Study on Market Availability for Organic Produce

NABCONS

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Abbreviations

IFOAM	International Federation of organic Agriculture Movements
USDA	United States Department of Agriculture
IANPP	International Association of Natural Products Producers
CAGR	Compound Annual Growth Rate
FGDs	Focused Group Discussions
FiBL	Research Institute of Organic Agriculture/ Forschungsinstitut für Biologischen Landbau
APEDA	Agricultural and Processed Food Products Export Development Authority
NPOF	National Project on Organic Farming
NCOF	National Centre of Organic Farming
NPMSF	National Project on Management of Soil Health and Fertility
SHM	Soil Health Management
NMSA	National Mission of Sustainable Agriculture
PGS	Participatory Guarantee System
HDPE	High-Density Polyethylene
RKVY	Rashtriya Krishi Vikas Yojna
ICAR	Indian Council of Agricultural Research
SAUs	State Agricultural Universities
NGOs	Non-Governmental Organisation
KSSOCA	Karnataka State Seed and organic Certification Agency
PKVY	Paramparagat Krishi Vikas Yojana
KSDA	Karnataka State Department of Agriculture
FDIs	Foreign Direct Investment
ITC-HS	Indian Trade Clarification based on Harmonized System of Coding
GMO	Genetically modified organism
HOPCOMS	Horticultural Producers' Cooperative Marketing and Processing Society

Chapter 1: Introduction

1.1 Organic farming

Organic Farming is a method of farming system which primarily aimed at cultivating the land and raising crops in such a way, as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm waste) and other biological materials along with beneficial microbes to release nutrients to crops for increased sustainable production in an eco-friendly, pollution free environment.

International Federation of organic Agriculture Movements (IFOAM), an international organization established in 1972 for organic farming organizations defines goal of organic farming as "Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved…"

Organic production is not simply the avoidance of conventional chemical inputs, nor is it the substitution of natural inputs for synthetic ones. Organic farmers apply techniques first used thousands of years ago, such as crop rotations and the use of composted animal manures and green manure crops, in ways that are economically sustainable in today's world. In organic production, overall system health is emphasized, and the interaction of management practices is the primary concern. Organic producers implement a wide range of strategies to develop and maintain biological diversity and replenish soil fertility (Organic Agriculture Overview, USDA)

For the vast majority of history, agriculture can be described as having been organic; only from the early 20th century agriculture deviated from organic farming and started using chemical inputs. The organic farming movement started in the 1940s in response to the industrialization of agriculture.

In 1939, Lord Northbourne coined the term" organic farming" in his book" Look *to the Land'* (1940), out of his conception of "the farm as organism," to describe a holistic, ecologically balanced approach to farming—in contrast to what he called chemical

farming, which relied on "imported fertility" and "cannot be self-sufficient nor an organic whole".

Organic farming is based on the four as advocated by International Federation of Agriculture Movement (IFOAM).

- It should be based on living ecological system and cycles, work with them, emulate them and help sustain them.
- It should build on relationships that ensure fairness with regard to the common environment and life opportunities.
- It should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and environment.
- Organic agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.

1.2 Organic food products

Organic food products refer to food items that are produced, manufactured and handled using organic means defined by certifying bodies or governing bodies under its set standards/ rules and regulations.

Closely related to the organic products are natural foods. Which are generally referred to food items that are not altered chemically or synthesized in any form. Stringent standards do not exist for natural food products. The International Association of Natural Products Producers (IANPP) is trying to get the definitions for natural food into solid place.

1.3 Present status

Globally, organic products are gaining more and more importance due to increasing health conscious and disposable income. As of 2014, a total area of 43.7 million Ha has been reported under organic cultivation with an estimated 2.3 million producers across the globe. India ranks first in number of organic producers and ranks 15th w.r.t. land under organic cultivation. India had tremendous growth in organic agriculture / organic products in last decade. India's organic area has increased by 122.12 per cent from 25.72

million Ha in 2004-05 was to 57.13 million Ha in 2015-16. Within this, area under organic farming has increased by more than 7 times i.e., from 1.86 million Ha in 2004-05 to 14.90 million Ha in 2015-16. Area under organic wild collection has increased from 23.86 million Ha in 2004-05 to 42.20 million Ha in 2015-16. Export of organic produce from India has been growing at a CAGR of 34.50 per cent from 4161 MT in 2002-03 to 263687 MT in 2015-16.

1.4 Need for organic products

Chemical fertilizers have played a significant role in Indian agriculture, facilitating green revolution and making the country self-reliant in food production. However, it disturbs the soil health, leading to acidification, micro-nutrient depletion, soil degradation, food crop health and lower crop yield and quality. Besides, use of chemical fertilizers may contribute to environmental risks like increase in global warming, ground and surface water pollution etc. In view of this, it is desirable that we may return to practices which is eco-friendly and meets the nutrient depletion and sustains quality food production nutrient depletion. The only answer to these problems is organic farming that provides eco-technological stability, sustainable agriculture and better pest and nutrient management.

Chapter 2: Study Objectives

The board objectives/ scope of work of the study are as under:

- Study the exclusive Organic Market outlets in and around Bangalore and also in other major cities such as Hyderabad, Mumbai, Kolkata, Delhi to assess the source of organic produce / products for procurement and status of certification of the produce/products procured by these outlets.
- Study the Major organic produce /products of the state being marketed.
- Analyze the handling and distribution process of organic produce / products.
- Source of organic produce / products for procurement and status of certification of the produce / products procured by corporate outlets in Bangalore and other major cities of the state having exclusive shelves for organic products.
- Assess the trend of pricing of organic produce / products and estimate the financial turnover of organic produce / products market in the state.
- Major organic produce marketers in state / country and their organic produce requirement.
- Assess likely consumption pattern and preference for the organic commodities.
- Analyze the market availability of organic produce in National / International or Export market.
- Keeping in view the likely demand for organic products, analyze the possibilities of value addition and processing of organic produce through organic processing industries.
- Study the potential of market developments.
- Suggest a clear road map of improving the market for organic produce of the state.

Chapter 3: Methodology

Study is based on both primary and secondary data. Status of organic farming and products in global, national and state are derived from the secondary data. Primary research was conducted to get to know about the ground realities of organic retail outlets, consumer preferences and organic farmers.

3.1 Study coverage

Primary study was conducted in four of the metro cities of the nation viz. Bangalore, New Delhi, Mumbai and Hyderabad. Product categories like cereals, pulses, millets, fruits, vegetables, spices, commercial crops, processed products, etc., were covered in the study. Organic farmers were also covered under primary study, to understand backward linkage. Secondary data is mainly derived from government department websites, published reports, etc.

3.2 Secondary data sources

Most of the data used in the study are of secondary nature and have been collected from concerned government departments or related agencies. Some of the data have also been taken from the official websites of the concerned agencies. Apart from these, information about present organic market data and future estimations are taken from the published reports from government and private bodies.

3.3 Primary research

Field survey has be carried out for seeking information to meet the aforementioned scope of work of the study. Various stakeholders like organic farmers, farmer's federations, organic retail outlets, organic restaurants, processors, exporters, various government officials were covered under the study. Study was conducted using various research instrument/s and tool/s like structured questionnaires, FGDs, in depth personal interviews etc. A total of 27 organic retail outlets were covered in four of the metro cities viz., Bangalore, Hyderabad, Mumbai and Delhi. Retail assess where covered to understand their procurement pattern, turnover, categories of products handled,

certification process, etc. On the other hand, to know the demand side aspects of the organic produces, 39 organic consumers were covered under the study. From the organic consumers, profile of organic consumers, their shopping pattern, their expectations, etc., were assessed. For the better understanding of backward linkage of the organic produces, organic farmers were interacted in two district of the state viz., Mandya and Bagalkote. These districts were covered keeping in view of geographical spread.

3.4 Tools and techniques for data analysis

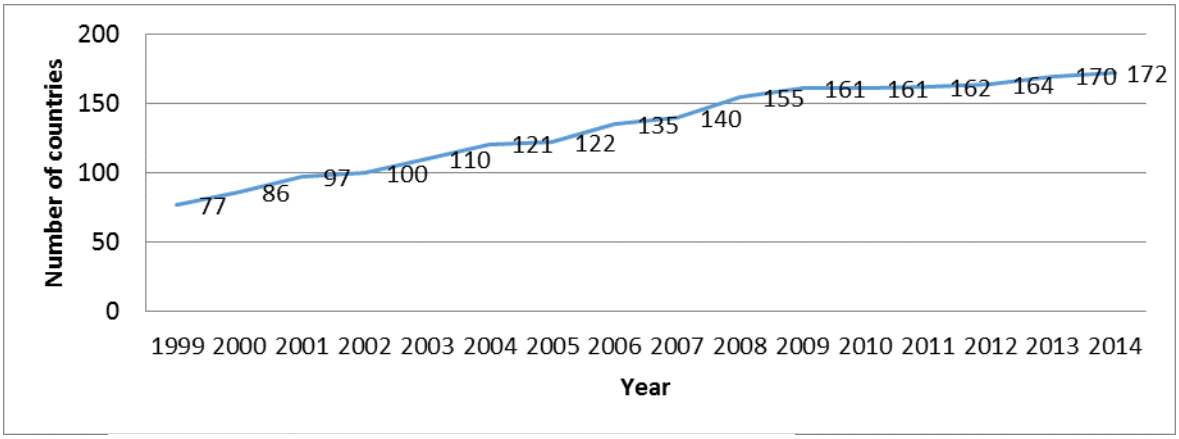
The data received from various sources / websites were tabulated and analyzed using standard statistical tools like averages, proportions, etc. The data trends and information past history was used to arrive at various conclusions and are discussed in respective chapters in the report.

Chapter 4: Global Scenario

As an impact of the organic movement internationally, and ensuring of consumer confidence through a credible and standardized certification system, the global area under organic cultivation indicating market supply, has been increasing rapidly at a CAGR of 10 per cent from 15.2 million ha in 1999 to 43.7 million ha in 2013-14 (as per Organic World 2015. FiBL & IFOAM).

As per FiBL-IFOAM-SOEL-Surveys 1999-2007, Countries with data on organic agriculture has more than doubled from 77 in 1999 to 172 in 2014. Year wise number of countries with data on organic agriculture is given in Figure 4.1. Growing demand for organic farming as well as premium for organic produces has enticed cultivars across globe to practice organic farming. This has caught attention of policymakers of respective countries. As a result, more and more countries are following organic standards and giving more importance to the data keeping w.r.t. organic farming.

Fig 4.1: Year wise number of countries with data on organic agriculture

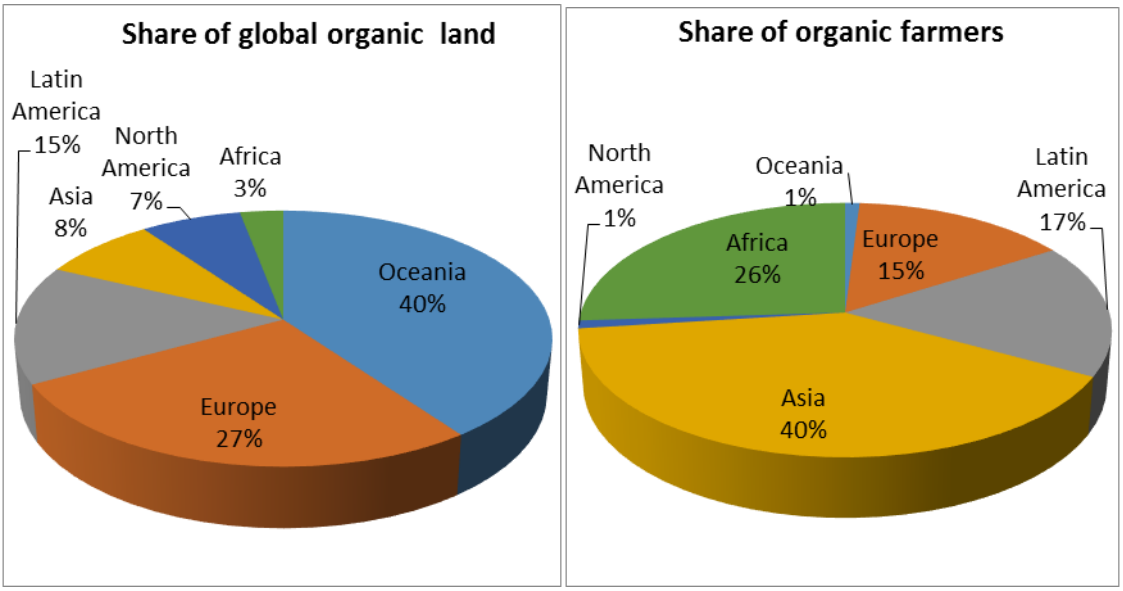


(Source: Organic Agriculture Worldwide 2016, FiBL-IFOAM Report)

In 2014, the global area under organic agriculture was estimated at 43.7 million ha. The organic agriculture land accounts for just 1 per cent of total global agriculture land. Continent wise, 40 per cent of the global organic agricultural land is in Oceania (17.3 million hectares), followed by Europe (27%; 11.6 million hectares) and Latin America (15%; 6.8 million hectares). The global organic producers' number was estimated at 2.3 million in 2014. Asia houses largest number of organic producers, accounting almost 40

per cent of the global organic producers followed by Africa (26%) and Europe (17%). Share of continents in global organic area and organic producers in given in Figure 4.2.

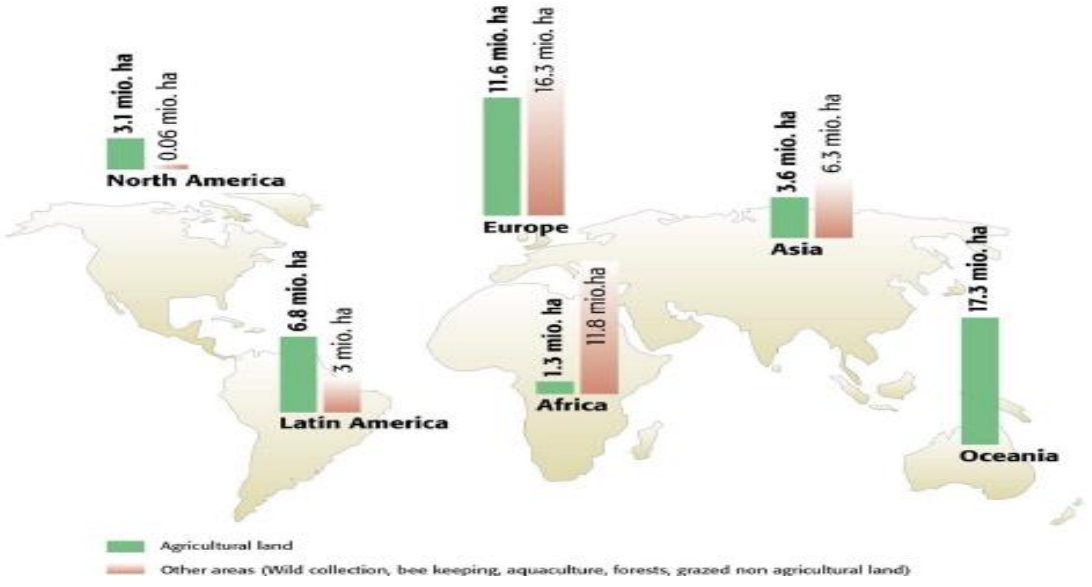
Fig 4.2: Share of continents in global organic area and organic producers



(Source: Organic Agriculture Worldwide 2016, FiBL-IFOAM Report)

In addition to the 43.7 million ha of organic agriculture land, wild collection classified area comprises another 35 million ha. Along with wild collection area, the total global organic area was around 78 million ha. More than 45 per cent of wild collection area is accounted by Europe with 16.3 million ha followed by Africa (34%, 11.8 million ha) and Asia (18%, 6.3 million ha). Along with wild collection area, Europe is the largest continent with area under organic (27.9 million ha) followed by Oceania (17.3). Continent map with area under organic agriculture and wild collection is given in Figure 4.3.

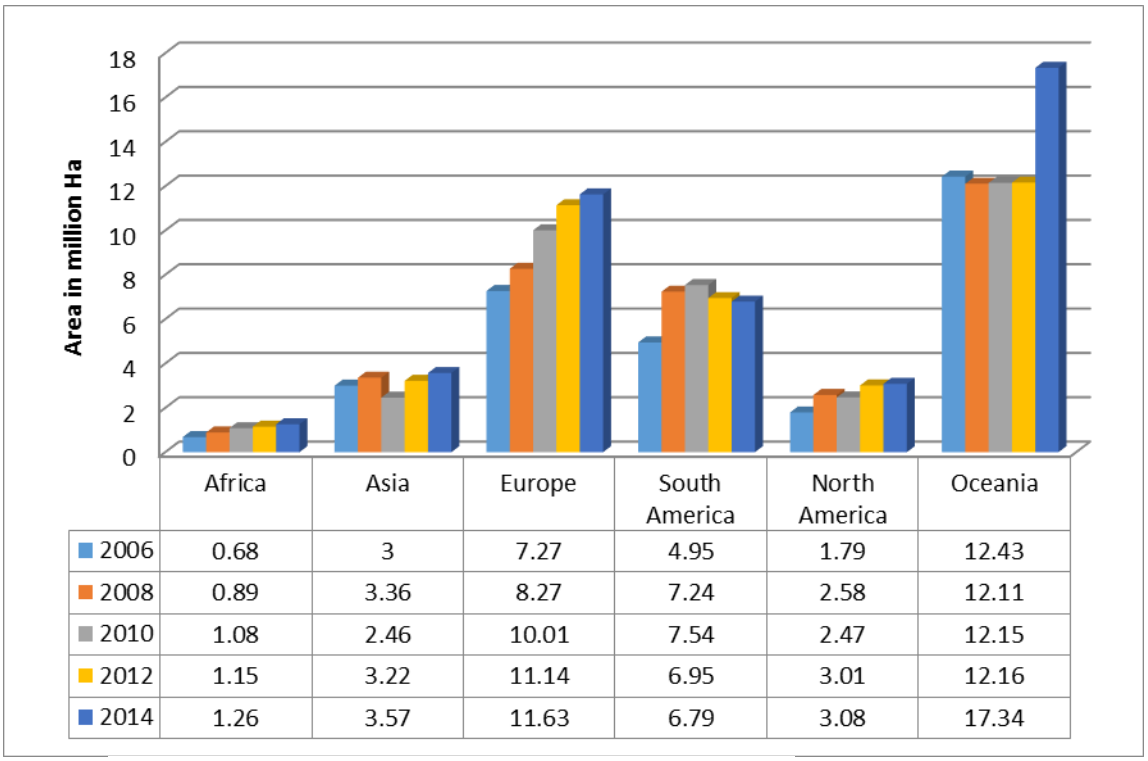
Fig 4.3: Continent map with area under organic agriculture and wild collection



(Source: Organic Agriculture Worldwide 2016, FiBL-IFOAM Report)

During the past eight years (2006-2014), Africa has highest growth rate for area under organic agriculture with 85 per cent. Africa's rapid growth is mainly due to lower base. Africa is followed by North America with 72 per cent growth rate, Europe (60%), Oceania (40%) and South America (37%). Asia has a lowest growth rate with just 19 per cent in the same eight years. Continent wise area from 2006 to 2014 is depicted in Figure 4.4.

