

Development Of Organic Farming In Globally With Indian Scenario

K. Rajasekaran¹, Dr. P. G. Thirumagal²

¹Research scholar, Department of Management Studies, VISTAS, Chennai, India

²Associate Professor, Department of Management Studies, VISTAS, Chennai, India

Email: ¹organicrajasekaran@gmail.com, ²tmgal.sms@velsuniv.ac.in

Abstract - There has been a rise in buyer's demand for safe and healthy food due to increasing concerns over the quality of food, tainting due to chemicals, serious health hazards, and environmental issues. This growing claim has given way to a new stream of Agriculture. The analysis of secondary data exposes that along with the rise in production, there is also a growth in the different varieties of organic agricultural products. This study is an attempt to understand and document the development of organic agriculture at the global level, the Asian continent, and India. It is evident that organic farming has been improved in recent years worldwide.

Keywords - Organic agricultural products, In conversion, Wild harvest

1. INTRODUCTION

Organic farming is free of chemical pesticides and chemical fertilizers as its efforts to attack a harmonious balance with a complex series of environments. The International Federation of Organic Agriculture Movements (IFOAM) is the universal canopy organization for the organic farming movement which has been established in 1972 at Bonn (Germany). Execution to IFOAM, 'Organic Agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on an ecological process, 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 good quality of life for the involved'.

The change of organic agriculture is based on some principles which make it a very important economic activity of the world to put on agriculture in the biggest sense including the way people tend soils, water, plants, and animals in order to produce, make and distribute food and other goods. They concern the way people network with living landscapes relate to one another and shape the heritage of future generations. The following four important principles are associated with organic agriculture which preserves biodiversity in this world through organic farming.

- ✓ The Principle of Health
- ✓ The Principle of Ecology
- ✓ The Principle of Fairness
- ✓ The Principle of Care

This study is an attempt to understand and document the development of organic agriculture at the global level, the Asian continent, and India. It is evident that organic farming has been improved in recent years worldwide.

2. REVIEW OF LITERATURE

P. Ramesh et.al.,(2010) expressed that organic farming in spite of the decrease in crop production by 9.2 percent, providing higher net profit to farmers by 22.0 percent associated with conventional farmers. It occurred due to the availability of best prices. This study is grounded on surveys that were conducted during 2008-2009 in Maharashtra, Karnataka, Tamil Nadu, Kerala, and Uttar Pradesh connecting 50 certified organic farmers and 50 conventional farmers. The study outcomes showed that input used as manure has different varieties. Organic farming is economically reasonable if farmers get a premium price for production. Kurmara Charyulu et.al.,(2010) established a study to test economic competence among organic & inorganic farming systems in four states viz., Gujrat, Maharashtra, Punjab, and U.P. on four main crops i.e. cotton. Sugarcane, Paddy, and wheat. A nonparametric model Data Envelopment was used for examining the efficacy. Results specified that efficiency levels are lesser in organic farming compared to conventional farming, relative to their production frontiers.

Singh(2011) showed primary research & concluded that organic wheat cultivation is more profitable and drop in production level may be a serious challenge in terms of food security for the nation. Primary data was collected from Patiala and Faridkot Districts of Punjab. The study was limited to the only wheat crop. Student t-test and Cobb-Douglas function were used for this study. The outcomes of the study stated that net return is higher in organic farming. While it has a low yield level but it was compensated by the higher price. S. Amarnath (2012) focused on a study in Erode district of Tamil Nadu and villages were selected randomly. The Logit Model and Garrett's Ranking procedures were applied to draw a conclusion. The result of the study exposed that net return from organic farming was comparatively higher than from conventional farming and an increase in the quantity of farmyard manure and vermi composite would raise the yield of crops.

