



Analysis of trading opportunities and market trends of organic food products in south Asia to the world: A case study of India

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Abstract

Farmers in the developing countries are mainly based on agriculture and it is one of the major economic sources for farmers. India is one of the country have lot of resources and agro climatic conditions for organic farm production. Organic food trade is increasing in the world day by day. India is one of the major distributors of organic food to world among South Asian countries. Organic food trade has increased in India more rapidly. This study has taken India as case study to investigate the data of the organic land and production in India and the world, the study also analyze the trading opportunities for organic products from India to world and find to understand contribution of South Asian organic sector; taking India as example to the world. The SWOT analysis here emphasis the value of Indian organic sector and the policy implications in domestic and international level.

Keywords: organic production, organic trade, global trade, south Asia, SWOT analysis

1. Introduction

In developing countries mainly farmers get trade opportunities by organic agriculture. There is a driving shift towards organic food products in the world due to various rising health consciousness and harmful effects of non-organic food due to chemical fertilizers and huge amount of pesticides. The same shifts are occurring India too. Increasing land area under organic farming and rising disposable income level are main pushing factors towards organic farming in India. It is one of the major part of emerging exporters in the world. The increased demand of organic food products in country as well as globe is resulting increased farming of organic food products. More profit levels due to high payments and favorable initiatives by government are also other encouraging factors for increased organic farming practices (TECHSCI, 2016) [7]. According to same research "India Organic Food Market by Product Type, Competition Forecast and Opportunities, 2011 - 2021" (TECHSCI, 2016) [7] surging investments in organic food market are increasing due to changing food consumption patterns and increasing instances of contamination of farm produce with chemical fertilizers and pesticides. India's organic food market is dominated by organic pulses and food grains segments. The report (TECHSCI, 2016) [7] further elaborates that West India will continue dominating through 2021 in organic food market. In the countries like India export of organic agriculture products have remained uncertain but these are practicing organic agriculture traditionally. Modernization has changed general attitudes towards organic farming, increased use of chemicals in maximized in the result of India's green revolution. Various factors including LEISA (Low External Input Sustainable Agriculture) have assisted and provide with required support for piloting organic agriculture related projects in the country. This paper aimed at analyzing trade opportunities for organic food and also trends of organic

food market in the world for South Asia. The study has taken India as case study from South Asia.

1.1 Objectives of the Study

This study is taken up with the following specific objectives,

1. To investigate the data of the organic land and production in India and the world.
2. Analysis the data of Organic products sale and trade from India to the world.
3. To understand the contribution of Indian and Asian organic sector to the global market.
4. To examine the SWOT analysis for the future of Organic trading and markets in India.

2. Literature Review

2.1 History of Food Trade

The food trade has a long historical background. Asia has witnessed a successful trade of tea and silk from the ancient era, like Middle East is famous for its trade of spices began way back in 2000 BC. India has experienced a 7.80% annual increase in GDP per person between 1999 and 2010. A positive influence on the effective demand for food. As per study (Celâl Şengör, Chandrasekhar, & Spencer, October 2018) [2] in 19th century sterilization and pasteurization were main milestones achieved in food industry, where the first canned food factory was inaugurated in England in 1813. In 20th century the history has achieved various milestones like Frozen foods in 1940s, Freeze-dried, pressure-cooked foods in 1960s, Microwave foods in 1980s and Induction foods in 1990s.

2.2 Demand of Organic Food Products

The connectivity between the demand and the growth is highly appreciated for input market of organic food products. It can be understood that if the demand for organic products increases in the market it will encourage farmers to

produce organic food products by implementing the organic farming practices and organic inputs and manures. According to a study (Garibay & Jyoti, February 2003) ^[3] the area under organic agriculture to be is 2,775 hectares (0.0015% of gross cultivated area in India). But on other estimation by SOEL-Survey (Hemu, August 2010) ^[4] the land area is 41000 hectare under organic cropping. The numbers of organic land and producers has been increased in a good number in India while compare with other Asian countries. The numbers of organic land and producers has been increased in a good number in India while compare with other Asian countries. The major crops produced by organic method in India described in the following table (Table 1).