Fig 4.4: Continent wise area from 2006 to 2014



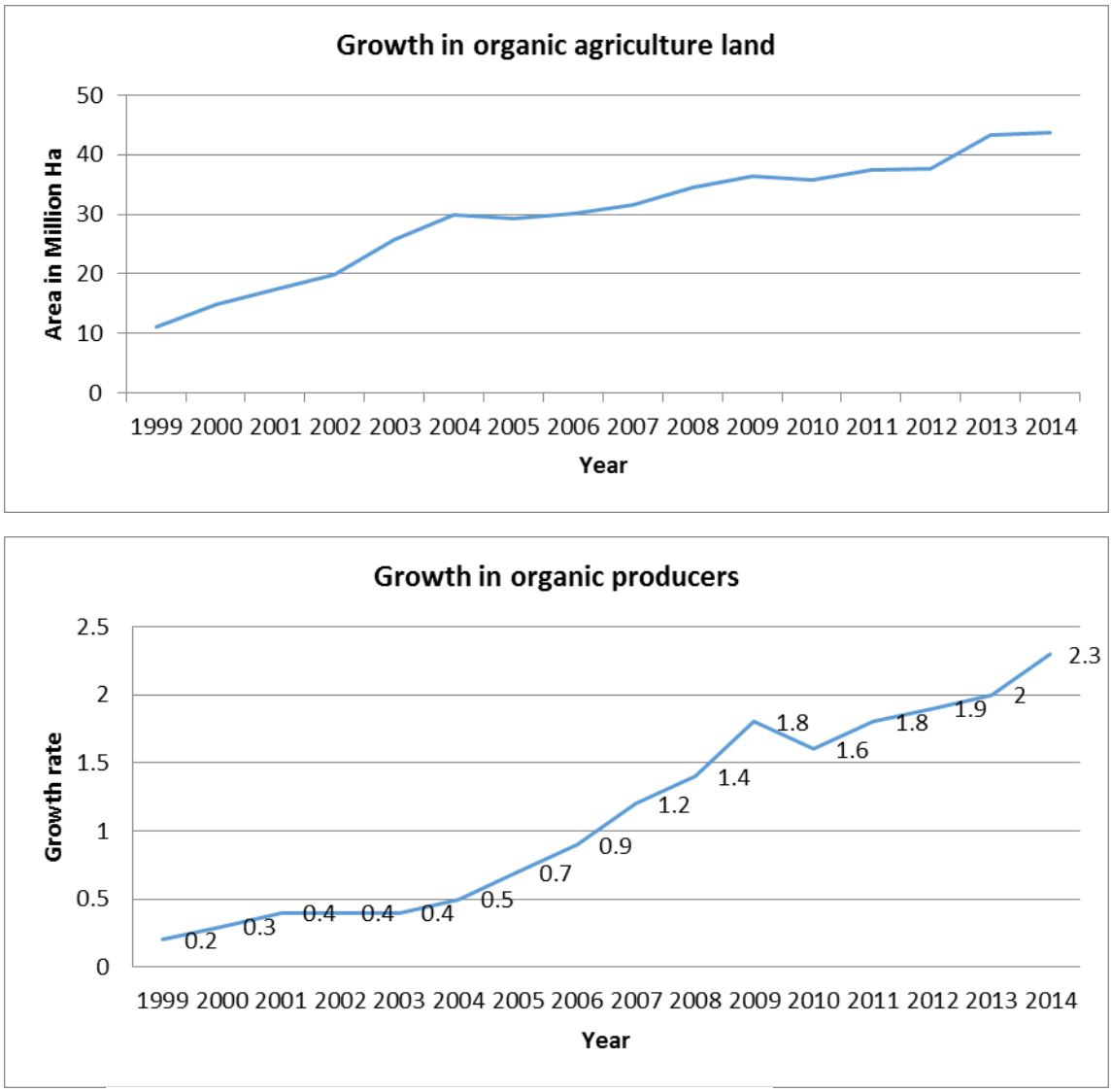
	Africa	Asia	Europe	South America	North America	Oceania
2006	0.68	3	7.27	4.95	1.79	12.43
2008	0.89	3.36	8.27	7.24	2.58	12.11
2010	1.08	2.46	10.01	7.54	2.47	12.15
2012	1.15	3.22	11.14	6.95	3.01	12.16
2014	1.26	3.57	11.63	6.79	3.08	17.34

(Source: Organic Agriculture Worldwide 2016, FiBL-IFOAM Report)

Global area under organic agriculture has almost tripled in 15 years i.e. from 15.2 m ha in 1999 to 43.7 m ha in 2014. Global organic agriculture area is growing with a CAGR of 10 per cent. Growth in organic agriculture area was rapid in initial five years (1999-2004) with doubling area in just five years. From 2004 to 2014, area has grown by just 50 per cent. In the same period organic producers' number has increased by more than 10

times i.e. from 0.20 million in 1999 to 2.3 million in 2014. Growth in organic agriculture area and organic producers from 1999 to 2014 is depicted in Figure 4.5.

Fig 4.5: Growth in organic agriculture area and organic producers

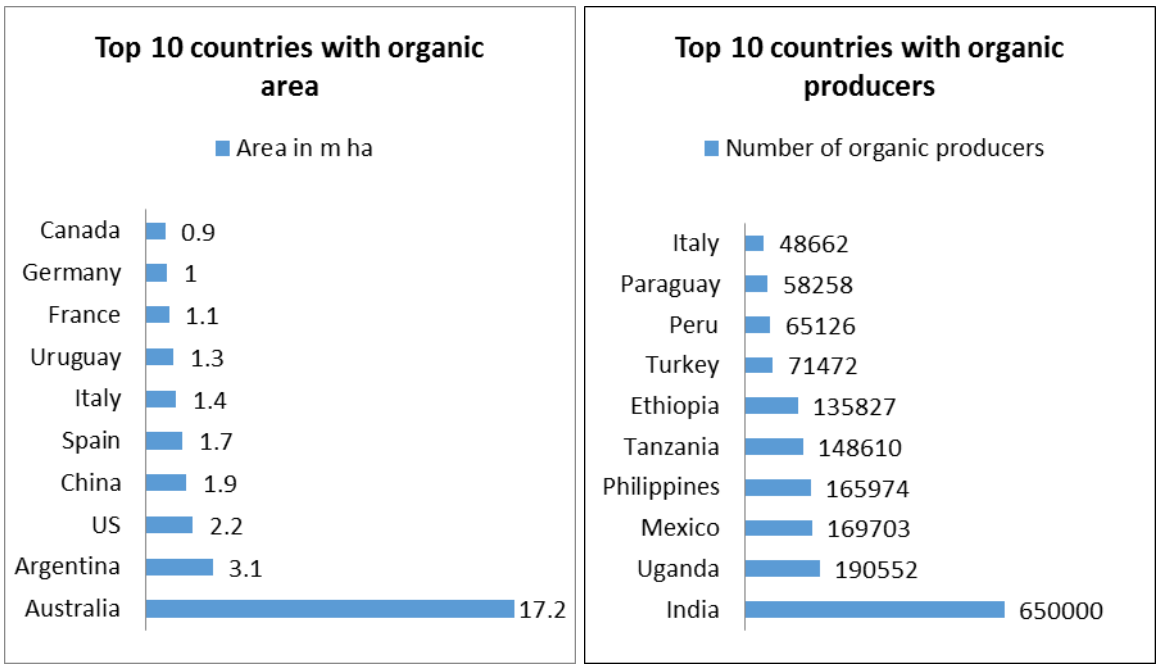


(Source: Organic Agriculture Worldwide 2016, FiBL-IFOAM Report)

Among the countries, Australia has the highest area under organic agriculture (17.2 m ha), followed by Argentina (3.1 m ha) and USA (2.2 m ha). Australia alone accounts for around 40 per cent of global area under organic agriculture. India with 0.57 million ha is placed at 15th among the countries with largest area under organic agriculture.

India is the country with largest number of organic producers with 6.50 Lakh farmers, followed by Uganda (1.91 Lakh) and Mexico (1.70 Lakh). India accounts for more than 28 per cent of global organic producers. Global top 10 countries with organic area and organic producers is depicted in Figure 4.6.

Fig 4.6: Global top 10 countries with organic area and organic producers



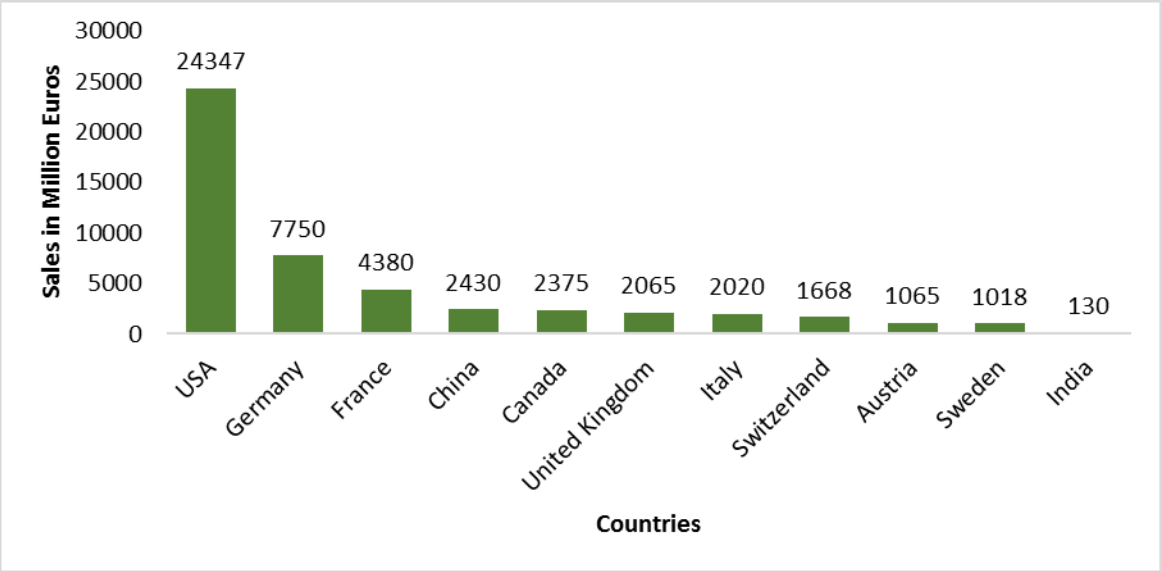
(Source: Organic Agriculture Worldwide 2016, FiBL-IFOAM Report)

The global organic food market which is estimated at USD 90 billion in 2015 has been growing at a CAGR of around 12 per cent for last 14 years. Europe and North America together generate about 90 per cent of the global organic food sales. Within Europe, Germany and France accounts for more than 50 per cent of the market. The organic packaged food and beverage products category occupies around 40-50 per cent of the total global organic food market with an estimated market size of around USD 38-40 billion in 2015. Of this, organic packaged food category accounts for USD 32-34 billion, while organic packaged beverages account for USD 4-6 billion. Dairy and dairy products, bakery/confectionery products, ready meals and baby food are the largest categories in the organic packaged food market globally accounting for around 50 per cent of the total organic packaged food market. Dairy sector accounts for close to 25 per cent of the

packaged food products followed by bakery confectionery products (18%), ready meals (8%) and baby food (6%).

The United States is the leading market with 24.3 billion Euros, followed by Germany (7.8 billion Euros), France (4.4 billion Euros), and China (2.4 billion Euros). As per the data India's organic retail sales is 130 million Euros. The highest per capita spending on organic produce was in Switzerland (273 Euros) followed by Denmark (212 Euros) Luxembourg (2044 Euros). Organic retail sales of major countries are given in Figure 4.7.

Fig 4.7: Organic retail sales of major countries



(Source: Organic Agriculture Worldwide 2016, FiBL-IFOAM Report)

Chapter 5: India Scenario

India ranks 15th in terms of World's Organic Agricultural land as per 2013 data (Source FIBL & IFOAM Year Book 2015). The total area under organic in India was 57.1 Lakh Ha in 2015-16, with a production of 13.5 Lakh MT. Of this total area, 26 per cent is under organic farming and the rest 74 per cent is under wild collection. India's organic food sector is estimated at Rs.2700 Crores (approximately USD 415 million) which stands at less than one percent of the global organic food market. Export accounts for more than 70 per cent of the total Indian organic market. However, there is no concrete data about Indian domestic market size and valuation. The organic food market in India is estimated to be growing at a 25-30 per cent, mainly due to lower base.

5.1 Area

The total area under organic certification is 57.1 Lakh Ha in 2015-16. This includes 26 per cent organic farming area with 14.9 Lakh Ha and rest 74 per cent (42.2 Lakh Ha) is forest and wild area. India's total organic area in 2004-05 was 25.7 Lakh Ha and in the last 11 years it has more than doubled to 57.1 Lakh Ha in 2015-16. However, area under certified organic farming has grown almost eight fold in last 11 years (1.86 Lakh Ha in 2004-05 to 14.9 Lakh Ha in 2015-16). In the same duration, area under organic wild collection has shown just 76 per cent growth. From 2004-05 to 2015-16, total organic area has grown with a CAGR of 8.30 per cent. During the same time, area under organic farming has grown with a CAGR of 23.14 per cent and are under wild collection has grown at a CAGR of 5.87 per cent. Year wise area of organic farming, wild collection and total organic area from 2004-05 to 2015-16 is tabulated in Table 5.1 and same is depicted in Figure 5.1. Growth trend in the organic area in India is depicted in Figure 5.2.

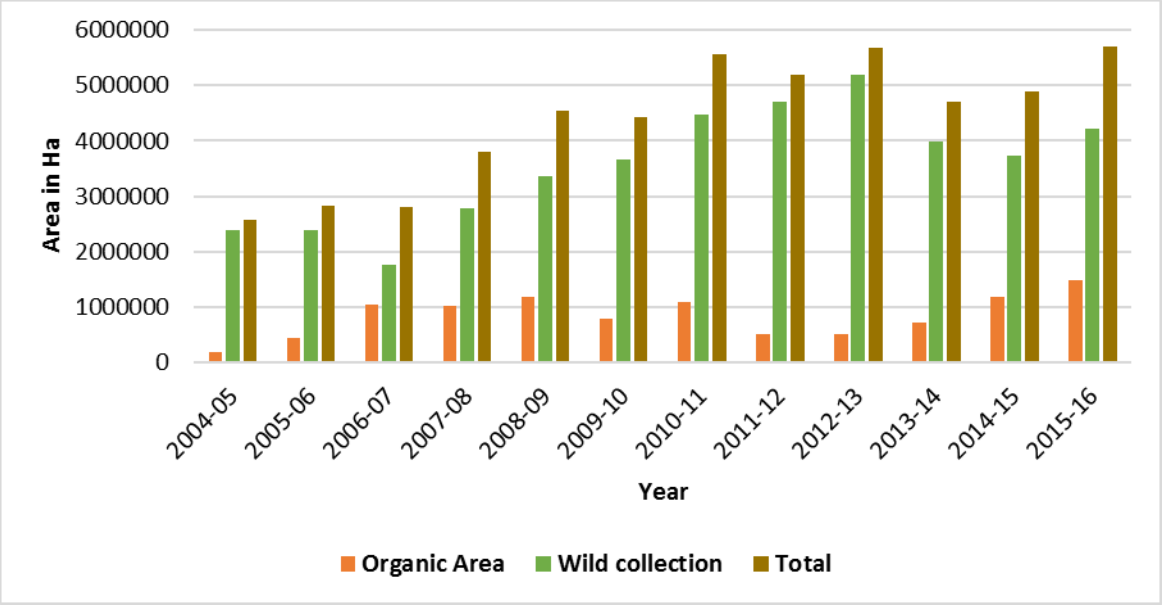
Table 5.1: Year wise area of organic farming, wild collection and total organic area from 2004-05 to 2015-16 (In Lakh Ha)

Sr. No.	Year	Organic farming	Wild collection	Total
1	2004-05	1.86	23.86	25.72
2	2005-06	4.32	23.86	28.18

Sr. No.	Year	Organic farming	Wild collection	Total
3	2006-07	10.30	17.70	28.00
4	2007-08	10.18	27.82	38.00
5	2008-09	11.80	33.60	45.40
6	2009-10	7.80	36.50	44.30
7	2010-11	10.84	44.78	55.62
8	2011-12	5.00	47.00	52.00
9	2012-13	5.10	51.80	56.90
10	2013-14	7.23	39.90	47.13
11	2014-15	11.80	37.20	49.00
12	2015-16	14.90	42.20	57.10