Govind Prasad Namdev et.al., (2013) expressed that on average the total cost of cultivation of paddy under organic & inorganic was observed to Rs. 8521/ and Rs. 14324/ respectively. The produce of inorganic paddy was higher than from organic paddy. But the price of organic paddy was comparatively higher than inorganic paddy. By this, the net revenue and output ratio was higher in organic farming. This study was conducted in the Jabalpur district of M.P. Manisha Gaur (2016) established a study to analyze organic farming in India. The secondary data-based analysis was presented to evaluate and assess the factors which may facilitate the adoption of organic farming in the country. She stated that organic farming is gaining momentum gradually and farmers are feeling the ill effects of conventional farming. By executing this, we can keep an ecological balance. To some level, the cost of synthetic chemicals may be reduced.

3. OBJECTIVES

The present study is an attempt to understand and document the following dimensions

- To explore organic agriculture at a global level.
- To study the export of organic agricultural crops from India.
- To understand movements of organic farming in India

4. RESEARCH METHODOLOGY

This paper tries to study the promotion of Organic farming through a descriptive analysis based on secondary data collected through various sources. Charts and comparative tabulations are used for easier and simpler understanding and presentation of data.

The information about organic agricultural products and their farming practices in India and globally is collected from the published sources. The core sources are the World of Organic Agriculture Statistics and Emerging Trend, The Agricultural and Processed Food Products Export Development Authority (APEDA), The International Federation of Organic Agriculture Movements, and in this study, the growth rate of an organic farming area, the export of the products internationally, and also cultivated and wild harvest areas are taken into consideration and analyzed.

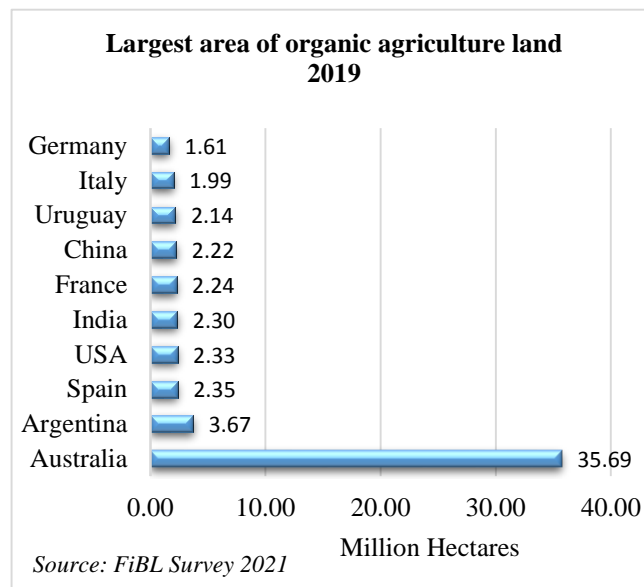
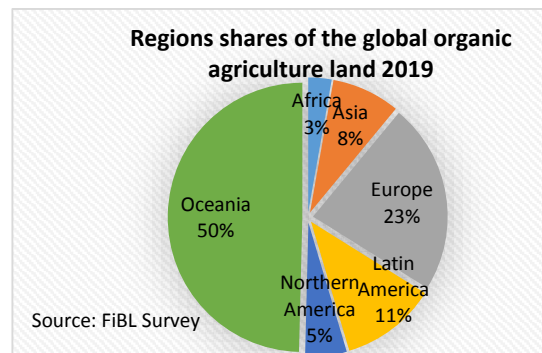
5. MAIN RESEULTS

A. Globally Scene of Organic Agriculture

In 2019, 1.5 percent of the world’s agricultural land is organic. Oceania (9.6 percent) is the highest organic shares of the total agricultural land [15]

Fig. 1. Regions shares of the global organic agriculture land 2019

In 2019, 72.3 million hectares were under organic agricultural management worldwide.



Oceania has the half of the global organic agricultural land. Europe has the 23 percent organic agricultural land followed by Latin America with 11 percent. Africa, Asia and Northern America have each below 10 percent of the global organic agricultural Land (Fig. 1).

Fig. 2. The ten countries with the largest area of organic agriculture land

The country with the most organic agricultural land in Australia, with 35.69 million hectares, followed by Argentina with 3.67 million hectares, Spain 2.35 million hectares, USA 2.38 million hectares, and India has got a fifth place with 2.3 million hectares. Germany has the tenth place with 1.61 million hectares the largest area of organic agricultural land around the world.

