

Ruthless Focus on Organic farming for Healthy and Prosperous Nation

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Abstract

Food excellence and security are the important factors that have gained ever-increasing interest in general consumers. Normal grown crops have huge adverse health effects due to the incidence of higher pesticide deposit, more nitrate, heavy metals, antibiotic contents, and also genetically modified organisms. Moreover, conventionally grown foods are fewer nourishing and contain lesser amounts of defensive antioxidants. In the search for safer food, the stipulate for organically grown foods has amplified during the last decades due to their feasible health profit and food safety concerns. Organic agriculture aims at the human welfare without any harm to the environment which is the foundation of human life itself.

In organic food cultivation, there is no application of chemical fertilizers and synthetic pesticides or genetically modified organisms, growth hormones, and antibiotics. The attractiveness of organically grown foods is escalating day by day owing to their nutritional and health benefits. Organic farming also cares the environment and has a greater socio-economic impact on a nation. India is a country that is bestowed with aboriginal skills and potentiality for growth in organic agriculture. Although India was far behind in the embracing of organic farming due to numerous reasons, presently it has achieved speedy growth in organic agriculture and now becomes one of the largest organic producers in the world. Therefore, organic farming has a great impact on the health of a nation like India by ensuring sustainable development.

As per the geographical extent and resource availability, there are different types in organic farming like, Permaculture, Ranching, Hydroponics, Dryland farming, etc. This paper highlights how organic farming is a track and important solution for healthy and prosperous nation. For that this paper attracts attention on the need of ruthless focus on organic farming. We need to remember following best lines said by M. S. Swaminathan, father of Indian green revolution

Key words: food safety; organic food; biodiversity; sustainable farming; conventional farming.

Introduction:

For the newly independent India, it was extremely essential to become self sufficient as far as food production was concern and the answer to that off course was the Green Revolution. While it did give us immediate high results, on the other hand it did have some serious long term impacts that we did not desire.

For a country emerging from the ravages of colonial rule, famine and lack of self sufficiency in food production, the Green Revolution was a breath of a fresh air. It was marked by the introduction of high yielding variety seeds, adoption of modern irrigation and agricultural technologies along with creating provisions for finance for farmers. In addition, a repeal of taxes on digging wells and abolition of the zamindari system acted as catalyst for

the Green revolution. Consequently production of cereals and grains surged, but as the years passed the cost of this revolution slowly became apparent. Experts say excessive use of chemical fertilisers over time has degraded soil fertility in India. What's more the use of electric tube wells has depleted ground water tables in several states. For instance data shows that India's ground water resources are falling rapidly. With the NASA's study estimating the rate of depletion at 1 meter every three years. India at present uses 230-250 cubic kilometres of Ground water each year. That's much more than the combined uses of United States and China. More than 60 % of irrigated agriculture depends on ground water and its shrinking levels pose a serious challenge to future food security. In 2016, India produced more than 250 million tonnes of food grains, but the risk is some way to go before India achieves self sufficiency. In a country with a young and growing population, dropping levels of ground water and shrinking fertile grounds make a case for more sustainable methods of agriculture.

While Sustainable agriculture has become modern day buzz word, it's not really a new concept. In fact in many ways it is just going back to traditional practices and going chemicals free. Organic Farming is a broad concept that involves the use of natural measures and method of crop and wheat control as a pose to chemical and synthetic product. It is the need of the hour.

Critics of organic farming often raise questions about economic viability and the difficulty in scaling operations to produce enough to feed the world. However, this is where a governments need to play a crucial role. Nobody ask a chemical farmer how many chemicals are you using on your fields? What kind of chemicals are you putting? What's the dosage? What is the Quantity? Are you injecting chemicals in vegetables? But while converting it into organic practices, it's almost like a penalised. You have to apply for a certification. It requires policy level changes and financial support from the government. It has often been doubted as a silver bullet to meet the challenges agriculture globally. Despite that the organic farming movement is still at a very nascent stage around the world. For starters merely around 50.9 million hectares of land is classified as organic agricultural land. That's just around 1.1 % of the total global agricultural Land. While India posts of nearly 1.2 million hectares of Organic Agricultural Land, this accounts for just around 0.7 % of the total Indian Agricultural Land in the country. The organic Movement in India however did receive a boost after Sikkim was declared as the countries first organic state. It's something that's prompted states like Kerala, Maharashtra, Mizoram, and Arunachal Pradesh to pick up pace. Data shows that with nearly 0.6 million organic producers, the highest globally, India produces around 1.24 million tonnes of organic food. So what is the market that these producers are looking to capture? Worldwide organic food and drinker have increased from 18 Billion US Dollars to almost 82 Billion US Dollars over past 15 years. While the US & Europe remain the dominant markets the share of Asian nations like china as a market for organic food products still on the rise. In India meanwhile the size of organic food market is still small roughly at 0.36 billion US Dollars. Despite that its market that is growing at a rate of nearly 25 to 30 % offering a host of new opportunities.

The agricultural sector accounts for nearly 50 % of India's workforce with many of these farmers with small land holdings. So while practicing organic farming gives us the prospect

of having sustainable future at the same time for a small time farmer to shift from conventional farming practices to organic farming is a cumbersome and expensive process. India is home to the largest number of organic producers globally. But still a vast majority of Indian Farmers continue to follow conventional practices relying on pesticides, chemical fertilisers and monocropping to higher yield. Proponents of organic farming said that this unsustainable. They argue that practicing organic farming instead can help cut input costs, fetch a premium price and produce and improve soil fertility.