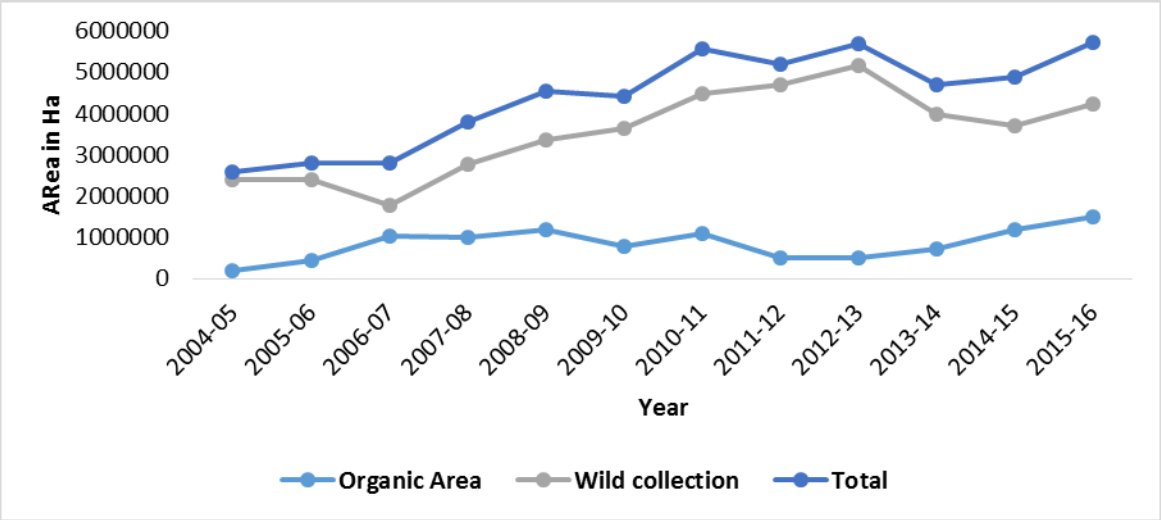
(Source FIBL-AMI Organic data network survey)

Fig 5.1: Area of organic farming, wild collection and total organic area from 2004-05 to 2015-16



(Source FIBL-AMI Organic data network survey)

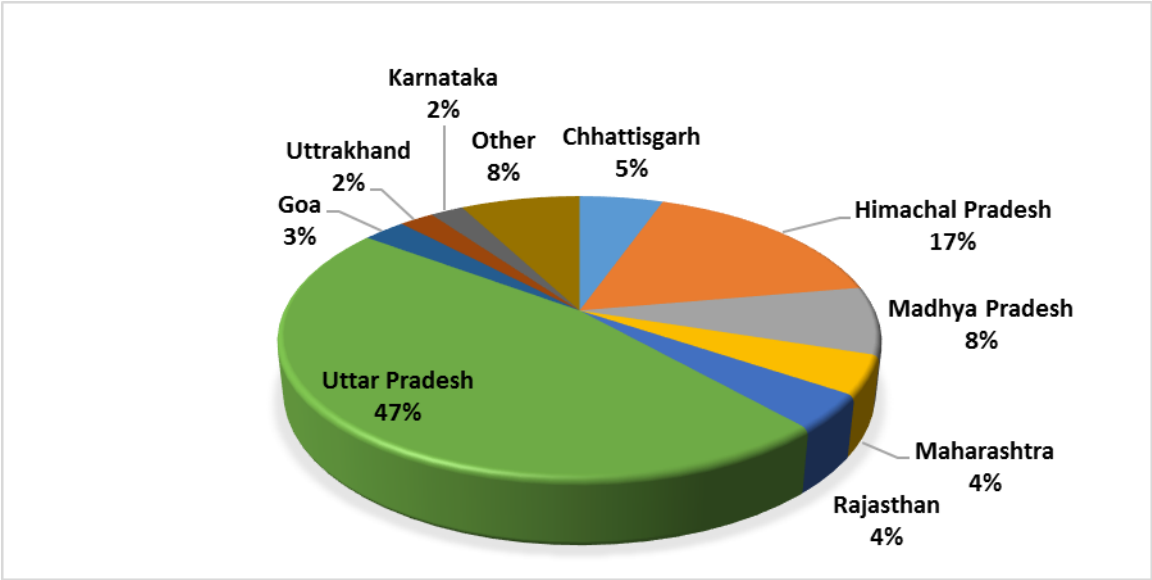
Fig 5.2: Growth trend in the organic area in India



(Source FIBL-AMI Organic data network survey)

Uttar Pradesh accounts for almost half of the total area under total organic area followed by Himachal Pradesh, Madhya Pradesh and Chhattisgarh. Share of states in total organic area is depicted din Figure 5.3.

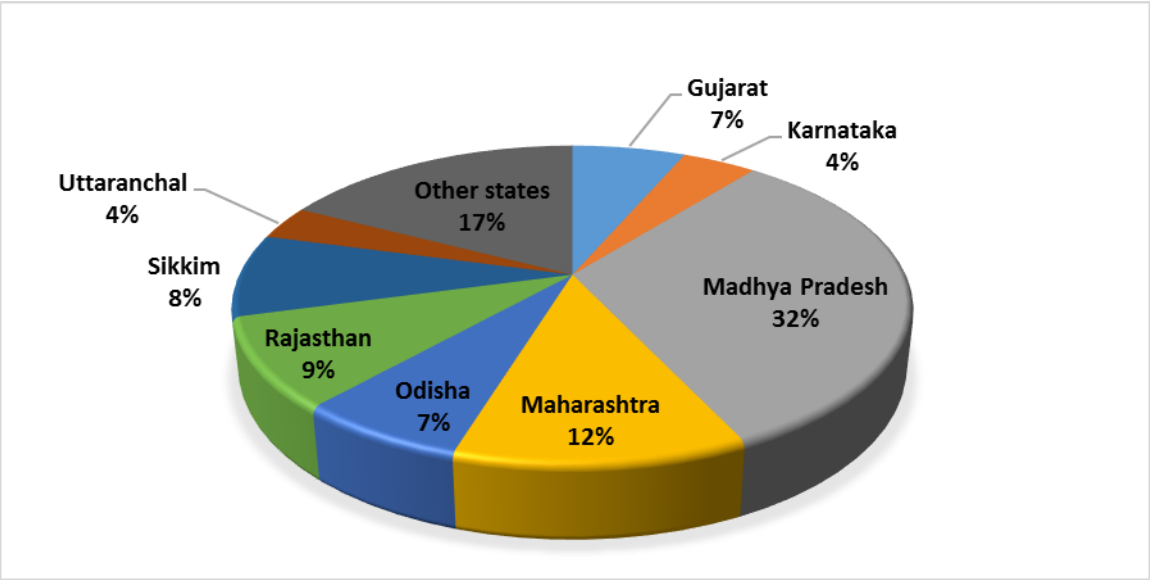
Fig 5.3: Share of states in total organic area (wild collection and organic farming)



(Source: National Project on Organic Farming Annual Report 2012-2013)

As per 2013-14 APEDA data, Madhya Pradesh is the state with largest area under organic certified farming with 2.33 Lakh Ha. Madhya Pradesh accounts for 32 per cent of total country's organic farming area, followed by Maharashtra (12%, 0.86 Lakh Ha), Rajasthan (9%, 0.66 Lakh Ha) and Sikkim (8%, 0.61 Lakh Ha). Karnataka with 0.31 Lakh Ha is the sixth largest organic farming state and it accounts for around 4 per cent of the total countries are. Share of states in organic farming is depicted in Figure 5.4. State wise area under Organic farming in given in Annexure 1.

Fig 5.4: Share of states in organic farming (excluding wild collection)

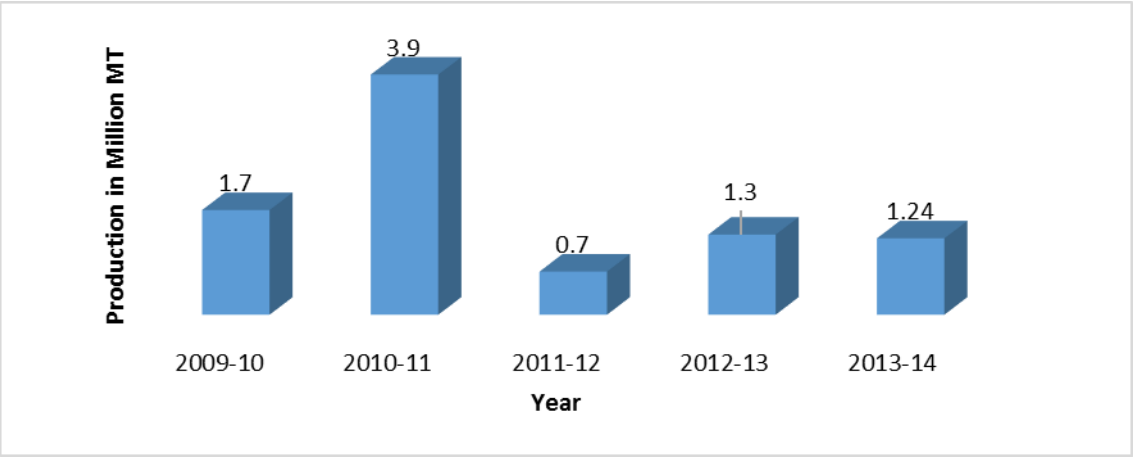


(Source: APEDA 2013-14)

5.2 Production

As per APEDA, India has produced around 1.35 million MT of certified organic product during 2015-16. Over a past five years (2009-10 to 2013-14), Indian organic production has shown erratic growth pattern with exponential growth in 2010-11 followed by drastic deduction in the later years. Year wise production of Indian organic produce is given in Figure 5.5.

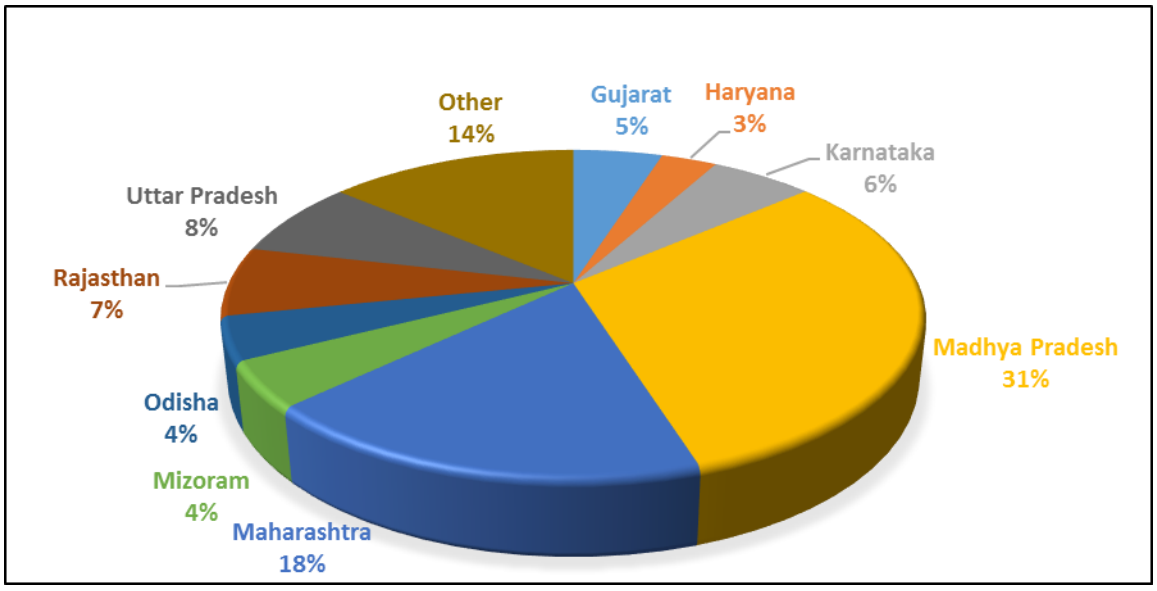
Fig 5.5: Year wise production of Indian organic produce



(Source: Lok Sabha Unstarred Question No.3130 dated 11-02-2014)

The latest state wise production data available is for 2011-12. As per it, Madhya Pradesh is the largest organic producing state with a contribution of around 31 per cent of total production, followed by Maharashtra (18%). Madhya Pradesh and Maharashtra accounts for almost half of the countries organic farming production. Other major organic produce production states are Uttar Pradesh, Rajasthan Karnataka and Gujarat. Share of states in the total country production is given in Figure 5.6.

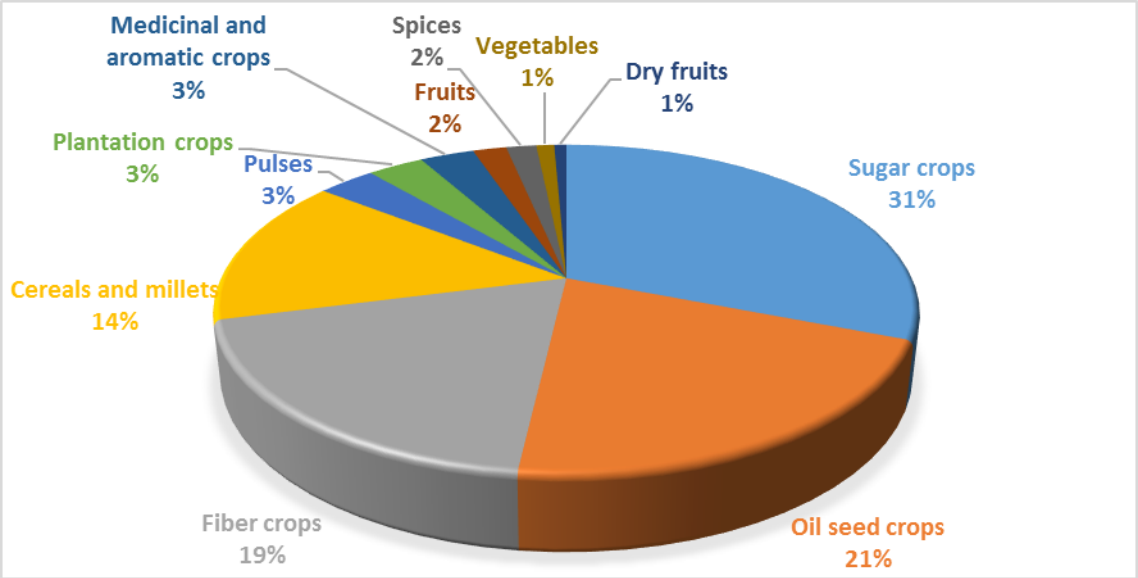
Fig 5.6: Share of states in the total country production (Wild collection and organic farming)



(Source: National Project on Organic Farming Annual Report 2012-2013)

Among the various categories of agricultural crops sugar crops is the major category in India with 30.90 per cent, followed by oilseeds (20.8%), fiber crops (19.1%) and cereals and millets (14.6%). Share of crop categories in the total production is depicted in Figure 5.7.

Fig 5.7: Share of crop categories in the total production



(Source: India Organic Sector Vision 2025 white paper in collaboration with APEDA)

5.3 Export

The increasing demand for organic produce has created new export opportunities and many developing countries including India have started to tap lucrative export markets for organic produce. As per APEDA, the total volume of export of organic produce during 2015-16 was 2.64 Lakh MT which is around 20 per cent of total organic production of the country. The value of export in 2015-16 was estimated at around 298 million USD.

India exports about 300- 400 products, mostly non value added commodities at the bottom of the value chain. Of these the major share is of low value bulk commodities like oil seeds, cereals and millets. Organic products are exported to European Union, US, Canada, Switzerland, Korea, Australia, New Zealand, South East Asian countries, Middle East, South Africa etc. There are more than 350 registered exporters in India

During the last 13 years (2002-03 to 2015-16), organic produce export has increased from 4161 MT to 263687 MT. Export volume has increased by more than 60 times in these period. During the same period, export value has increased by only 2 times i.e.

from Rs.620 Crore in 2002-03 to Rs.2086 Crore in 2015-16. Export volume has grown continuously with a CAGR of 37.60 per cent. Whereas, export value had irregular growth pattern with an overall growth of 9.79 per cent (CAGR). Export value and export income generation clearly shows that, India is exporting more and more of low value high volume commodities. Year wise export in volume and value generation is tabulated in Table 5.2 and is depicted in Figure 5.9. CAGR of export volume and export value realization is depicted in Figure 5.8.