Table 1. Top 10 Countries With The Largest Number Of Producers In The Production Of Organic Agriculture Products (2019)

S. No	Country	Total number of producers
1	India	13,66,226
2	Uganda(2016)	2,10,353
3	Ethiopia(2015)	2,03,602
4	Tanzania(2013)	1,48,609
5	Thailand	1,18,985
6	Peru	80,785
7	Turkey	74,545
8	Italy	70,561
9	Madagascar	69,505
10	Togo	48,443

Source: The world of Organic Agriculture, Statistics and emerging trend 2021, FiBL and IFOAM- Organics International.

India is one of the leading organic producers at the global level with around a share of 1366226 farmers, with Uganda in second place with 2,10,353 farmers and Ethiopia with 203602 farmers producing organic products. In Asia, Africa, and Latin America there are almost 85% producers of organic products with Togo among the least in the top 10 countries

B. Organic agriculture in Asian continent

Asia though has a high potential and untapped market the demand for organic products is drastically less when it is compared with the western world. In 2019, the area of the organic agricultural land in Asia has more than 5.9 million hectares, eight percent of the global organic agricultural land have in Asia.

Table 2. Asia Development Of Organic Agriculture Land 1999-2019

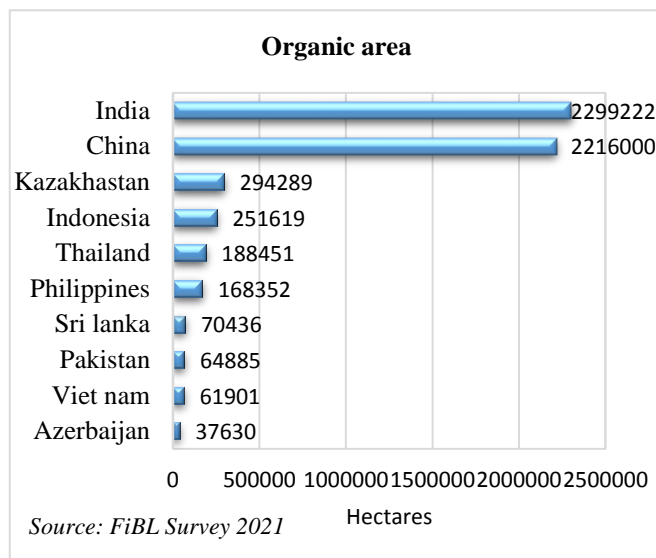
Year	Million hectares	Year	Million hectares
1999	0.02	2009	3.58
2000	0.06	2010	2.46
2001	0.42	2011	3.69
2002	0.43	2012	3.21
2003	0.49	2013	3.39
2004	3.78	2014	3.52
2005	2.68	2015	3.85
2006	3.00	2016	4.87
2007	2.9	2017	6.00

2008	3.36	2018	6.36
		2019	5.91

Source: FiBL-IFOAM-SOEL-Surveys-1999-2021

Table 2 indicates that 0.02 million hectares of land were utilized for organic farming in the Asian continent in the year 1999 which has grown in the year 2019 by utilizing 5.91 million hectares of land, although in 2018, 6.36 million hectares are utilized of organic agricultural land. Between 2018 and 2019, however, there was a decrease in the organic area of 8 percent. Since 2001, the organic land in the region has grown over thirteen-fold. Thus, this is evidence that organic farming has increased undertaking land for cultivation in recent times in the Asian continent.

Fig. 3. The ten countries with the largest organic area 2019



From the Fig. 3, In 2019 India has the highest organic agricultural area with 2.3 million hectares in the Asian continent followed by China with 2.2 million hectare and Azerbaijan has the tenth place with 0.03 million hectares.