Table 1: Major Products produced in India by Organic Farming

Type of Product	Products
Commodity	Tea, Coffee, Rice, Wheat
Spices	Cardamom, Black pepper, white pepper, Ginger, Turmeric, Vanilla, Tamarind, Clove, Cinnamon, Nutmeg, Mace, Chili
Pulses	Red gram, Black gram
Fruits	Mango, Banana, Pineapple, Passion fruit, Sugarcane, Orange, Cashew nut, Walnut
Vegetables	Okra, Brinjal, Garlic, Onion, Tomato, Potato
Oil seeds	Mustard, Sesame, Castor, Sunflower
Others	Cotton, Herbal extracts

Data Source: Agricultural & Processed Food Products Export Development Authority (APEDA)

Organic tea is one of the main organic exporting products of India but there are other organic products also which include spices and fruits. Some other studies also prove India's organic tea as top organic products than other categories include spices, fruits, vegetables, rice and coffee. There are few responses in other studies regarding exporting of oil seed, wheat and pulses or among fruits like bananas, mangos and oranges, but these are most preferred organic products (Garibay & Jyoti, February 2003) ^[3].

2.3 Trading Opportunities for Organic Farm production in India

India's economy mainly base on agriculture, it forms 13% of the country's total export, agriculture contributes 18.5% of India's GDP. The agriculture sector offers a huge potential for growth of rapidly growing economy of India. The opportunities regarding agro-industry are not only limited to farming. The steady and strength of population and export, the organic food production will be double in next ten years. As globalization and modernization set in India helps to detail the opportunities for employment and decent trading economy growth for individual and country development through agriculture-based businesses in India (Verma, 2018) ^[9]. The reality in India and in several other developing countries is different, however, is that 60 to 80% of its agricultural production still uses small amounts of chemicals (here taken as including both synthetic fertilizers and pesticides) and could easily be converted to organic agriculture. However market premiums are relatively limited in the domestic markets, and organic food export markets entail high costs of entry. The emphasis of developing country governments on organic agriculture originates from two basic concerns. First, the use of hybrids

and their seeds, excessive irrigation and the use of pesticides and fertilizers have now led to diminishing returns by lowering agricultural yields. This implies that in order to make agriculture economically viable, it is necessary to revert to a different form of farming. On the other hand, from an environmental point of view, the excessive use of Chemical fertilizers and pesticides is determined that the harmfulness is high in soil, water and air. It would be useful to upgrade from nonchemical agriculture to organic agriculture and to use modern and well-known methods of organic and biodynamic cultivation to increase agricultural yields (Investing in Rural People, September 2013).

2.4 Domestic Market and Trade

Some people have belief that in developed countries only the famous concept is of organic food. In India organic food consumption is on rise. Generally it is thought organic food is consumed very little and India exports it more, in actual it is not so. While there are many who look towards organic food consumption for domestic purposes and only 50% organic food in India is targeted towards exporters. About 66% people in India prefer organic food over non-organic food and the most important reason for buying organic food is the concern of health for children. Most of the parents are willing to pay extra amount to buy organic food because it is seemed that organic food is prices over 25% more than conventional food in India. The organic food stores are increasing mainly and it is one of the main reasons for increased organic food consumption in India. The number of organic food stores and retail restaurants in urban and semi urban areas and the section in the supermarket for organic products has increasing in a vast level in India. The first organic food store was started in 1997 in Mumbai and that had led towards a huge change. There is shift towards organic farming, now a day more farmers have started organic farming and organic food exports from India is increasing. The prime market for Indian organic food industry mainly lies in US and Europe. India leads in supplying the organic herbs, organic spices, organic basmati rice etc. in the world. The main drivers for the India organic food industry include increasing demand of organic food products in developed countries and extensive support by government. Organic food products in India are priced about 20-30% higher than non-organic food products. This is a very high premium for most of the Indian population where the per capita income is merely USD 800. The main motive of producers and government to export organic food products in a huge level to international markets because of insufficient domestic market to consume. (Ummiyah, Narayan, Kumar, Nabi, Ajaz, & Magray, 2017) ^[8].