Table 5.2: Year wise export in volume and value generation

Sr. No	Year	Export Volume (In MT)	Export Value (In Crore)
1	2002-03	4,161	619.6
2	2003-04	6,288	726.6
3	2004-05	8,344	953.3
4	2005-06	7,953	1,281.6
5	2007-08	37,533	498.0
6	2008-09	44,476	537.0
7	2009-10	58,408	526.0
8	2010-11	69,837	699.0
9	2011-12	1,47,800	1,866.3
10	2012-13	1,65,262	2,106.8
11	2013-14	1,94,088	2,363.1
12	2015-16	2,63,687	2,086.0

(Source: Lok Sabha Unstarred Question No. 5368, dated on 06.09.2011 & Lok Sabh Unstarred Question No. 6140, dated on 14.05.2012. National centre for organic agriculture annual report 2002-03-2012-13 and APEDA)

Fig 5.8: CAGR of export volume and export value realization from 2001-13 to 2015-16

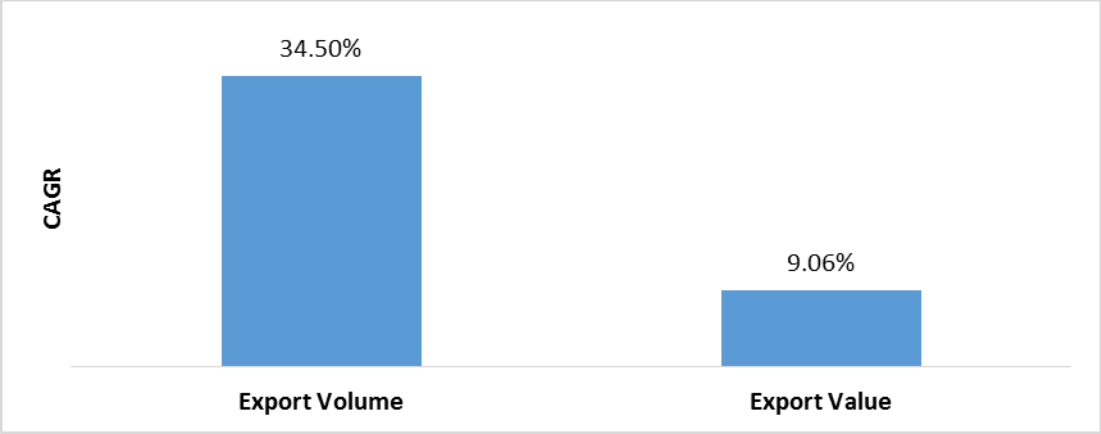
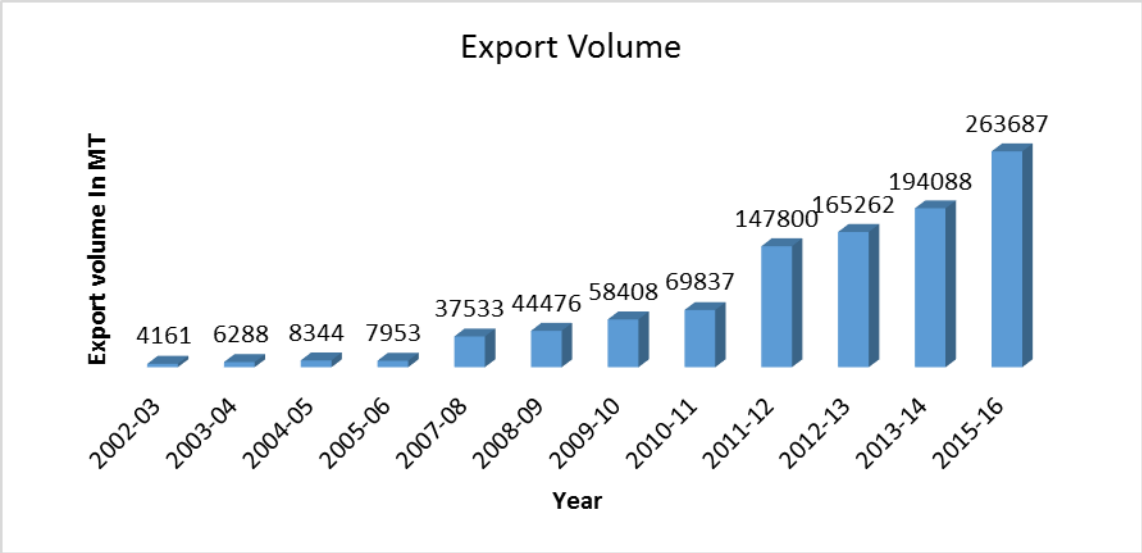


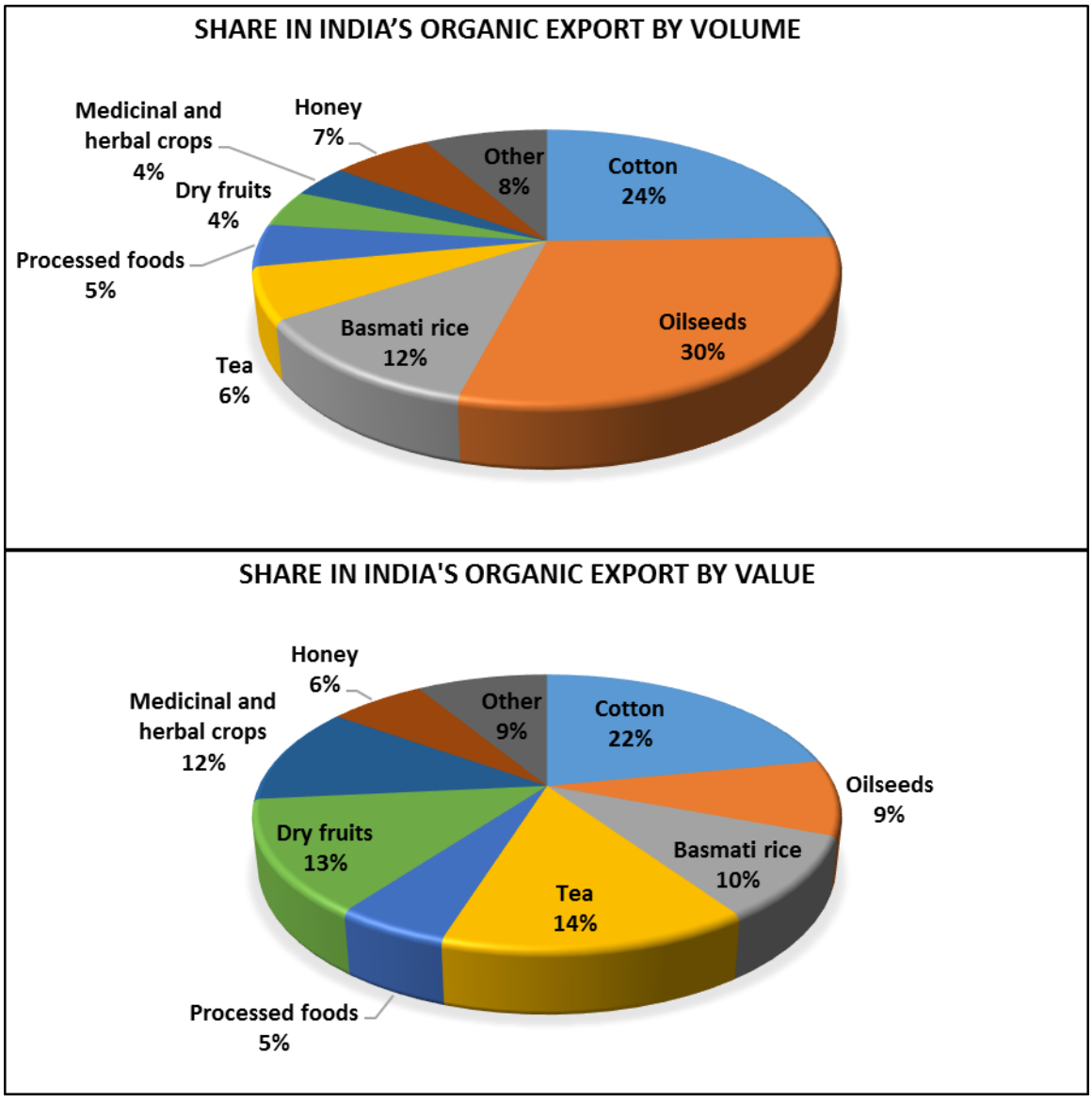
Fig 5.9: Year wise export in volume and value generation



(Source: Lok Sabha Unstarred Question No. 5368, dated on 06.09.2011 & Lok Sabh Unstarred Question No. 6140, dated on 14.05.2012. National centre for organic agriculture annual report 2002-03-2012-13 and APEDA)

In the total volume of 2.64 Lakh MT exported from India, oilseeds accounts for 30 per cent, followed by cotton (24%) and Basmati rice. Other major categories of organic export from India are honey, tea, processed foods, medicinal & herbal crops, dry fruits, etc. When it comes to value of export, cotton is the major product with 22 per cent of total export value realized followed by tea (14%), dry fruits (13%) and medicinal & herbal crops (12%). Share of India's organic export by volume and value is depicted in figure 5.10.

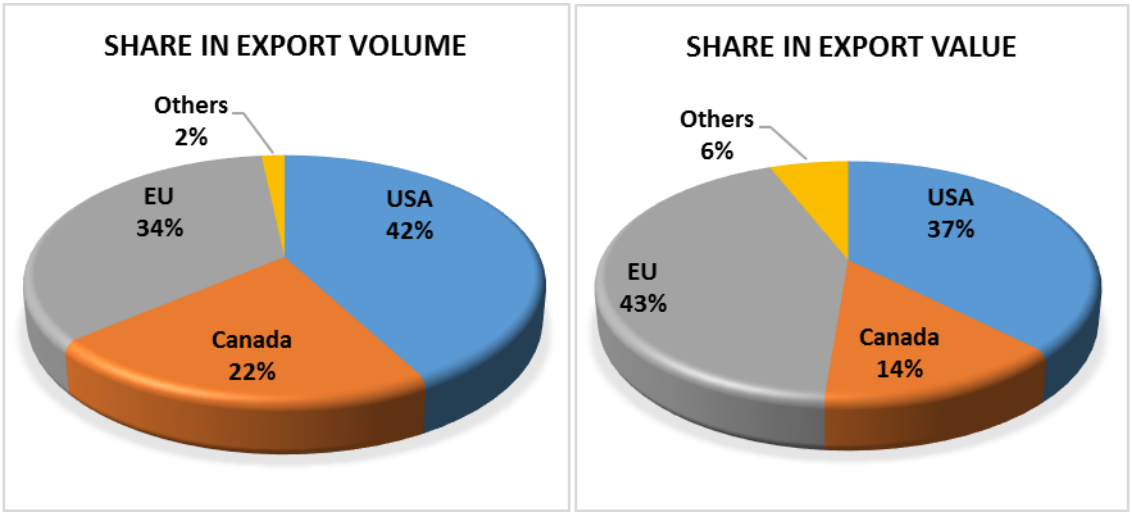
Fig 5.10: Share of India's organic export by volume and value



(Source: National Centre for organic farming -annual report 2008-2009)

The major importers of Indian organic products by volume is USA with 42 per cent of total countries export followed by European Union (34%) and Canada (22%). In terms of value, European Union is the major importer with 43 per cent followed by USA (37%) and Canada (14%). Share of Indian organic products import by volume and value is given in Figure 5.11.

Fig 5.11: Share of Indian organic products import by volume and value

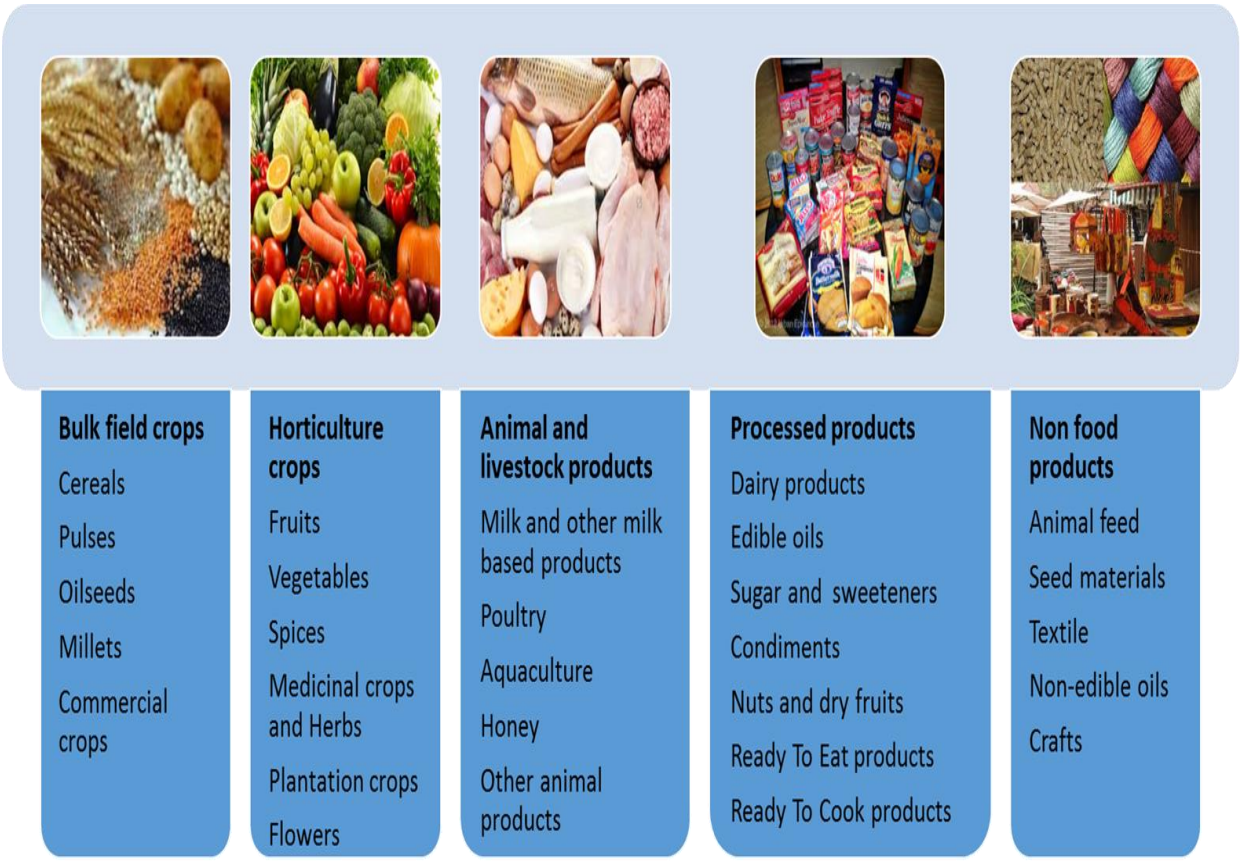


(Source: Loksabha Unstarred Question No 2393 Dated on 25/07/2014)

5.4 Broad product portfolio

The broad categories of products available in the country are field crops, horticulture crops, animal and livestock products, processed products and non-food products. Sub-categories among these categories are given in Figure 5.12.

Fig: 5.12: Broad category of organic products available in India



Chapter 6: Karnataka State Scenario

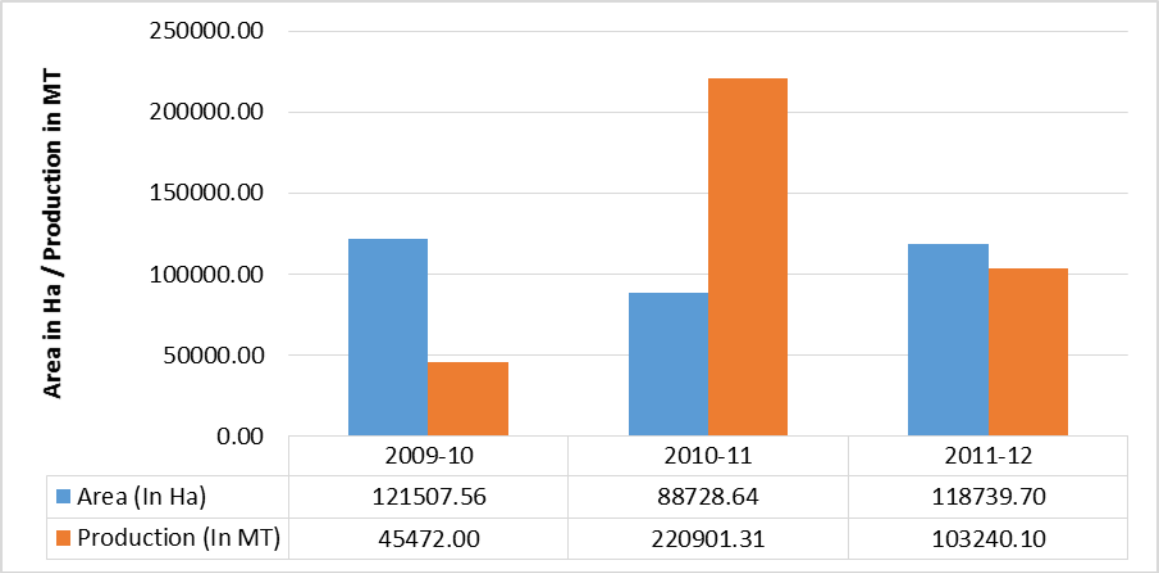
Area and production of organic crops in the state as per latest data available, state initiatives in promoting organic farming and present market scenario of organic produce market in Karnataka is dealt in this chapter.

6.1 Area and Production

During 2011-12, Karnataka stood 9th in terms of area under organic cultivation with a total area of 1.19 Lakh Ha. This include both organic farming and wild collection. From 2009-10 to 2011-12, growth in area was almost flat however, production has more than doubled from 0.45 Lakh MT in 2009-10 to 1.03 Lakh MT in 2011-12. With 1.03 Lakh MT production, Karnataka ranks fifth in terms of production of organic crops and wild collection. Area and production of organic crops and wild collection from 2009-10 to 2011-12 in Karnataka is given in Figure 6.1.

As per 2012-13 APEDA data, Karnataka stood 7th in terms of area under organic farming (excluding wild collection). The present situation with respect to area and production of organic crops in Karnataka may drastically vary from the 2012-13 (latest data available year), mainly due to the various state government incentives to promote organic farming. In the absence of published data on recent area and production, study team has provided state position as per data prior to 2012-13.

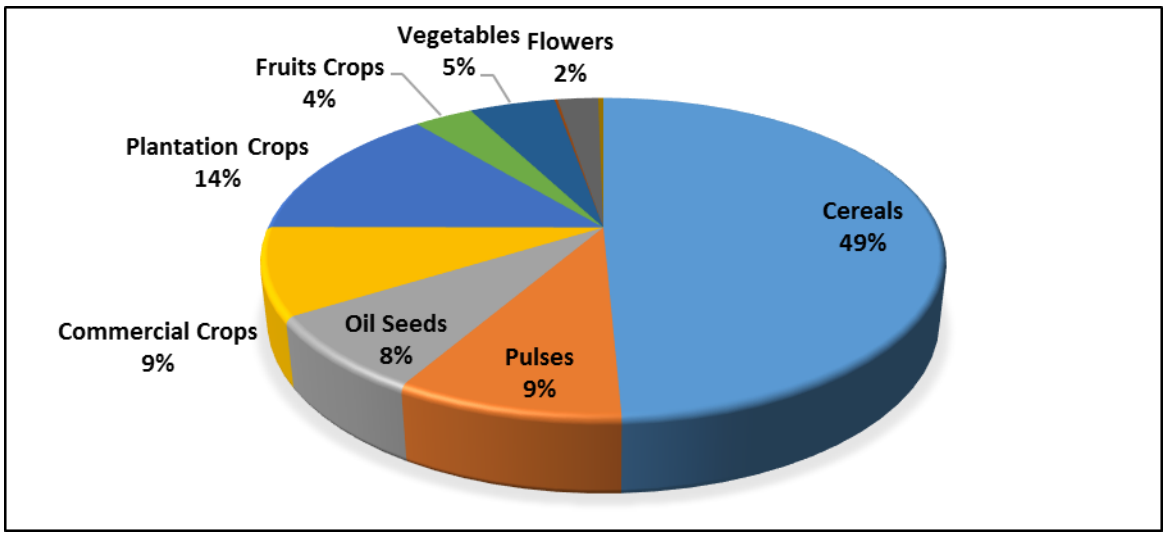
Fig 6.1: Area and production of organic crops and wild collection



	2009-10	2010-11	2011-12
Area (In Ha)	121507.56	88728.64	118739.70
Production (In MT)	45472.00	220901.31	103240.10

In the absence of published data on crop wise organic farming, share of crops in overall area has been arrived by recent organic certification data collected during field visits. As per recent organic certification data, cereals and millets accounts for almost half of the area under organic farming in the state. With 14 per cent of total area under organic farming, plantation crops are the second largest category followed by pulses and commercial crops (9% each) and oil seeds (8%). Crop category wise. Share of various crop categories in overall crop area under organic farming in the state is depicted in Figure 6.2.