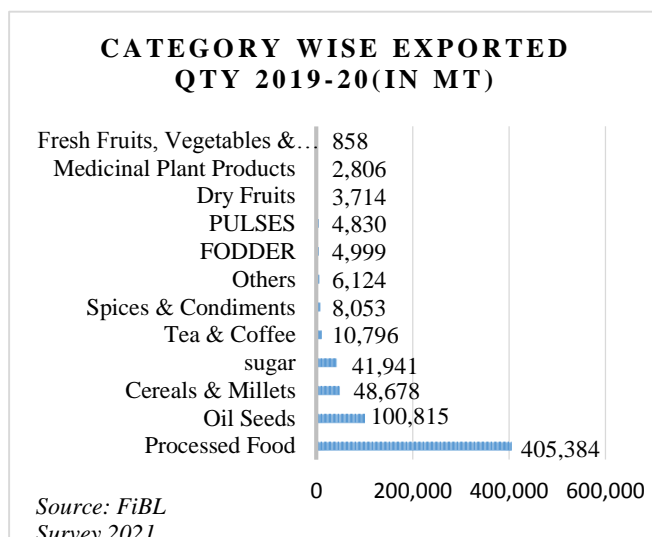
C. The development of organic farming in India

Northeast India can become a huge hub of organic farming and the capital for organic products with its own identity in the world. The government policies and interventions are following in Sikkim's footsteps the first organic state in the country

Table 3. Organic Cultivated Land Area In India

Year	Cultivated area in million hectares	Wild harvest area in million hectares	Total area in million hectares
2010-11	0.78	3.65	4.43
2011-12	1.00	4.55	5.55
2012-13	1.10	4.12	5.22
2013-14	0.72	4.00	4.72
2014-15	1.18	3.71	4.89
2015-16	1.49	4.22	5.71
2016-17	1.44	3.01	4.45

2017-18	1.79	1.78	3.57
2018-19	1.94	1.49	3.43
2019-20	2.30	1.37	3.67
Source: FiBL-IFOAM-SOEL-Surveys-1999-2021			



From Table 3, it is very clear that India's organic cultivated area is 0.78 million hectares in the year 2010-11 which has raised to the level of 2.30 million hectares in the year 2019-20 which is evidence that what ways the cultivated area for the organic farming is increasing in India. That means from 2010 till 2020 the cultivated land has been increased to 1.52 million hectares. This shows that in India organic farming is gaining significance.

In the case of the wild harvest area, it has increased from 3.65 million hectares to 4.55 million hectares from 2010-11 to 2011-12. While In 2019 it has 1.37 million hectares.

Table 4. Export Of Indian Organic Farming Products

Year	Export in INR crore rupees
2012-13	1,155.81
2013-14	1,328.61
2014-15	2,099.16
2015-16	1,975.87
2016-17	2,477.96
2017-18	3,453.48
2018-19	5,150.99
2019-20	4,685.91
https://apeda.gov.in/apedawebsite/organic	

Table 4 reveals the value of the export of organically farmed products is 1155 crore rupees in the year 2012-13 has been increased to the level of 4685 crore rupees in the year 2019-20.

The compound growth rate is 22% which shows India has a great market in the outer country than within the country.

Fig. 4. Distribution of Indian exports in term of organic products

According to Fig. 4, in terms of export value, Processed Food (63.44%), oilseeds (15.78%), cereals and millets (7.62%), sugar (6.56%), tea and coffee (1.69%), spices (1.26%) and dried fruits (0.58%) are the major organic products.

6. FINDINGS OF THE STUDY

- Oceania continent has half of the shares of the global organic agricultural land.
- Australia has the highest organic agricultural land in the world and India has the third place Having organic agricultural land.
- India has the largest number of producers in the production of organic agricultural products
- The area of the organic agricultural land in Asia has more than 5.9 million hectares, eight percent of the global organic agricultural land have in Asia.
- Since 2001, the organic land in the Asian continent has grown over thirteen-fold.
- In 2019, India has the highest organic agricultural area with 2.3 million hectares in the Asian continent followed by China with 2.2 million hectares.
- In India from 2010 till 2020 the organic agricultural cultivated land has been increased to 1.52 million hectares
- From 2012-13 to 2019-20, the compound growth rate of Indian organic farming produce export is 22%
- In 2019-20, Organic processed Food have got the first place of the Export of organic products in India.