2.5 Export to International Market

The Export to international market the export market of agriculture is helps for the sustainability and greening the agriculture and development. The current product of organic crops is around 14000 tons (Garibay & Jyoti, February 2003) ^[3]. The tea and Rice and the fruit and vegetables are produced by organic way and proving the percentage of total production. The export level and the ratio has been determine the 85% of total organic crop production from India to the world. (Table 2).

Table 2: Major products export from India

Product	Sales (Tons)
Tea	3000
Coffee	550
Spices	700
Rice	2500
Wheat	1150
Pulses	300
Oil Seeds	100
Fruits & Vegetables	1800
Cashew Nut	375
Cotton	1200
Herbal Products	250
Total	11,925

Data Source: (Kolanu & Kumar, 2017)

Indian organic industry and producers are well aware about market demands regarding organic food products in developed countries. Mainly rice, wheat, tea, spices, coffee, pulses, fruits & vegetables, cashew nuts, cotton, oil seeds and medicinal herbs are available for export market. The channels adopted for the export of organic products, except for tea, are mainly through export companies (Ummiyah, Narayan, Kumar, Nabi, Ajaz, & Magray, 2017) [8]. Organic products are mainly exported to the following countries (in order of priority)

- Europe: Netherlands, United Kingdom, Germany, Belgium, Sweden, Switzerland, France, Italy, Spain;
- Americas: USA, Canada;
- Middle East: Saudi Arabia, UAE;
- Asia: Japan, Singapore;
- Australia;
- Africa: South Africa.

3. Results

The study has used secondary data sources including research articles, reports, books and other related data sources. The study has also done SWOT analysis regarding the future of organic trading market and Indian organic trade industry.

This research utilized secondary sources of research to arrive at the conclusion. The literatures which has already researched by the scientists and reviewed and compared according to the objectives of the study. The secondary data which has been collected from (IFOAM) International Federation of Organic Agriculture Movements. Secondary sources are these sources that are derived from original data gathered in the field. An in-depth data and information was sought from the Research Institute of Organic Agriculture that makes various publications of organic farming in the international standard. In 2015 organic farming continued to grow: More organic farmland, more producers, and market growth. However, the development varies a lot between countries and regions. The outlook on the organic markets continues to be good; there is scope for further growth. However, particularly the production in Europe is not have the continue speed with the market development. The data collection and analysis need to be improved in many countries especially for market and international trade data to be focused the better development of the sector.

4. Discussion

4.1 Growth of Organic Farm Land

(Figure 1) According to Figure 1, the data determine that India has the third place having the highest increase of organic land. The growth of organic land in India has gradually increased in last decade and reached high point recent years. According to the FIBL Data 2016, 2015 was affair to good year in organic farming. The new central Government of India is providing 64 million US dollars to two organic development initiatives. The state of Meghalaya plans to convert 200000hectares to organic farming by 2020 and Sikkim state is aiming for 100 percent organic production.

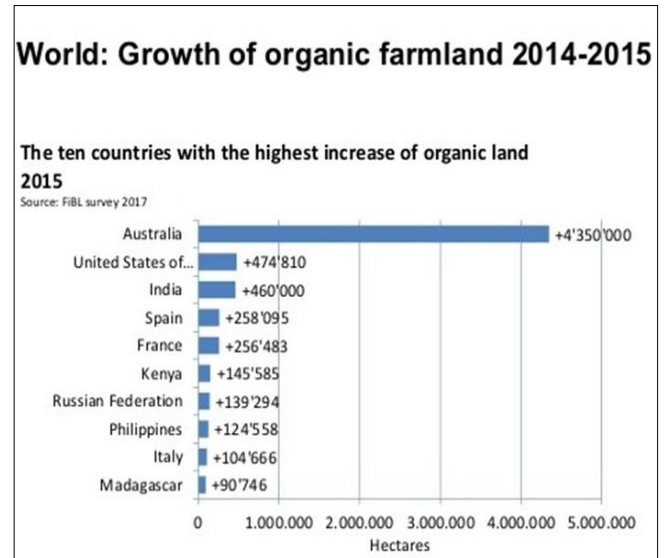


Fig 1: Growth of organic farmland

4.2 Organic Producers and Companies in India

(Figure 2 & 3) The Number of Organic producers increasing in India day by day. The young generation of people have and spread more awareness about the food consumption. The value and demand of organic food focused and analyses by the government and academicians, NGOs for the better future in agriculture sector. Globally mention, the half of the organic producers from Asia as they have captures 46% in total number of producers. In peculiar India has 835000 producers have produced organic food products in domestic and internationally.