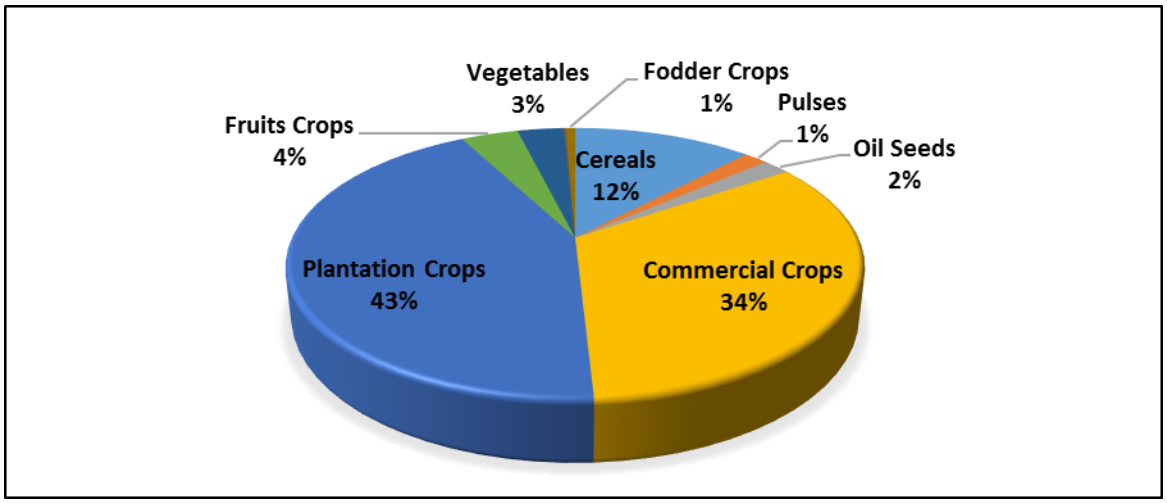
Fig 6.2: Share of crop categories in overall crop area under organic farming



(Source: Data collected from organic certifying agencies in Karnataka)

In terms of organic crop production, plantation crops accounts for 43 per cent of state's total organic production followed by, commercial crops (34%) and cereals (12%). Share of various crop categories in state's total organic production is depicted in Figure 6.3.

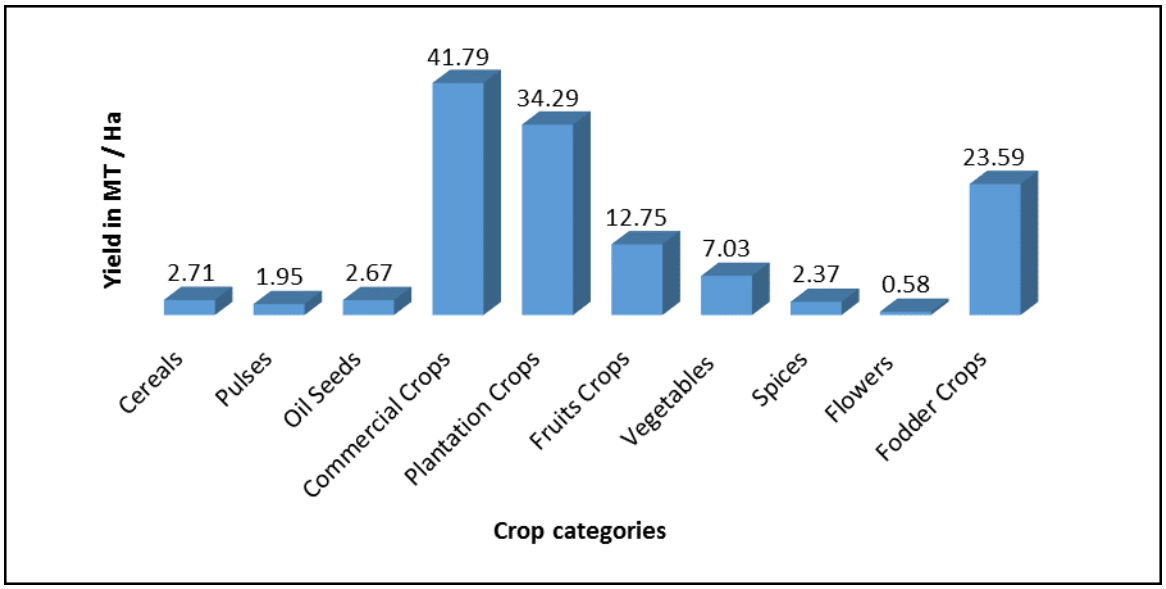
Fig 6.3: Share of crop categories in state's total organic production



(Source: Data collected from organic certifying agencies in Karnataka)

Higher share in production among commercial and plantation crops despite lower share in area is due to high productivity. Commercial crops have a highest productivity with 41.79 MT/Ha followed by plantation crops (34.29 MT/Ha). Lowest productivity is found among field crops like pulses (1.95 MT/Ha), oilseeds (2.67 MT/Ha) and cereals and millets (2.71 MT/Ha). Comparison of productivity of various crop category is depicted in Figure 6.4.

Fig 6.4: Productivity of organic crop categories

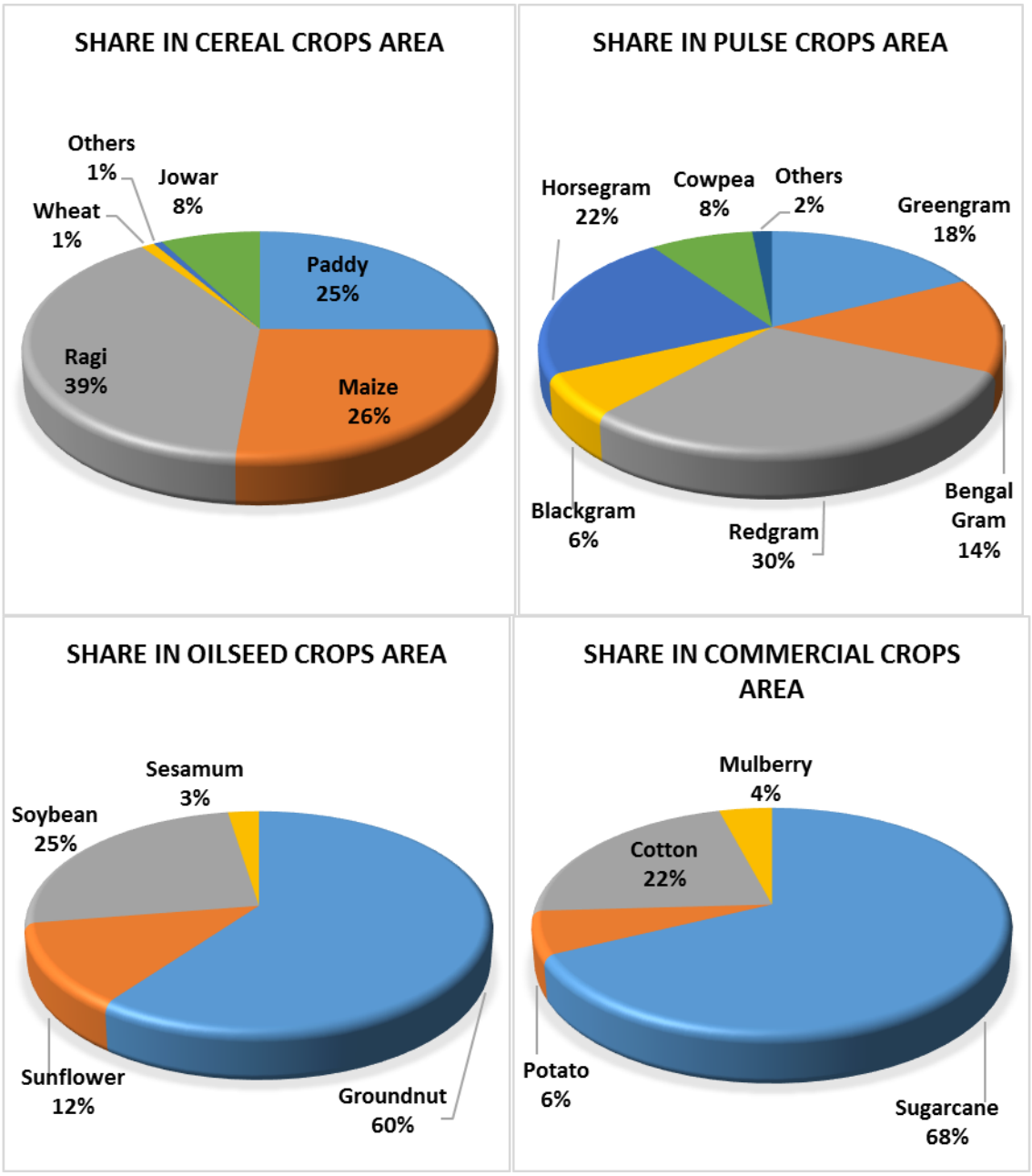


(Source: Data collected from organic certifying agencies in Karnataka)

Ragi is the major organic crop grown in the state accounting for almost 20 per cent of the total organic farming area. Other major organic crops are maize (13%), Paddy

(12.37%), arecanut (6.84%), sugarcane (6%) and groundnut (5%). Ragi is the major organic cereals and millets crop with 39 per cent of area under the category followed by maize (26%) and paddy (25%). Among organic pulses, red gram is the major crop with 30 per cent of area followed by, horse gram (22%) and green gram (18%). Almost 60 per cent of area under organic oilseeds is covered by groundnut followed by soya bean (25%) and sunflower (13%). Sugarcane is the major organic commercial crop cultivated in the state with more than two-third of area under organic commercial crops, followed by cotton (22%). Share of major crops in each of the categories of organic field crops is given in Figure 6.5.

Fig 6.5: Share of major crops in each of the categories of organic field crops

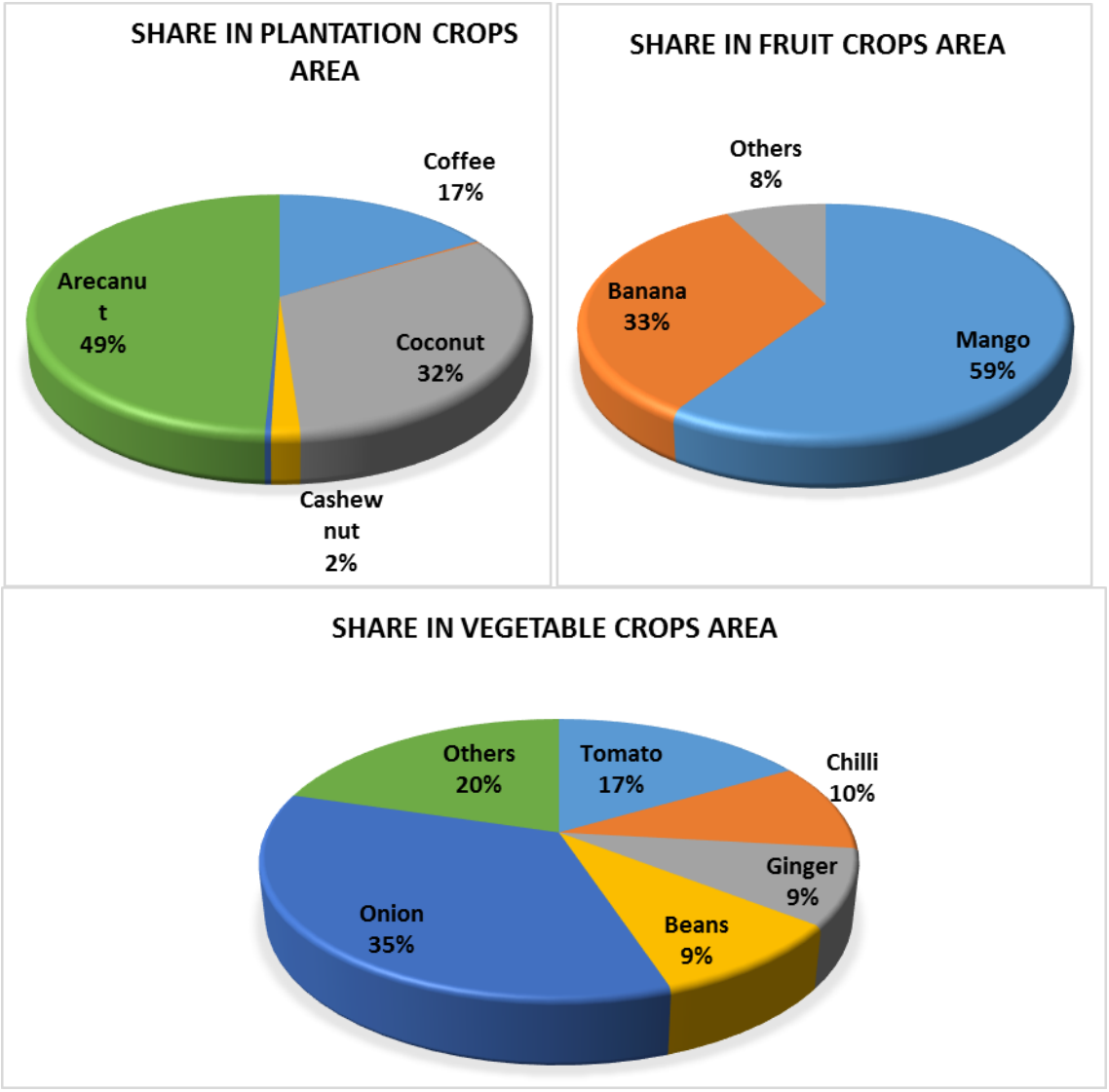


(Source: Data collected from organic certifying agencies in Karnataka)

Among the organic horticultural crops, plantation crops accounts for almost two-third of area; rest one-third area is occupied by fruits and vegetables. Arecanut is the major organic plantation crop grown in the state accounting almost half of the area under organic plantation, followed by coconut (32%) and coffee (17%). Among organic fruits, mango and banana accounts for more than 90 per cent of area. Onion is the major organic vegetable cultivated in the state. It accounts for almost one-third of area under

organic vegetables, it is followed by tomato (17%) and chili (10%). Among organic spices, black pepper, turmeric and ginger are the major in the state. Share of major crops in each of the categories of organic horticulture crops is given in Figure 6.6.

Fig 6.6: Share of major crops in each of the categories of organic horticulture crops



(Source: Data collected from organic certifying agencies in Karnataka)

6.2 State initiatives

Government of Karnataka has brought out a unique policy in 2004 to promote organic farming in Karnataka by adopting holistic approch. Since then, several schemes and programmes of the State and Central Governments have been implemented in the State to promote organic farming. On account of this, awareness has perculated down the line and more than 1 Lakh hectares of agricultural land has been converted from

conventional farming to organic farming. Now, organic farmers have started approching Government in various forums for providing market linkages to their produce. Simultaneously, the demand for organic produce has also started increasing tremendously from the consumer side.

The Hon'ble Chief Minister of Karnataka in the budget speech of 2015-16, has made a mention that the Government would facilitate formation of organic farmer associations in the state to provide marketting linkages.Further, in the high level meeting chaired by Honarable Minister for Agriculture, Government of Karnataka it has been decided to forn 14 Regional federations in the state. At present, regional federations are operating in the initial years. Particiaption of organic farmers in these regional federations is encouraging and promising. Total area under certified organic production from 14 federations is around 0.47 Lakh Ha and there are more than 45,000 farmers registered under these federations. In future, these federations are expected to play pivotal role in promotion of organic farming and organic produce market in the state.

Savayava Bhagya Project

Savayava Bhagya Project, an ambitious project of the Karnataka government, is being implemented at Hobli/ block level in coordination with NGOs selected transparently through e-tendering since 2013-14. The selected NGO is given the task of adopting 100 hectares of area in each Hobli/ block. Currently, this project is under implementation in 566 Hoblis and an area of 63,677 hectares involving 53,829 farmers has been brought under the project. The project area has been brought under group certification through Karnataka State Seed and organic Certification Agency (KSSOCA). An amount of Rs.4657 Lakh has been reserved for the project during the year 2016-17.

Paramparagat Krishi Vikas Yojana (PKVY)

In addition to Savayava Bhagya, the centre sponsored Paramparagat Krishi Vikas Yojana (PKVY) is being implemented in all districts and taluks of Karnataka in clusters of 50 acres since 2015-16. In each taluk, three clusters have been chosen in a total area of 27,250

acres in State and 25,968 farmers are benefiting from this project. A sum of Rs.2,630 Lakhs has been reserved for this project during the year 2016-17

Organic Millet Mela

Karnataka State Department of Agriculture (KSDA) has been conducting annual organic millet Mela in the state capital Bangalore. This year KSDA has organised 'Organics and Millets 2017,' a three-day national trade fair from April 28 at Palace Grounds in Bengaluru with an aim of promoting organic food and millets. This Mela acted as forum for organic farmers and companies for selling organic food products and to interact with one another and market their products. Major retail players like Big Bazaar, Reliance, Metro, ITC and SPAR Hypermarket had taken part in the fair. Mela had received very good response from organic farmers, institutional buyers and consumers.

6.3 Organic produce marketing

Organic produce is growing rapidly in the state mainly in the state capital, Bengaluru. Due to highest consumption of organic produce, Bengaluru is being treated as organic capital of the country. Growth rate of organic market in the state is expected to outperform the national growth of 25-30 per cent. However, there is no published data on the state's organic produce market size and growth. There are more than 25 corporate companies which are processing, packing and selling the organic food products to various retail stores in Bangalore and across the country and major corporates including 24/7 Mantra, Pro-Nature, Tattva, Green Path, Namadhari etc. Along with these corporate companies there are more than 200 retail outlets dealing with organic produce in Bengaluru. Organic restaurants are also gaining importance in the recent times.

Chapter 7: Study Findings

Primary study has been conducted covering retail outlets, organic consumers and farmers. A total of 78 samples were covered under the primary study. Data / information collected by these samples is analyzed and presented in this chapter. Break-up of samples covered under the study is tabulated in Table 7.1.