7. CONCLUSION

The core organic products that have been produced in India are basmati rice, fruits, oilseeds, sugarcane, pulses, dry fruits, vegetables, etc. Growing consciousness towards environmental issues, health awareness, leading a healthy lifestyle, is mainly responsible for the higher request for organic agricultural products. Persons get safe and nutritious products by producing these organic products as well as by importing them from other countries. In city areas a heterogeneous cluster of people is more concerned with buying organic label products in their everyday life in western countries than in India. The graceful market and high-profit margin have inspired many farmers to undertake organic farming. There is essential to construct infrastructure both technical and fiscal to provoke farmers to switch to organic farm practices. The government and international institutes and gradually consumers are being recognized and all over the world are also accepting the benefits of the organic products in their lifestyle. It is evident that organic farming has been improved in recent years worldwide.

8. REFERENCES

- [1] APEDA (2021) <http://apeda.gov.in/apedawebsite/organic/data.htm>
- [2] Amarnath J.S., Sridhar V., (2012), "An Economic Analysis of Organic Farming in Tamil Nadu, India", Bangladesh Journal of Agriculture Economics XXXV, pp 33-51.
- [3] Kumara Charyulu, D. and Subho Biswas, 2010. Efficiency of organic input units under NPOF scheme in India. Working paper (April, 2010), IIM, Ahmedabad.
- [4] Kumar, M. S. (2019). Trends of Organic Farming in Indian Economy. *IJRAR19H1160 International Journal of Research and Analytical Reviews (IJRAR) Wwww.Ijrar.Org*,

- 6(1), 61. www.ijrar.org
- [5] Martins, F. S., Cunha, J. A. C. da, & Serra, F. A. R. (2018). Secondary Data in Research – Uses and Opportunities. *Iberoamerican Journal of Strategic Management (IJSM)*, 17(04), 01–04. <https://doi.org/10.5585/ijsm.v17i4.2723>
- [6] Meena, V. S., & Sharma, S. (2015). Organic farming: A case study of Uttarakhand Organic Commodity Board. *Journal of Industrial Pollution Control*, 31(2), 201–206.
- [7] Melissa P, Johnston. (2014). Secondary Data Analysis : A Method of which the Time Has Come. *Qualitative and Quantitative Methods in Libraryes (QQML)*, 3, 619–626.
- [8] Mukherjee, B. (2017). From Local to Global- Indian Organic Produce an Overview. *IOSR Journal of Business and Management*, 19(02), 34–39. <https://doi.org/10.9790/487x-1902013439>
- [9] Namdev P.G., Shrivastav A., Awasthi K.P. (2013), “ Economic Viability of Organic Paddy Production In Central India”, *Agriculture Science Digest*, 33(4), pp 241-246.
- [10] Gaur Manisha (2016), “Organic Farming in India: Status, Issues and Prospects”, *SOPAAN-II, Vol-1, issue-1*
- [11] Ramesh P., Panwer N.R., Singh A.B., Ramana S., Kumar S. et.a. (2010), “Status of Organic Farming in India”, *current Science*, Vol.98, No.9, pp 1190-1194
- [12] Singh, D. (2017). Economic Perspectives of Organic Agriculture: A Review of Literature. *International Journal for Research in Engineering Application & Management (IJREAM)*, 03(08), 8.
- [13] Sujaya, H., Salins, M., & Aithal, S. (2018). Organic]Agricultural Products :A Comparative Study of India with Other Economies. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, 2(December 2018.). <https://doi.org/10.5281/zenodo.2530409>
- [14] Singh Inder Pal, Grover D.K. (2011), “Economic Viability of Organic Farming: An Empirical Experience of Wheat Cultivation in Punjab”, *Agriculture Economics Research Review*, Vol.24, pp 275-281.
- [15] The world of Organic Agriculture, Statistics and emerging trend 2021, FiBL and IFOAM- Organics International.