There are lot of small branded companies are working on organic food production in India. The investment from other countries also has been increased in efficient level. The data shown above that the top three companies which play a vital role in organic production in Indian food market as well as globally. The following companies such as, Sresta Natural Bioproducts Pvt Ltd, Organic India Pvt Ltd and Chamong Tea exports Pvt Ltd are the top three companies have dealing with the organic food production for domestic consumption and export international market. The growth Comparison also indicate that the last decade percentages for India shows 26.8% and For Asia Pacific indicates 15.1%.

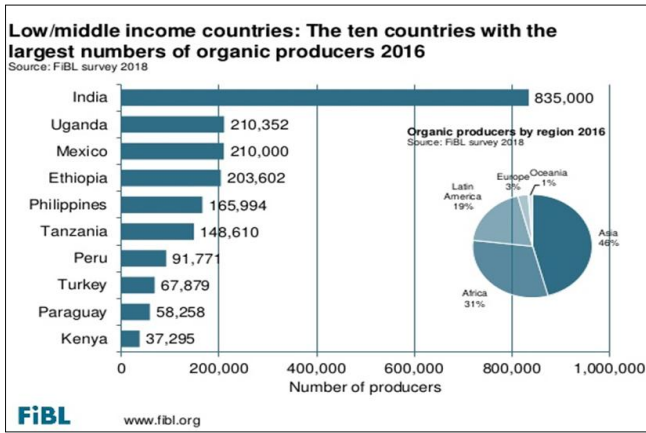


Fig 2: Organic Producers in the world.

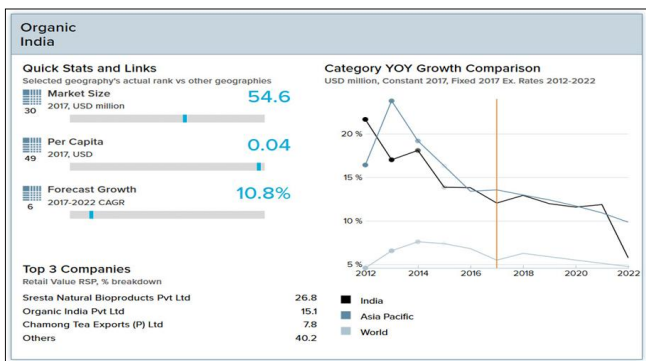


Fig 4: Organic production companies

4.3 Organic food Markets

(Figure 4) Market is key to insight the global demand of organic food products. India has a domestic organic market for consumption but still is not in a huge level. Also there may a conflict with the consumers about to choose the products by their certification. There are lot to be improve in certification process of organic products by the Government. According to Asia India and China are the giants for food production and consumption. According to organic food products, India is step ahead in organic farming. The population pressure is a key issue to the huge urbanization in India recently. Even though the spirits of sustainability and the traditional methods and practices make Indian organic markets in conducive growth. According to the comparison with other countries, India has maintained and stick the lead of global sales of organic food. The Indian organic production and market trends generates more sales than any other countries.

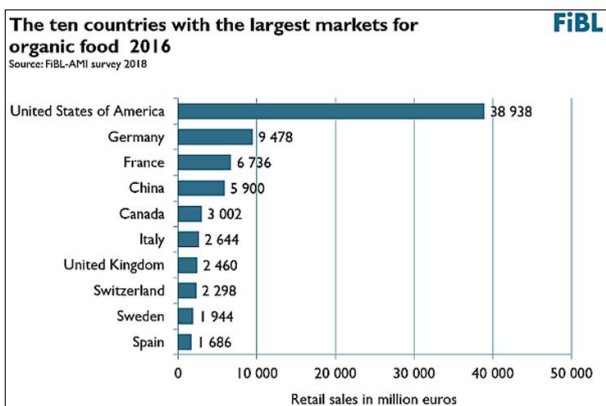


Fig 4: Organic food Markets

4.4 Organic Trade in Asia

(Figure 5) The countries with largest organic trade are shown above in the figure. As the data determine that China and India are the leaders have that much vast area for organic trading in Asia. China has the huge trading area of 1609928 hectares and India has 1180000 hectares for organic trade. From Asia, the export level to all over the world for specific organic products still crucial to full fill the consumption of the rest of the world.