Table 7.1: Break-up of samples covered under the study

Sr. No.	Location	Retail outlets	Organic consumers	Organic farmers	Total
1	Bengaluru	12	11	12	35
2	Hyderabad	5	5	0	10
3	New Delhi	5	18	0	23
4	Mumbai	5	5	0	10
Total		**27**	**39**	**12**	**78**

7.1 Retail outlets

A total of 27 organic retail outlets were covered in four of the metro cities of the country, 5 each in Hyderabad, New Delhi & Mumbai and 12 outlets in Bengaluru. Information required for the study has been elicited from the sample organic outlets as per the schedule enclosed in Annexure 2. Findings of the information collected from sample organic outlets is given below:

- Organic exclusive outlets are old concept in the metro cities, however the number of these outlet has increased rapidly in the recent years. Competition among the organic retail outlets is getting intense every year.

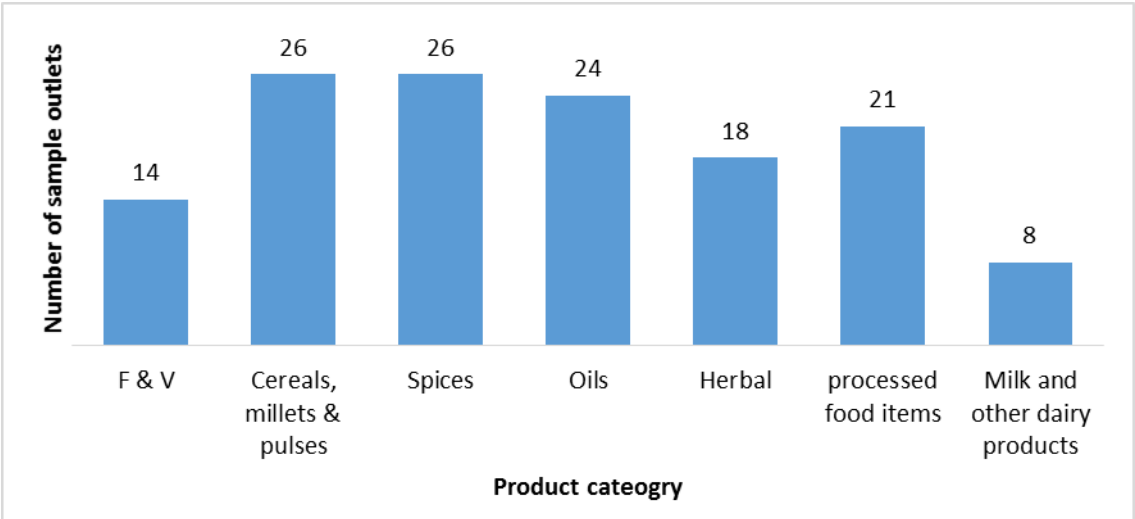
- On an average sample organic outlets are operating from last three years. It indicates that most of the shops are new and the number of new shops are increasing in the recent years. One can infer from increasing organic retail outlets that, the overall organic products market is growing in these metro cities.

- Most of the organic retail outlets were exclusive organic shops. Among the sample outlets, only three outlets were operating with mixed products (both organic and non-organic products). All these three mixed products outlets are dealing with packed products, which have details of organic certification upfront. Further, these units were also planning to convert into exclusive organic shops in the future. As per outlets, it is very difficult to maintain trust among customers with mixed products, especially in non-packed products like fruit and vegetables.

- The average footfall per day across the metro cities in the country is 65 persons per day. It can increase to more than 100 persons per day in the weekends and holidays. As per sample outlets, more than 80 per cent of the people visiting outlets purchase some products; showing better conversion rate compare to normal retail outlets.

- Cereals, pulses, millets, spices and oils are the most common items sold in the organic outlets. Almost all sample outlets dealt with these products. Many of the retail outlets don't keep fruit and vegetables, dairy products and chicken and meat due to the perishability of the products and lack of sustained timely supply. Some outlets opined that the inability of keeping perishable products like fruit and vegetables will result in losing customers, as most of the customers like to shop for their complete products requirement from one place. Sample outlets dealing with various categories of food products is depicted in Figure 8.1.

Fig 7.1: Sample outlets dealing with various categories of food products

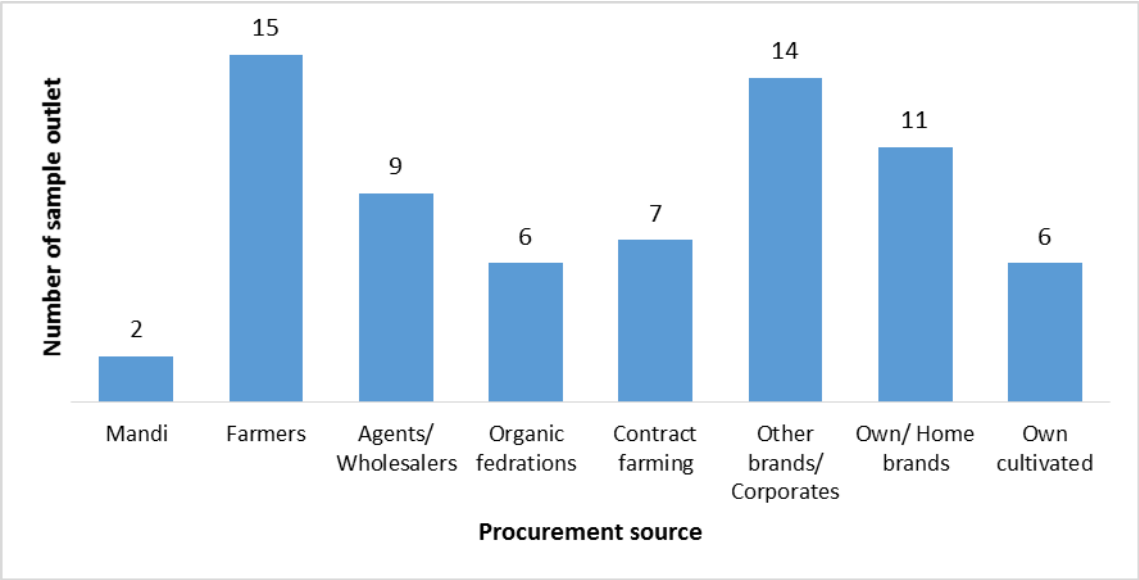


- About two-third of the sample outlets were not able to sell the entire stock. It is found that the average wastage of organic produce in storage is around 14 per cent. Majority of these wastage is contributed by fresh fruit and vegetables. Wastage among non-perishable products is very less. The main reason for wastage among fruits and vegetable is perishability and among non-perishable products it is expiry of the products.

- Most of the outlets were hesitant to provide their annual turnover. Based on the few outlets who have revealed, the average annual turnover per shop is a round Rs.90 Lakh per year.

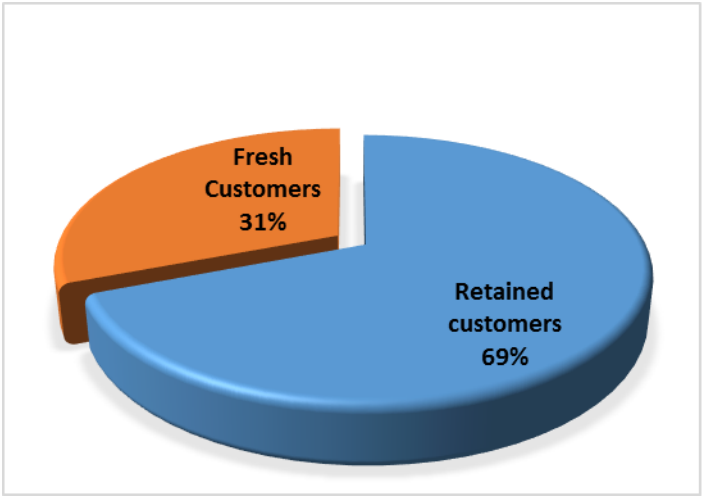
- The common channel for procuring raw material by sample retail outlet is purchasing directly from farmers followed by selling corporate brands and home brands. Higher percentage of direct procurement of raw material shows the least involvement of middlemen. Further, retail outlets prefer direct procurement from farmers to middlemen; due to trust issue. With the existing supply chain, one may think of educating organic farmers about primary processing of produce and strengthen organic federations for better price realization by farmers. Procurement channel of sample outlet is given in Figure 7.2.

Fig 7.2: Procurement channel of sample outlets



- In retail outlets opinion, health consciousness is the major reason behind increasing number of people buying organic products.
- On an average, the premium charged for the organic products over non-organic products is around 30 per cent. Premium charged for major organic products is discussed in details in the later part of this chapter.
- In the recent years' demand for cereals, pulses & millets, spices, fruits and vegetables are increasing rapidly compared to other categories of food items. Dairy and meat segments are showing very little growth.
- Majority of the retail outlets are not satisfied with the organic raw material quality. In the recent years, quality of field crops like cereals, pulses and millets are increasing due to branding at corporate level and primary processing at lower level. However, quality of perishable commodities like fruit and vegetables are below expectations. As per retail outlets, there is enormous scope to increase the quality of organic produces by strengthening supply chain.
- As per retail outlets, 69 per cent of existing customers are retained customers and the remaining 31 per cent are fresh customers. This shows good customer retention as well as interest from new customers. Share of customers is shown in Figure 7.3.

Fig 7.3: Share of customers

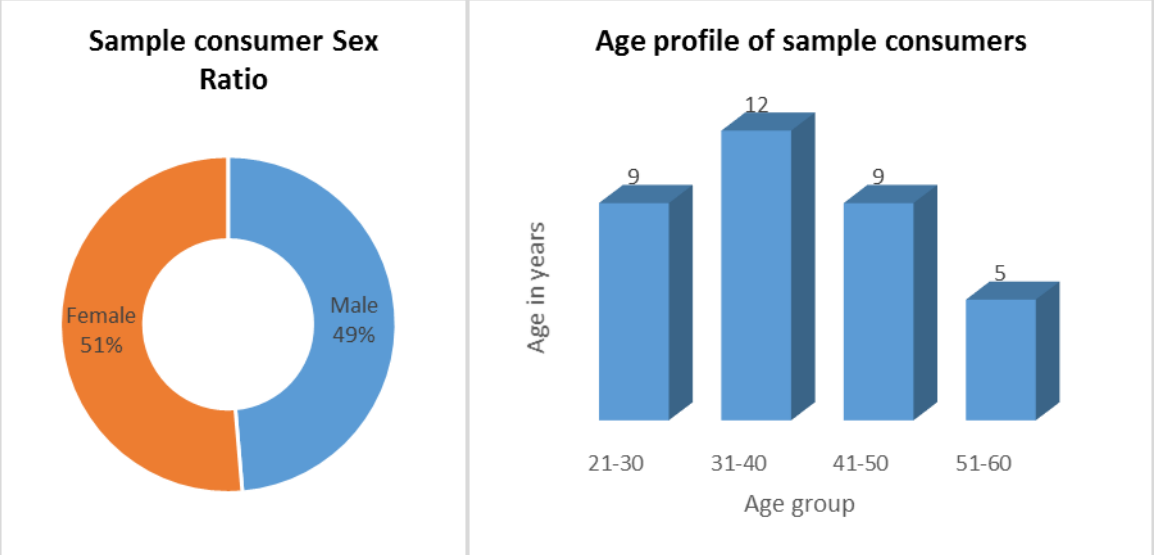


7.2 Consumers

A total of 39 organic consumers were covered in four of the metro cities of the country, 5 each in Hyderabad & Mumbai, 18 in New Delhi and 11 outlets in Bengaluru. Information required for the study has been elicited from the sample consumers as per the schedule enclosed in Annexure 3. Findings of the information collected from sample consumers is given below:

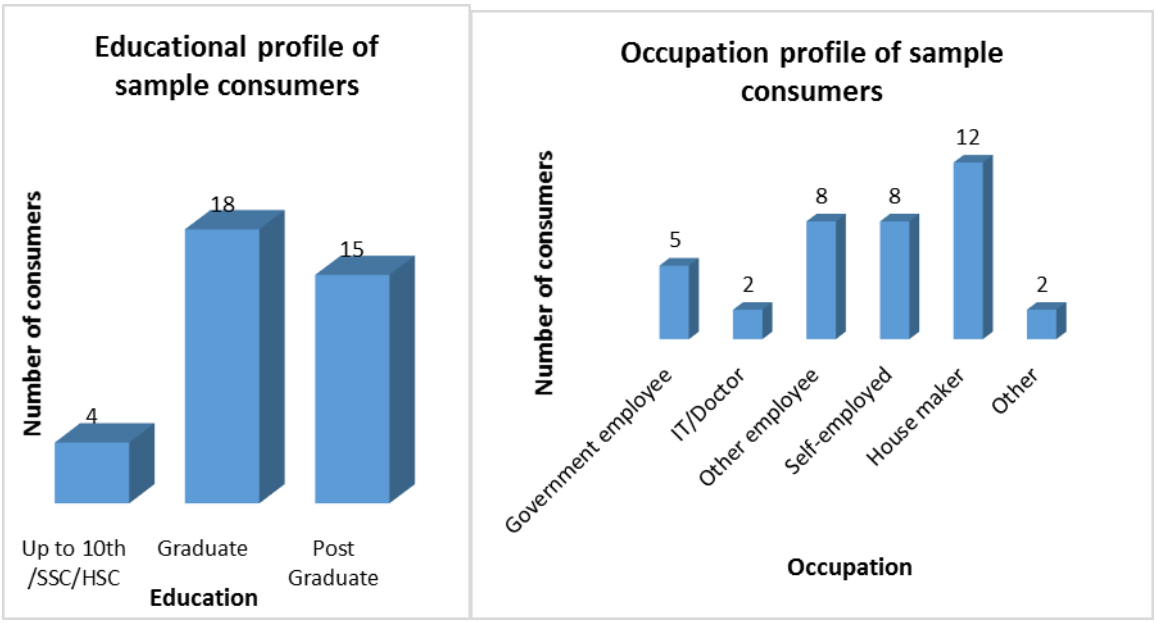
- Sample consumers were equally selected across the gender. More than half of the sample consumers were below the age of 40. It indicated, more and more young population is showing interest in organic products. And it is a good indication for organic market for the long run. Sample consumers sex ration and age profile is depicted in Figure 7.4.

Fig 7.4: Sample consumers' sex ration and age profile



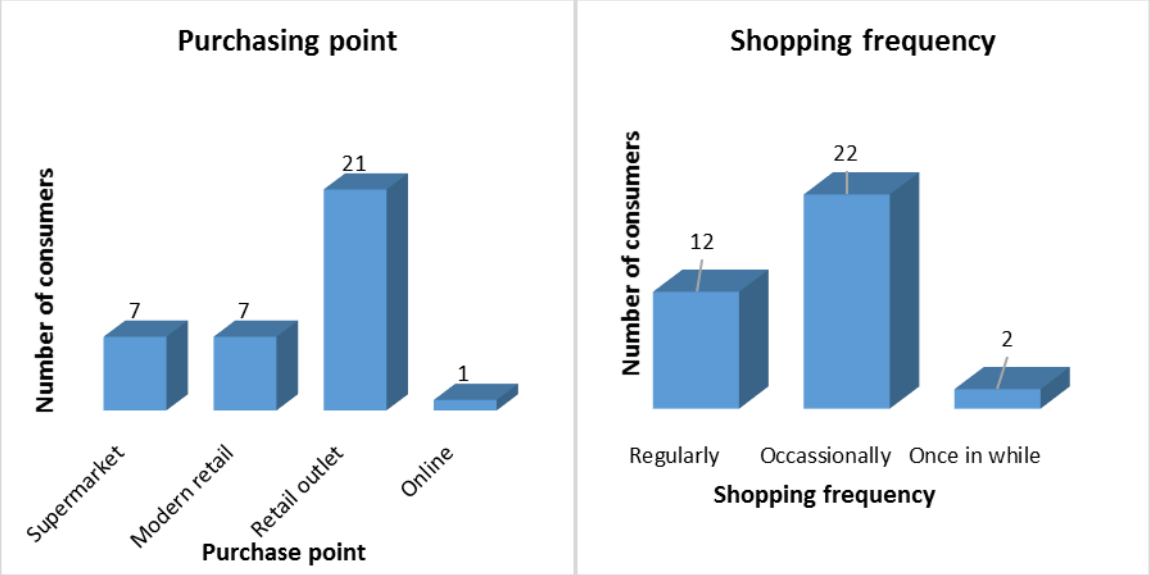
- As per sample consumers' education profile, most of the organic produce consumers are graduate or above; indicating better awareness about organic products among educated people. More than half of the consumers were house maker. Hence, one has to primarily target house makers for promotion of organic products for better result. It is also found that the most of the consumers are from upper middle income and high income group. Increasing population with higher income is a boost for organic market. Educational and occupational profile of sample consumers in given in Figure 7.5.

Fig 7.5: Educational and occupational profile of sample consumers



- The Most preferred purchase point of the organic products is retail outlets, followed by modern retails and super market. Most of consumers' shop for organic products occasionally to regularly. Purchasing point and frequency of shopping of organic products is directed in Figure 7.6.

Fig 7.6: Purchasing point and frequency of shopping of organic products



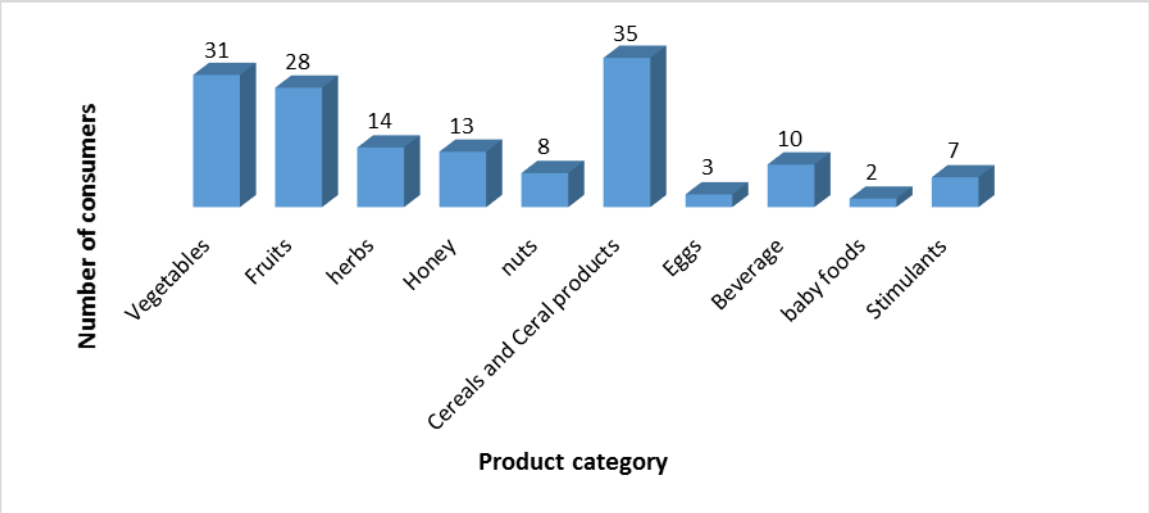
- From the Figure 7.7, it can be observed that most of the consumers are using organic products for more than three years; indicating better retention. Also, number of new organic consumers among the sample is encouraging.

