billion (Rs. 6, 00,000 crore).



**Figure 8: Market Size- Current and Projected (US\$ Million)**



Source: Organic Food Market in India 2011-12 (TECHNOPARK)

## **Major players in Organic Food Market in India**

### **Conscious Foods**

Founded in 1990, Conscious Foods offers a wide variety of organic products like cereals and pulses, beverages, sweeteners, spices and power snacks. The products of the company are procured from small organic farm and small farming communities across India. A rigorous check is maintained on quality from the farm to the Conscious Food workshop in Mumbai, and from there on to the retail outlets. Their products are certified by ECOCERT.

### **Eco Farms**

Eco Farms (India) Ltd. was founded in 1995 with an objective to build up and endorse organic techniques of sustainable farming. In the area of certified organic cotton, it is rated as one of the largest producer of fiber output. A duvet cover manufactured by Eco Farms for a UK based client got nominated to the finalist list for Best Organic Textile Product 2009, "The Natural and Organic Awards 2009" (UK).

### **24 Mantra**

It was formed in 1992, by Raj Seelam in response to high chemical and pesticide use and farmer indebtedness that he observed around his during his stint as an employee at an agricultural company. 24 Mantra organic food brand is available across India and abroad in more than 1500 outlets and their own stores. Under their sustainable farming initiative, they have 20,000 farmers working in 30 plus projects over an area of 1, 20,000 acres.

### **Morarka**

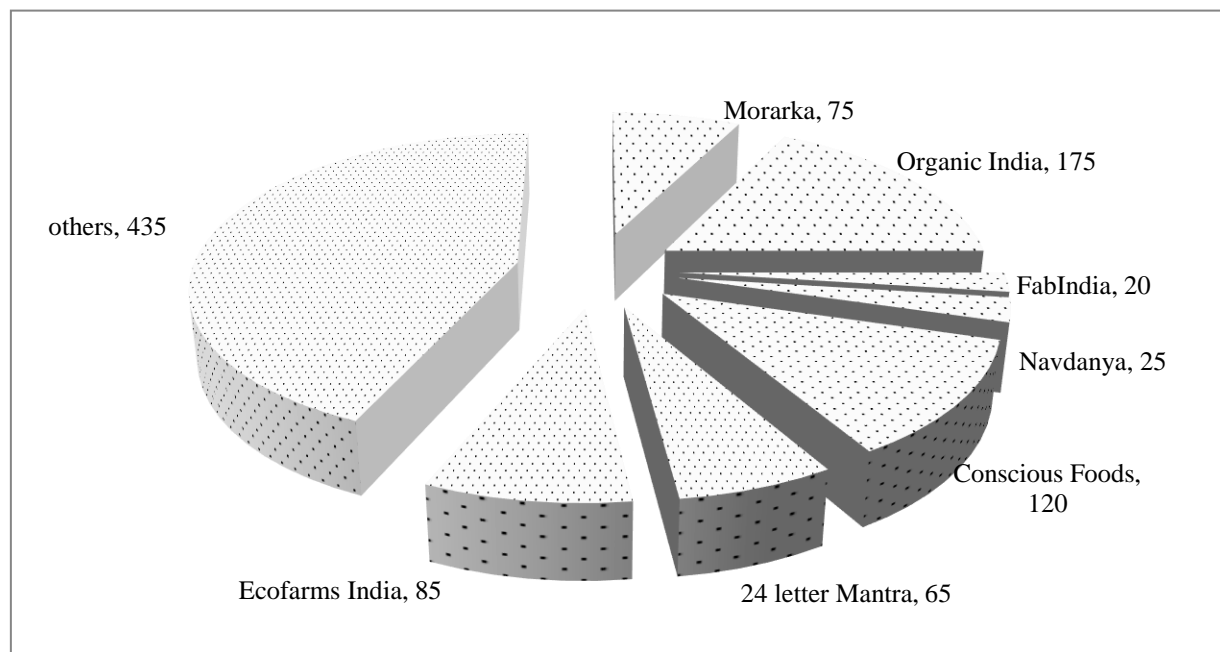
Morarka Organic boasts of organic food brand called Down to Earth. Beginning with just a few cereals, pulses, oil seeds and seed spices, today Morarka Organic has expanded to over 170

different products. This organization has more than 12 years of organic food research behind it and boasts of the most stringent organic certification in the industry.

### **Organic India**

It is a multi-national company instituted in 1990s based in Lucknow, India that produces Organic herbal and Ayurveda health products. This company is well known for its range of organically grown tulsi teas that popular in the markets in India, the US, Canada and the UK. Organic India also has a retail store in Maharashtra, India. Organic India works directly with marginal or disadvantaged farmers in small tribal villages, providing them with seeds, fertilizers, and organic certification. The risk of crop failure is also covered by the company itself. Originating from Uttar Pradesh, they have more than 50,000 acres (200 km<sup>2</sup>) of arable land in U.P., Rajasthan, Gujarat, and Madhya Pradesh.

**Figure 9: Leading Brands of Organic Products**



Source: The Indian Organic Food Market Yes Bank 2012

### **Challenges**

Although the interest in organic products is increasing rapidly, there are several hurdles to be crossed before organic food industry becomes an attractive market both from producers and the consumers. (K. Muthukumaran, 2006). However, the main challenges identified are:

#### **Supply Side Factors**

- Low level of market Information among the farmers regarding the Organic products
- Conventional Agricultural Inputs are considered more effective than the bio-inputs.
- Time is taken to convert the conventional farming methods into biological methods

- Limited government support
- Underdeveloped domestic market
- Underdeveloped infrastructure and marketing channels
- Low levels of interaction among farmers and other stakeholders

#### **Demand Side factors**

- Low level of awareness regarding the organic products
- Lack of Knowledge about organic certifications.
- Products not widely available.
- Products are costlier.

#### **Conclusions**

As the awareness and the demand for organic products rise globally organic markets in India cannot remain isolated. The organic products and their consumption will show strong upwards trends in near future. Growing demand of organic products along with increased purchasing power of Indian consumers will give ample thrust to the organic farmers engaging inorganic agriculture. However markets can only flourish if proper support, infrastructure and awareness is provided to the producers and suppliers.

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