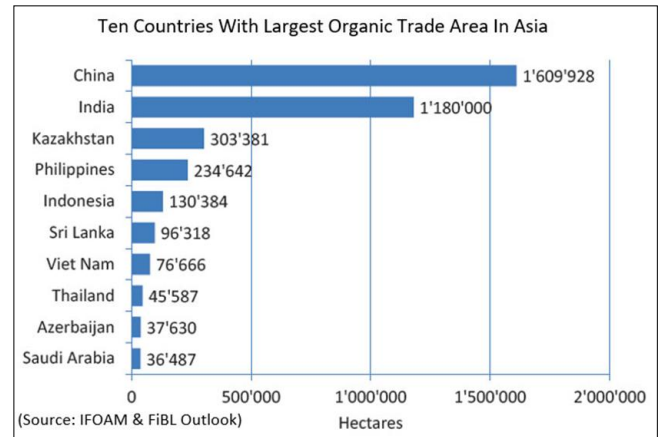


Fig 5: Organic trade area in Asia

4.5 Global Organic Trade Share

(Figure 6) The figure above conclude that the share of total agricultural land for highest organic trade in international level. Timor-Leste, or East Timor, a Southeast Asian nation occupying half the island of Timor, is ringed by coral reefs teeming with marine life has 6.65 of total share in Asia. Secondly, Sri Lanka (formerly Ceylon) is an island nation south of India in the Indian Ocean has 3.5% of the total share of Asia.

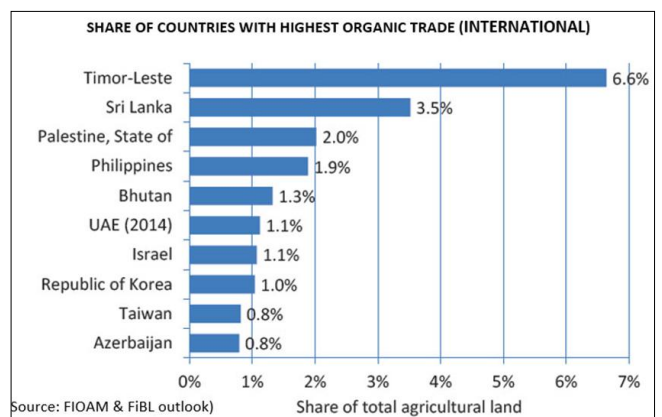


Fig 6: Organic trade share of the countries

4.6 The world of organic agriculture

(Figure 7) The comparison between organic land, producers and market emphasis the development of organic agriculture and the sustainability in agricultural profit for poor and marginal farmers. There are lot of Organic producers in India But the market for organic products is very less when compare with the world market. This discrepancies between the production and Market demand will lead to be further in-depth research in organic field especially in developing countries. As per the FiBL data shown in above figure, the number of organic producers are increasing. Meanwhile the

global market is growing and the consumer demand is increasing in developed and developing countries. Over all in 2015, globally have 50.9 Million hectare organic farm land, 2.4 Million organic farmers, and approximately 75 billion Euros value for global organic food market. The increasing ratio of organic farm land 2014-2015 is 14.7%. Other hand, the countries are leading in organic field by

their unique disciplines such as, Australia is the top country have 22.7 Million hectare of organic land. While consider the organic producers, India is the top country has 585000 organic producers. According market, USA is in the top and has 35.8 billion euros of worth value in organic food market.