Fig 7.7: Organic shopping history of consumers

- The most preferred product category among organic products is cereals, pulses and millets followed by vegetables and fruits. Most of the consumers were satisfied with the organic product range available at the retail outlets, except for fruits and vegetables. As per consumers, availability of fruits and vegetables is very limited to major crops like onion, tomato, chilli, mango and banana. As per many consumers as well as retail outlets, non-availability of complete range of

fruits and vegetables is the major concern for organic produce marketing. Few opined that, consuming few organic products along with non-organic fruits and vegetables in their diet may not have a desired outcome. Preferred organic products by sample consumers is given in Figure 7.8.

Fig 7.8: Preferred organic products by sample consumers

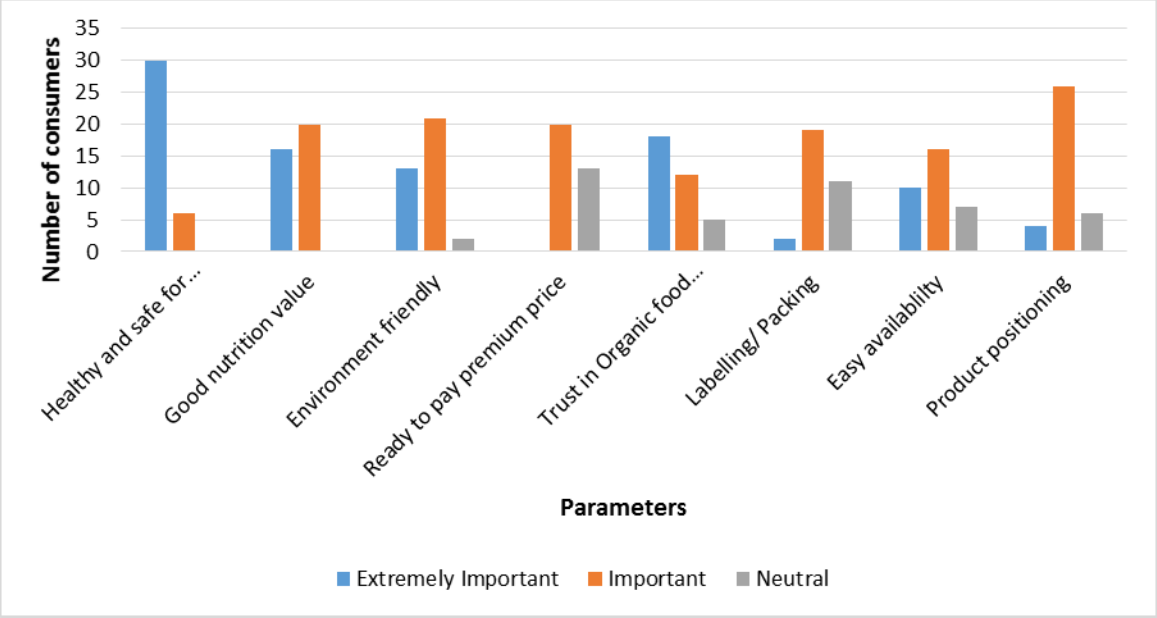


- On an average consumers are willing to pay a premium of up to 20 per cent for the organic products. According to consumers, premium charged for products like honey, jaggary and ghee are very high. Still, they are purchasing these products mainly due to quality and non-adulteration guarantee.

- As per consumers, increasing health conscious among the high income younger population is the major driving force for organic markets.

- In order to understand the perception of organic products among consumers, various parameters were ranked in terms of extremely important, important and neutral. As per consumers, healthy and safe for consumption of organic produce is extremely important followed by trust in certification and good nutrition value. Organic product positing, easy availability, environment friendly are important for consumers. Consumer perception about organic products is given in Figure 7.9.

Fig 7.9: Consumer perception of organic products



7.3 Organic farmers

Organic farmers were interacted during the primary study to understand back ward linkage of the organic market. A total of 12 farmers from two district viz., Bagalkote and Mandya were covered through FGDs. Some of the key outcome of the FGDs are:

- Most of the organic farmers were motivated and hand hold by NGOs or concerned departments or local influential people. Guidance support to the farmers during the initial years of organic farming is very essential for promoting organic farming.
- Prior to adopting organic farming, all the farmers were aware about organic farming but didn't know know-about of organic farming. Required information about organic farming is mainly provided by promoting / hand holding agency or person. According to sample farmers, still many more farmers in their locality are interested to adopt organic farming. Most of them are waiting for proper guidance, hand holding and assured market linkage.
- Most of the sample farmers are having access to marketing channel through direct contact with retail outlets, own selling or through agents. On an average farmers are getting premium in a range of 10-15 per cent for organic products.

- Present organic certification is on higher side. Same may be reduced, at least in the initial years of the certification.
- Awareness about primary processing of organic crops needs to be created among organic farmers.
- Post-harvest management and storage infrastructures is presently lacking at the ground level

7.4 Organic products pricing

Sample organic farmers expects to earn at least 15-20 per cent premium for the organic produces. At present, most of the farmers are getting premium in these range. Still, forward market linkage of organic produces, especially perishable produces, is still a major issue as per farmers. On the other hand, most of the sample consumers are of the opinion that the consumption of the organic produces will increase drastically if the premium charged for organic will be in the range of 20-30 per cent. Large portion of the population is willing to pay premium in this range.

For analyzing the premium paid on the organic produces by the consumers, prices of selected commodities were collected from the sample outlets. Average price of these commodities has been compared with average price non-organic produces. It is found that the consumers are paying premium in the range of 27 per cent to 95 per cent. Premium is lower in the day-to-day consumption commodities like cereals, pulses, millets, onions and tomatoes. Majority of the outlets charge premium above 75 per cent in the commodities like honey, ghee, cooking oil and jaggary. Comparison of average organic produces vis-à-vis non-organic produces is given in the Table 7.2.

Table 7.2: Comparison of average organic produces vis-à-vis non-organic produces

Sr. No.	Products	Non-organic commodity price per Kg	Organic price commodity per Kg	Premium in Rs./ Kg	Premium in per cent
1	Rice	57	76	19	33.33%
2	Tur Dal	117	157	40	34.19%
3	Millets	100	136	36	36.00%

Sr. No.	Products	Non-organic commodity price per Kg	Organic price commodity per Kg	Premium in Rs./ Kg	Premium in per cent
4	Honey	264	468	204	77.27%
5	Ghee	470	862	392	83.40%
6	Cooking oil	135	263	128	94.81%
7	Onion	43	55	12	27.91%
8	Tomato	33	45	12	36.36%
9	Jaggary	65	125	60	92.31%

Most of the retail outlets are aiming to bring down the premium for organic produces to around 30-40 per cent. However, higher premium charged by middlemen, lack of sustained supply chain, high losses in perishable commodities, high inventory in non-perishable commodities, etc., are the major aspects which escalates the operational cost of the retail outlets. Strengthening of backward linkages will bring down the premium markup of the organic produces.

Chapter 8: Potential of Organic Products

8.1 Market Potential

The global organic food market is presently estimated at USD 90 billion and it is expected to reach close to USD 230-280 billion by 2025 at the current growth levels. The Indian organic sector at USD 415 million (Rs.2700 Cr) is not even 0.5 per cent of it, constituting both negligible domestic component and exports (Indian Organic Sector Vision 2025- A White Paper). As per a study, the domestic organic food market of India would touch the USD 1.36 billion mark by 2020 (Economic times). Further, Indian domestic market is expected to reach Rs.25,000 Crores mark by 2025 as per IBEF.

At present there is no published data on the Indian domestic organic market. Most of the data available are estimates are guess. As per a study, the organized domestic certified organic market is estimated to be between Rs.250 to Rs.300 Crores. Guesstimates put the other part of the irregular unregulated domestic 'unorganized-uncertified-unmonitored' organic market size range between Rs.300 to Rs.500 Crores. Total domestic market estimates range widely from Rs.500 Crores to Rs.1000 Crores as no reliable estimation exercise was ever undertaken (Indian Organic Sector Vision 2025- A White Paper).

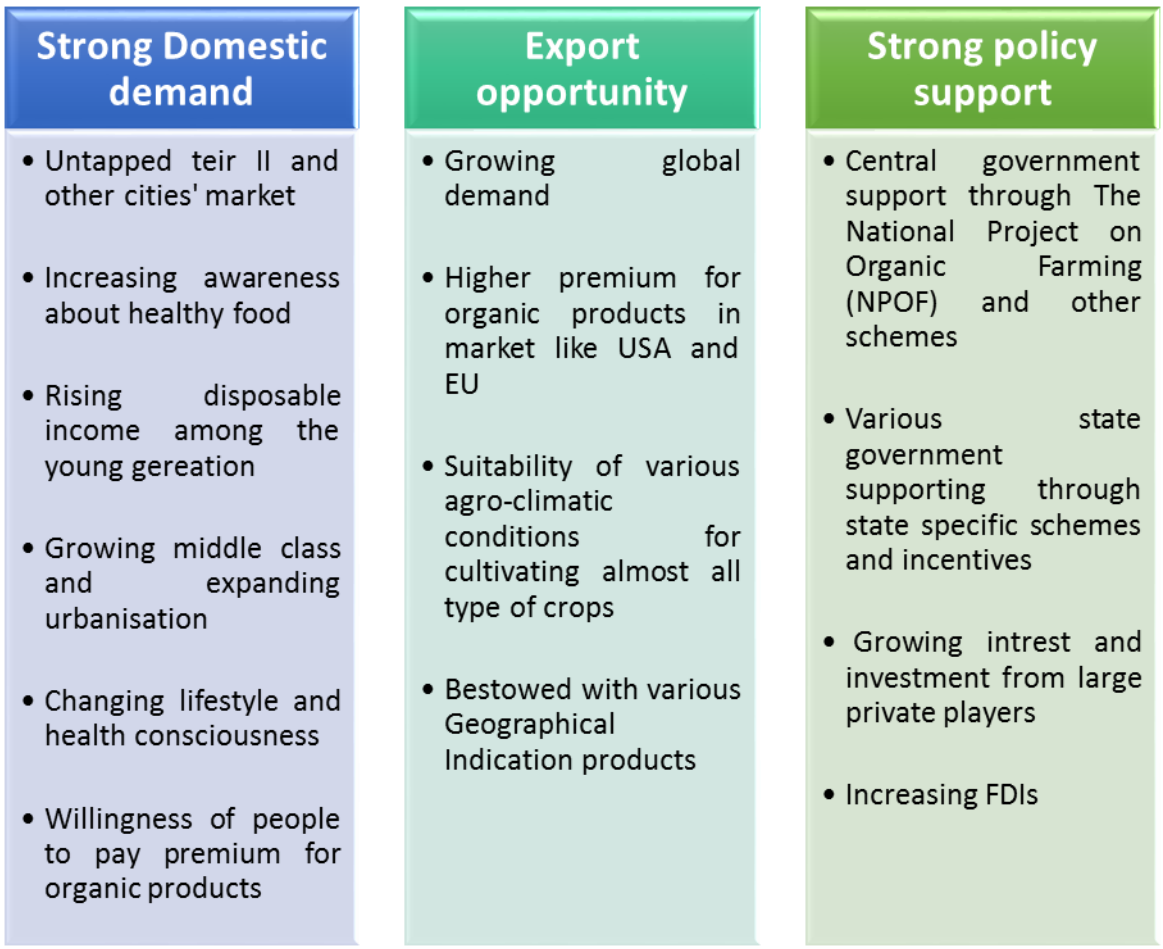
Organic products market in India, currently is predominantly metro based. It is estimated that around 95 per cent of the organic brands market exists in the top 10 metros e.g., Delhi (NCR), Kolkata, Mumbai, Pune, Chennai, Bengaluru and the other Tier II cities – e.g. Indore, Nasik, and Nagpur. In future, organic market is expected to expand rapidly with penetration to other cities of the country.

In addition to the domestic market, exports are forecast to continue to be the growth driver for the Indian organic products industry. India majorly exports organic processed food products, organic rice, beverages and other cereals and millets to the USA, Canada, Europe, and select South East Asian countries. Global organic market is expected to triple in the next decade. With the increasing demand for organic produce globally, Indian organic export is expected to grow with a healthy rate.

8.2 Growth drivers

In the recent times, more and more people are showing interest in organic food products. As per recent estimation, the Indian organic sector is pegged at USD 415 million (Rs.2700 Cr). There is huge untapped market potential for organic products in domestic as well as in international market. Some of the major growth drivers for the organic products are increasing domestic demand, export potential and strong policy support. Factors fueling these growth drivers are given in Figure 8.1.

Fig 8.1: Organic products growth drivers



8.3 Risks & possible risk mitigation plan

Table 8.1: Risk and possible risk mitigation plan

Aspect	Obstacle	Solutions
Price	Price of organic produce is too high	Focus should be given to reduce the cost of organic crop production and increase the land under organic production. Marketing platform should be formed to bring producers and retails closer and thereby reduce the middlemen.
Quality	Low consistency of quality and have contamination issues	The quality must be consistent. For this reason, higher quality standards must be enforced to develop and maintain a good reputation. Post-harvest management of organic production should be improved.
Availability	Lack of availability of complete range of products	Better understanding of the demands of buyers. Proper planning for making available of complete range of products especially perishable produces like fruits, vegetables and dairy products.
Logistics	Slow shipment both in domestic and export	The logistics must be better coordinated from place of production to consumption. Post-harvest infrastructure has to be enhanced to guarantee quality. For export purpose, duty ports must reduce the time taken to complete the process.
Certification	Lack of trust on certificates	More awareness about organic certification has to be created among the consumers. Government may think of providing addition certificate for organic produce after thorough inspection during production and stringent residual testing
Organic farmers	• Lack of quality seed materials • Lack of required infrastructure • Lack of marketing	• Government may make arrangements for supplying quality local seed materials at an affordable price. • Strengthen organic farmers' groups or federation with common infrastructure required for organic farming • Training of farmers' w.r.t. marketing of organic produces. Linking farmers/ farmers

	facilities • Low return during conversion period	group/ federations with retail outlets / corporate buyers. • Incentivize farmers during the initial three years / conversion period
Export	Lots of paper work required for exporting	Develop a fast track or single window service to support export of organic produce from India
Non-organic farmers	Most of the farmers are not aware of organic farming practices	Creating awareness among the interested farmers through training programs, demonstrations, field visits, etc.,
Residual testing	High cost for testing	Presently available facility for testing residual content in the organic produces in very less and it's very expensive. Government should increase the testing facilities along with affordability

Chapter 9: Organic Certification

9.1 Introduction

Organic certification is a certification process for producers of organic food and other organic agricultural products. In general, any activity / business directly involved in food production can be certified, including cultivation, various agricultural input suppliers, food processors, retailers, restaurant, etc. At present, there are about 65 countries with formal government standards, regulations for organic certification. In addition to these, there are another 17 countries with regulation under development. Certification criteria varies from country to country however, it generally includes set of production standards for cultivation / growing, processing, packaging and shipping. Some of the common features of the standards across countries are:

- Avoidance of synthetic chemical inputs like fertilizers, pesticides, herbicides, growth hormones, etc.
- Avoidance of genetically modified deed / seedling materials.
- Cultivation land needs to be free from chemical usage for certain years (often 3 years)
- Complete documentation of all the activities.
- Strict separation from non-organic products and
- Periodic on-site inspections by authorized certification bodies / agencies.

In India, APEDA regulates the certification of organic products as per National Standards for Organic Production. "The NPOP standards for production and accreditation system have been recognized by European Commission and Switzerland as equivalent to their country standards. Similarly, USDA has recognized NPOP conformity assessment procedures of accreditation as equivalent to that of US. With these recognitions, Indian organic products duly certified by the accredited certification bodies of India are accepted by the importing countries". Organic food products manufactured and exported from India are marked with the "India Organic" certification mark issued by the APEDA. Organic standards in India are in effect since 2000 however, India Organic logo

was introduced in 2002. Certification marks of India and other major countries are given in Figure 9.1.

Fig 9.1: Different Organic Logos

India	USA	European Union
		
Canada	**Australia**	**Switzerland**
		
Germany	**France**	**Japan**
		

(Source: Respective websites)

9.2 The certification process

In order to certify a farm, the farmer is typically required to engage in a number of new activities, in addition to normal farming operations:

- Study the organic standards, which cover in specific detail what is and is not allowed for every aspect of farming, including storage, transport and sale.
- Compliance - farm facilities and production methods must comply with the standards, which may involve modifying facilities, sourcing and changing suppliers, etc.
- Documentation - extensive paperwork is required, detailing farm history and current set-up, and usually including results of soil and water tests.
- Planning - a written annual production plan must be submitted, detailing everything from seed to sale: seed sources, field and crop locations, fertilization and pest control activities, harvest methods, storage locations, etc.
- Inspection - annual on-farm inspections are required, with a physical tour, examination of records, and an oral interview.
- Fee – A fee is to be paid by the grower to the certification body for annual surveillance and for facilitating a mark which is acceptable in the market as symbol of quality.
- Record-keeping - written, day-to-day farming and marketing records, covering all activities, must be available for inspection at any time. In addition, short-notice or surprise inspections can be made, and specific tests (e.g. soil, water, plant tissue) may be requested. For first-time farm certification, the soil must meet basic requirements of being free from use of prohibited substances (synthetic chemicals, etc.) for a number of years. A conventional farm must adhere to organic standards for this period, often, three years. This is known as being in transition. Transitional crops are not considered fully organic. A farm already growing without chemicals may be certified without this delay.

Certification for operations other than farms is similar. The focus is on ingredients and other inputs, and processing and handling conditions. A transport company would be required to detail the use and maintenance of its vehicles, storage facilities, containers,

and so forth. A restaurant would have its premises inspected and its suppliers verified as certified organic.

Certification bodies in India

As per APEDA website, at present there are 28 organic certification agencies in India. List of certification agencies are given in Table 9.1

Table 9.1: List of organic certification agencies in India

• Bureau Veritas Certification India (BVCI) Pvt. Ltd., • ECOCERT India Pvt. Ltd., • IMO Control Pvt. Ltd., • Indian Organic Certification Agency (INDOCERT) • Lacon Quality Certification Pvt. Ltd., Thiruvalla • OneCert Asia Agri Certification (P) Ltd • SGS India Pvt. Ltd. • Control Union Certifications, Mumbai • Uttarakhand State Organic Certification Agency (USOCA) • APOF Organic Certification Agency (AOCA) • Rajasthan Organic Certification Agency (ROCA) • Vedic Organic Certification Agency • Indian Society for Certification of Organic Products • Food Cert India Pvt. Ltd • Aditi Organic Certifications Pvt. Ltd	• Chhattisgarh Certification Society, India (CGCERT) • Tamil Nadu Organic Certification Department (TNOCD) • Intertek India Pvt. Ltd. • Madhya Pradesh State Organic Certification Agency • Odisha State Organic Certification Agency • Natural Organic Certification Agro Pvt. Ltd. • FairCert Certification Services Pvt. Ltd. • Gujarat Organic Products Certification Agency • Uttar Pradesh State Organic Certification Agency • Karnataka State Organic Certification Agency (KSOCA) • Sikkim State Organic Certification Agency (SSOCA) • Global Certification Society • Greencert Biosolutions Pvt. Ltd

9.3 Product labelling

Being able to put the word "organic" on a food product is a valuable marketing advantage in today's consumer market. Certification is intended to protect consumers from misuse of the term, and make buying organics easy. However, the organic labelling made possible by certification itself usually requires explanation. In many countries organic legislation defines three levels of organics. Products made entirely with certified organic ingredients and methods can be labelled "100% organic". Products with 95% organic ingredients can use the word "organic". Both may also display organic seal. A third category, containing a minimum of 70% organic ingredients, can be labelled "made with organic ingredients". In addition, products may also display the logo of the certification body that approved them. Products made with less than 70% organic ingredients cannot advertise this information to consumers and can only mention this fact in the product's ingredient statement.

During the field study, it was observed that almost all the organic products in the sample stores had clear label and logo of the certifying agency. However, many of the products didn’t had “Organic India” label. This may be due to procurement of raw material from under conversion or small farmers, product manufactured with less than 90 per cent of certified organic products, lack of certification at processing stage, etc. In case of perishable products like fresh fruit and vegetables, display of label / logo was completely absent as they are mostly sold without packing. Sample of organic labels is provided below.

Fig 9.2: Sample of organic labels

9.4 Status of organic certification in Karnataka

In Karnataka, group certification of organic farms is undertaken by certified agencies recognized by APEDA, GoI, in coordination with Karnataka State Organic Certification Agency. Organic certification in the state is mainly done by three agencies viz., Karnataka State Organic Certification Agency (KSOCA), APOF Organic Certification Agency (AOCA) and Aditi Organic Certifications Pvt. Ltd. A total of 63,677 hectares of land from 53,829 farmers has been covered under Savayava Bhagya. These are having been brought under certification through Karnataka State Organic Certification Agency. The second year certification process (IC-2) is currently underway

9.5 Organic certification Charges

Certification bodies charges for organic certification on man-days basis. Certification bodies have set different tariffs for different category of farmers/ processors/ traders. To understand the tariffs charged by certification bodies, tariff structure of six agencies has been collected and the average tariff of these six agencies has been worked out. Summary of the average tariff charged by certification agency is presented in the Table 9.2.

Table 9.2: Summary of the average tariff charged by certification agency

Sr. No.	Inspection	Inspection (In Rs.)	Certification (In Rs.)
1	Small holder groups	11,400	14,300
2	Growing groups	11,000	13,800
3	Individual farmers	9,400	11,800
4	Small processors	11,800	14,800
5	Estates	13,600	17,000
6	Medium size processors	14,600	18,300
7	Manufactures/ Exporters / Importers	15,700	19,700
8	Travel time fee	5,400	6,800
9	Travel cost	As per actual	

(Source: Data collected from organic certifying agencies in Karnataka)

Chapter 10: Government Initiatives to Promote Organic Farming in India

10.1 National Project on Organic Farming

The National Project on Organic Farming (NPOF) is a Central Sector Scheme implemented on pilot basis during the Tenth Five Year Plan with an outlay of Rs.57.04 Crore. The scheme was subsequently expanded in the Eleventh Five Year Plan with an outlay of Rs.101 Crore and is continued during present twelfth Five Year Plan also. NPOF is being implemented by National Centre of Organic Farming (NCOF) located at Ghaziabad along with its eight Regional Centres viz., Bangalore, Bhubaneshwar, Panchkula, Ghaziabad, Imphal, Jabalpur, Nagpur and Patna The primary objective of the NPOF Scheme is to encourage the production of food organically, and promote manufacture and usage of organic and biological inputs, such as bio-fertilizers, organic manure, bio-pesticides and bio-control agents.

10.2 Capital Investment Subsidy for Setting up of Organic Inputs Production

The NPOF provides financial assistance for fruits and vegetables waste compost units by providing for 33 per cent of the capital cost of the project, subject to a ceiling of Rs.63 Lakh. Further, NPOF provides subsidy for the construction of bio fertilizer or bio pesticide production unit to an extent of 25 per cent of the capital cost of the project subject to a ceiling of Rs.40 Lakh. The remaining cost is envisaged as credit support from financial institutions and margin money. The subsidy is credit linked and back-ended and mobilised through NABARD.

10.3 National Project on Management of Soil Health and Fertility (NPMSF)

The National Project on Management of Soil Health and Fertility (NPMSF) was implemented during the Eleventh Five Year Plan period with an outlay of Rs.429.85 Crore, to promote the balanced and judicious use of fertilizers and organic manure on soil test basis. This Scheme provides financial assistance at Rs.500 per ha for promoting the use of organic manure.

10.4 Paramparagat Krishi Vikas Yojana

It is an elaborated component of Soil Health Management (SHM) of major project National Mission of Sustainable Agriculture (NMSA). Under PKVY Organic farming is promoted through adoption of organic village by cluster approach and PGS certification. Scheme has two major components viz. Adoption of Participatory Guarantee System (PGS) certification through cluster approach and Adoption of organic village for manure management and biological nitrogen harvesting through cluster approach. Government has made budgetary allocation of Rs.300 Crores for the same in the Union Budget 2015-16.

10.5 National Horticulture Mission

This is a Centrally Sponsored Scheme; launched in 2005-06, the Scheme aims at strengthening the growth of the horticulture sector comprising of fruits, vegetables, roots and tuber crops, mushroom, spices, flowers, aromatic plants, cashew and cocoa. NHM provides financial assistance for establishing vermi compost units and HDPE vermi beds. Assistance is also being provided under the Mission for organic certification of Rs.5 Lakh for a group of farmers covering an area of 50 hectares.

10.6 Rashtriya Krishi Vikas Yojna

Assistance for decentralized production and marketing of organic fertilizers is available under Rashtriya Krishi Vikas Yojna (RKVY) for projects formulated and approved by the State Level Sanctioning Committee.

10.7 Network Project on Organic Farming by ICAR

The Network Project on Organic Farming initiated by the ICAR in the Tenth Five Year Plan at the Project Directorate for Farming Systems Research, Modipuram, Uttar Pradesh, involves developing package of practices for different crops and farming systems under organic farming in different agro-ecological regions of the country. The project has been running at 13 centres including State Agricultural Universities (SAUs), spread across 12 States. The crops for which package of practices for organic farming have been developed include basmati rice, rain fed wheat, maize, red gram, chickpea, soybean, groundnut, mustard, isabgol, black pepper, ginger, tomato, cabbage and cauliflower

Chapter 11: Suggestions / Recommendations

General

- Presently, data maintains regarding organic produces is in dismal condition in state as well as in country. Government should give more focus for collecting and maintaining basic data like area, production, yield, etc. This will assist in scientific planning for promotion of organic produces as well as in assessment of growth in the sector.
- Government needs to give focus to produce more of high value low volume crops. Presently state as well as country is mainly producing/ exporting low value high volume crops.
- APEDA may think of implementing Indian Trade Clarification based on Harmonized System of Coding (ITC-HS Codes) for organic products. The Harmonized Commodity Description and Coding System, also known as the Harmonized System of tariff nomenclature is an internationally standardized system of names and numbers to classify traded products. Indian Trade ITC-HS Codes is adopted in India for import-export operations.
- Government may enhance the incentives for export of organic products from India. Export incentives for organic products has to be more than the incentives provided to the export of non-organic agricultural products.

Production aspects

- Organic Seed banks and organic input supply stores may be established to promote natural and organic indigenous seeds varieties in place of GMO & hybrid seeds
- Agricultural Universities, Research Institutions have to come forward to develop an organic farming methods with low cost model (crop specific) to ensure lower cost of cultivation and increased optimal yield year by year. Such demonstrations may be carried out in different locations of state and on main commercial crops

- Local cow breeds may be promoted in place of other international cow breeds for better quality milk production and quality manure which brings sustainability to organic farmer
- The cost of certification needs to be reduced drastically or a government certifying agency or outsourced certifying agency may be put in place with affordable fee structure

Marketing aspects

- Government has to establish more number of chemical and pesticide residue testing labs and has to ensure testing in time with nominal fee
- Processing or value addition of organic produce has to be given utmost priority in order to get the full benefit of organic farming.
- Collection centers, storage facilities, Grading, Cleaning, Processing, Packaging & labelling centers has to be established in each district to ensure timely procurement of organic produce, process and distribute to retail outlets, wholesalers, food chains and supermarket which brings sustainability in the supply chain. Cluster based approach may be adopted for effective implementation. The 14 organic federations farmed in the state may be assisted in this direction.
- Government has to empower Organic Federations for timely procurement, process, packing, labelling of food products and regular supply to different food chains, retailers etc. So that the quality produce reaches consumers in better quality and affordable prices
- Hi tech and scientific cold storage has to be established for storing of perishable food produce to minimize the losses
- Government may make arrangements for selling certified organic products through outlets like HOPCOMS or establish outlet chain on the model of HOPCOMS

- Government may create a platform for direct marketing of produce between corporates/ retailers/ wholesalers/ other marketers and farmer / farmers' associations/ groups/ federations, etc.
- Government may establish crop specific organic export hub to enhance the export of organic products from state
- Government has to develop strict policy to ensure organic shops to sale pure organic food products with proper information on the labels and only licensed retailers / wholesalers/corporate should market organic products
- State government may come up with Karnataka state specific label in line with "Organic India" label provided by APEDA. This will assist in enhancing confidence among consumers and also keep local organic market in check
- Awareness creation programs for publics about organic products, its benefits importance of certification, etc., needs to conducted
- Adequate training has to be provided to the staff involved at various level.

Annexure

Annexure 1: State wise area under organic farming

Sr. No.	State Name	Organic Area (in Ha)
1	Andaman & Nicobar Islands	321.28
2	Andhra Pradesh	12325.03
3	Arunachal Pradesh	71.49
4	Assam	2828.26
5	Bihar	180.6
6	Chhattisgarh	4113.25
7	Delhi	0.83
8	Goa	12853.94
9	Gujarat	46863.89
10	Haryana	3835.78
11	Himachal Pradesh	4686.05
12	Jammu & Kashmir	10035.38
13	Jharkhand	762.3
14	Karnataka	30716.21
15	Kerala	15020.23
16	Lakshadweep	895.91
17	Madhya Pradesh	232887.36
18	Maharashtra	85536.66
19	Manipur	0
20	Meghalaya	373.13
21	Mizoram	0
22	Nagaland	5168.16
23	Odisha	49813.51
24	Pondicherry	2.84
25	Punjab	1534.39
26	Rajasthan	66020.35
27	Sikkim	60843.51
28	Tamil Nadu	3640.07
29	Tripura	203.56
30	Uttar Pradesh	44670.1
31	Uttaranchal	24739.46
32	West Bengal	2095.51
	Total	723039
Source: APEDA (2013-14)		

Annexure 2: Schedule – Retail outlets

1.	Shop Name				
2.	Shop Address				
3.	Contact person Name				
4.	Contact Number				
5.	Shop establishment year				
6.	Average per day footfall at your shop				
7.	Shop Type	Organic		Natural/ Herbal	Mix
8.	If mix, are you willing to completely switch over to organic products?	Yes / No			
9.	If mix, do customer trust organic products				
10.	Category of products handled	Fruit and vegetables		Cereals, millets & pulses	
		Spices		Oils	
		Herbal extracts		Processed food items	
		Milk & other dairy products		Chicken & meat products	
		Others			

11.	Major two Products in each category specified in Q 10.	Quantity handled (per month)	Organic - Price (Rs.kg)	Conventional - Price (Rs.kg)	Source of procurement

12.	Are you able to sell the entire produce in a season?	Yes / No	
13.	If No, what is the percentage of wastage, If any		
14.	If No, specify the reasons for the unsold stock.	1. Lack of information on availability and certification 2. High Price 3. Slow shipment / logistics problem 4. Raw material quality issue 5. Perishability 6. Grading aspects (Variation in size, variation of boiling quality in cereals) 7. Others	
15.	Do you export organic produces		
16.	If yes, quantity exported, products and countries		
17.	Share of export and domestic market (%age)	Export	Domestic
18.	Raw material procurement channel	1. Mandi 2. Farmers 3. Agents/wholesalers 4. Organic federation 5. Contract farming 6. Other brands/Corporates 7. Own / home brands 8. Own cultivation	
19.	According to you, which segment buys the organic produce the most?	1. Lifestyle 2. Health conscious 3. Recommended by doctors 4. Others	
20.	Percentage of customer repeat purchase		
21.	PROJECTION OF DEMAND - Major organic products for which growing demand is anticipated		Rank (1-9) (Rank 1 is with highest growth and 9 with least)
		1. Fruit and vegetables 2. Cereals, millets & pulses 3. Spices 4. Cooking oils 5. Herbal extracts 6. Processed food items 7. Ready To Eat (RTE)	

		8. Milk & other dairy products 9. Chicken & meat products 10. Others
22.	Are you satisfied with the quality of raw material	
23.	If no, reasons	
24.	Number of organic stores in the locality	
25.	Do you have certificate for selling organic produce	
26.	Name of the certifying bodies	
27.	Cost of certification	
28.	Any inspection undertaken at your shop to verify organic produce	

29.

Parameters (Tick any one)	Very important	Important	Neutral	Not important	Least important
Organic certificate					
Traceability					
Labelling					
Packing					
Price					
Product availability					

30.	Perishable products lead time	
31.	Any suggestions to improving overall supply chain/quality?	
32.	Any suggestions to improve the market for organic foods?	

Annexure 3: Schedule – consumers

1. Name
2. Contact
3. Address

4. Gender? □ Male □ Female
5. Age?
   □ 11-20 □ 21-30 □ 31-40 □ 41-50 □ 51-60 □ 60+

6. Education

   □ Illiterate □ Up to 10th /SSC/HSC □ Graduate □ Post Graduate

7. Occupation

   □ Government employee □ IT/ Doctor □ Other employee □ Self-employed
   □ House maker □ Farmer
   □ Other (Please specify :_____)

8. Which of the following is your main source of weekly food shopping?
   □ Supermarket (D-Mart, Safal, Easyday, More, Big Bazaar, HyperCity, Spencers', Bangalore Central)
   □ Modern retail (Fabindia, Reliance Fresh)
   □ Retail outlet
   □ Online (Amazon grocery, BigBasket, Grofers, etc.)
   □ Other (Specify) _____
9. Do you find organic food there? □ Yes □ No
10. Do you ever buy organic food or beverage products? □ Yes □ No
11. If Yes, how often?
    □ Regularly (Weekly)
    □ Occasionally (Fortnightly)
    □ Once in while
    □ Never
12. Share(%age) of Organic and non-organic food products:
13. How did you first hear about organic foods?
    - Newspaper.....
    - Magazine.....
    - Internet.....
    - Friends/relatives.....
    - Television
    - Doctor Prescription
    - Social Media
14. How long have you been buying organic foods?
    □ One year

□ Two years
□ Three years
□ More than three years

15. What types of organic food do you purchase?
□ Vegetable □ Fruit □ Herbs □ Honey □ Nuts
□ Cereals and cereal products □ Bakery products
□ Milk/Dairy products □ Eggs □ Beverages □ Meat products □ Fish □ Baby foods
□ Stimulants (sweets, coffee, tea, etc.)
□ Other (Please, specify _____)
16. Do you ever buy organic non-food products?
□ Detergents and washing agents
□ Natural products and natural cosmetic products
□ Other (Please, specify _____)
17. What are the factors which motivate you to purchase organic food?

Parameters	Not Important	Neutral	Important	Extremely Important
Organic products are healthy and safe for consumption				
Good nutrition value				
Organic products are environment friendly				
Ready to pay premium price				
Trust in Organic food Certification				
Labelling/ Packing				
Organic food products are easily available				
Positive image and trendy (lifestyle)				

18. How far is nearest organic shop from your house?
19. Do you find all the products required by you in the nearest shop? Yes No
20. Issues hindering your organic food produce purchase?
□ It's too expensive
□ Not many varieties
□ Not available where I shop
□ Don't like the labelling/packaging
□ Don't like the taste
□ Don't trust the origin
□ Other (Please, state) _____
21. Are you willing to pay extra for organic food?
    - Yes □No
22. If yes, then how much premium when compared to the price of regular products? (in %age terms)
23. Would you buy more organic products if they were less expensive?

□ Yes □ No □ Maybe

24. Would you buy more organic products if they are certified by a government agency / recognizable label?

□ Yes □ No □ Maybe