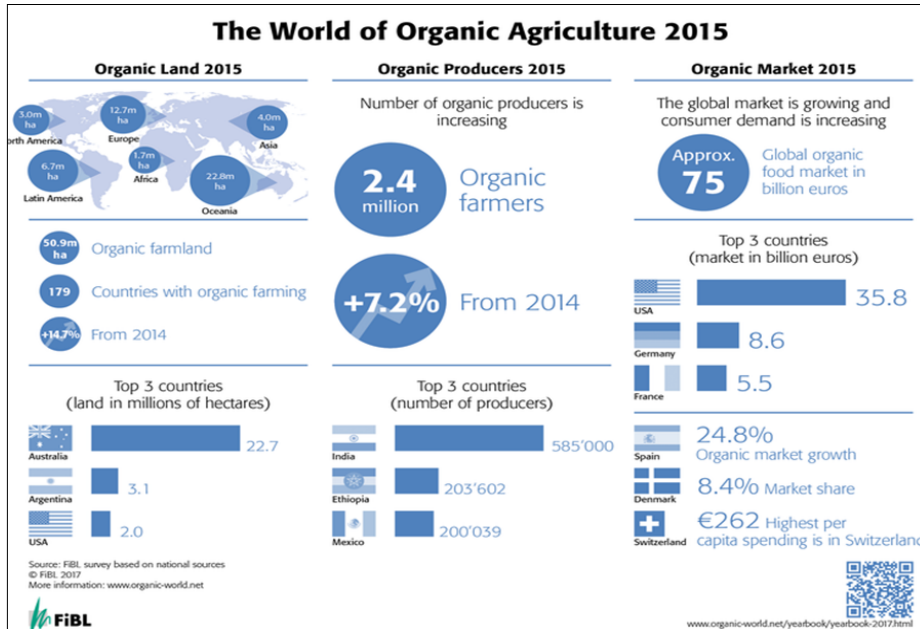


Fig 7: The world of organic agriculture

4.7 SWOT Analysis

Strength

- Wide range of fruits and vegetables and other commodities can be grown organically.
- The Interest among farmers and producers has increasing
- Increasing Investments in agribusiness especially in organic farming.
- Unique products have the trademark and special customers in global market.
- Awareness about food consumption is high among youngsters.

Weakness

- The awareness about the updated practices and technologies is lack among the farmers.
- The price Competitiveness, and the Middleman system
- Lack of market information and intelligence
- The research and development in global market sector is less.
- Certification labelling

Opportunities

- New policies about trading by government
- WTO and other Trading communities open the global opportunities
- Price premium for unique products
- Rising demand of organic products globally
- Organic shops and retails increasing in numbers.
- Private sectors willing to join organic supply chain.

Threats

- Competition from domestic industries.

- Threat from imported goods increasing level.
- Policies change about trading, tax barriers in domestic and developed nations.

5. Conclusion

An Organic label emphasis that a product was produced for consumer by using the unique production methods. The IFOAM, a non-governmental organization have global network and promoting Organic agriculture, has established the ample scope of the methods and guidance that have been accepted and implemented for Organic productivity and processing. India has the vast land for organic farming and the number of organic producers in India is higher than other countries. The Import-Export level of agricultural products in India still in pull strategy. From that, organic agriculture products are high in productivity and expecting to export in a huge level. The opportunities for India trade to the global is open gates to reach the products to customer doorstep. The technology development, the globalization, the digitalization, the E-commerce development, the supply chain and logistics development are the sources for the trade platform to achieve the best trade with the world. The recommendations which will create a new pathway to the farmers and producers and consumers to create a better growth in agricultural sector, Eco-friendly in environment sector and disease free in health sector. The ideas which has developed the research and development and insight the future benefits in production and trading such as, urban cluster is the initiative for vegetable and fruit production. It will emphasis the farmers about the value of organic production and the trade opportunities. The state governments has reduced the chemical inputs to distribute the farmers and make them aware about the hazard to the

environment and health. Government has to make policies to encourage the adaptation of organic farming and production through Community Based Agriculture or organisations. The schemes from Central government also need to be analysed the key problems of organic market and align the producers group by farming organic farmers market. Above all, recent years India has the development in economy by its globalization roadmap and the export level also be noted by developed countries and the investment from the corporate companies from all over the world is increasing. So organic production not only for business and trade and also the culture and history sharing with the world.

6. Acknowledgement

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