Experts say that given the current scenario it is unlikely that India will witness a rapid spurt in organic agriculture. One Key aspect is government support to producers, allowing them to tie over the financial of strain switching from conventional farming. Another is a demand related issues. Such as better relations to monitor quality of food which will inspire consumer confidence. It's not just the Government; the private sector in India too needs to play key role encouraging sustainable agriculture. Example of Saskan Technologies in Bangalore has its own organic garden on 1 acre of land located in the heart of the city. This IT Company growing different vegetables completely chemical free and the produces of which is sold to the employees at a nominal price and these employees also created their own organic garden at home. Other companies in a country can take a clue from this one.

Literature Review:

In the paper on Organic Agricultural Products: A Comparative Study of India with Other Economies by Sujaya H, Meghana Salins, P. S. Aithal, the study reveals that countries like India have low health consciousness towards organic products where the sales are still in the introduction level. From the study, it is observed that some people do not buy organic agricultural products though they are health conscious due to the high price of organic products.

In a study of Analysis of trading opportunities and market trends of organic food products in south Asia to the world: A case study of India, Karthikeyan Mariappan, Meetha Ram observed 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. Need organic production not only for business and trade but also to share the culture and history with the world as India has rich knowledge and insights about the same. Only need to work with serious implications and policy measures.

In a documentary on Sikkim: Worlds's First Organic State by Rajya Sabha TV, Government of India, it is highlighted that India exporting 300 products in 20 different categories. India is the largest exporter of organic cotton producer. Domestic organic market growing steadily More than 30 % of worlds organic producers are in India. India's progress in organic sector has been remarkable. But Both the Government and private players need to develop a strong policy framework in a coherence and do develop a road map for further movement, so that it can be inclusive growth.

In National Programme for Organic Production (NPOP), APEDA Agricultural and Processed Food Products Export Development Authority, Ministry of Commerce & Industry figured on Organic Facts of India as total Cultivable area: 2299222.37 hector, Farm production: 27, 09119.51 tons, total exports quantity: 638998.395 Tons. Hence need further strong inputs and hard work to fulfill growing demands with respect to population.

Objectives of Research:

- To have the comparative analysis of Organic Foods and Inorganic Foods.
- To design strategic development, investment and growth plans of Organic Food and Produces.
- To understand and highlight the innovative ways to the Governments and the private sectors to play key roles in encouraging sustainable agriculture.
- To develop viable Economies of Scale and Competitive Pricing for organic produces in comparison to inorganic.

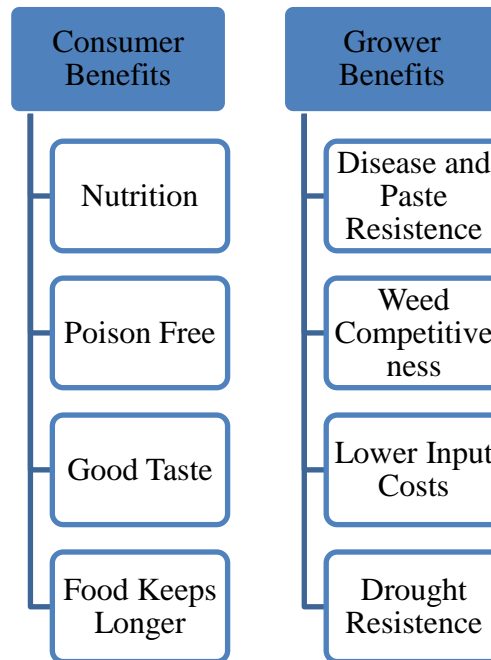
Research Methodology:

The information data refereed in this paper is secondary data. The various research papers, articles, books, case studies and documentaries are refereed. Opinions and views of authors and experts are referred. Here selected and most authentic sources are considered on the basis of its quality, content and usefulness for drawing conclusion.

Findings:

The findings of research are mentioned by means of Consumer Benefits and Grower/Farmer Benefits.

Benefits of Organic Farming:



(Source: Only Organic Only Organic Website. <http://www.onlyorganic.org/get-facts/top-10-reasons-to-go-organic/> Accessed on March 10, 2018)

Consumer Benefits:

1. Nutrition- The nutritional value of food is largely a function of its vitamin and mineral content. Organically grown food is superior in mineral content to that grown by modern conventional methods.
2. Poison-free - A major benefit to consumers of organic food is that it is free of contamination with health harming chemicals such as pesticides, fungicides and herbicides.
3. Good Taste - Organically grown food tastes better than that conventionally grown. The tastiness of fruit and vegetables is directly related to its sugar content, which in turn is a function of the quality of nutrition that the plant itself has enjoyed.
4. Food Keeps Longer - Organically grown plants are nourished naturally, rendering the structural and metabolic integrity of their cellular structure superior to those conventionally grown. As a result, organically grown foods can be stored longer and do not show the latter's susceptibility to rapid mold and rotting.

Organic Grower Benefits:

1. **Disease and Pest Resistance**—Organic Fertilizers are found to be resistant to Diseases and pests. For instance, in an orange grove infested with scale, Organically some part restored the mineral balance to part of the soil and the trees growing in that part became clean while the rest remained diseased.

2. **Weed Competitiveness** - Weeds are nature's Band-Aids, placed by the wisdom of creation to heal and restore damaged soils. When farmers follow organic practices, it helps to balance the life of the soil and with improved conditions dissuade many weeds and favour their crops. The crops, being healthier, are also better able to compete with those weeds that are present.

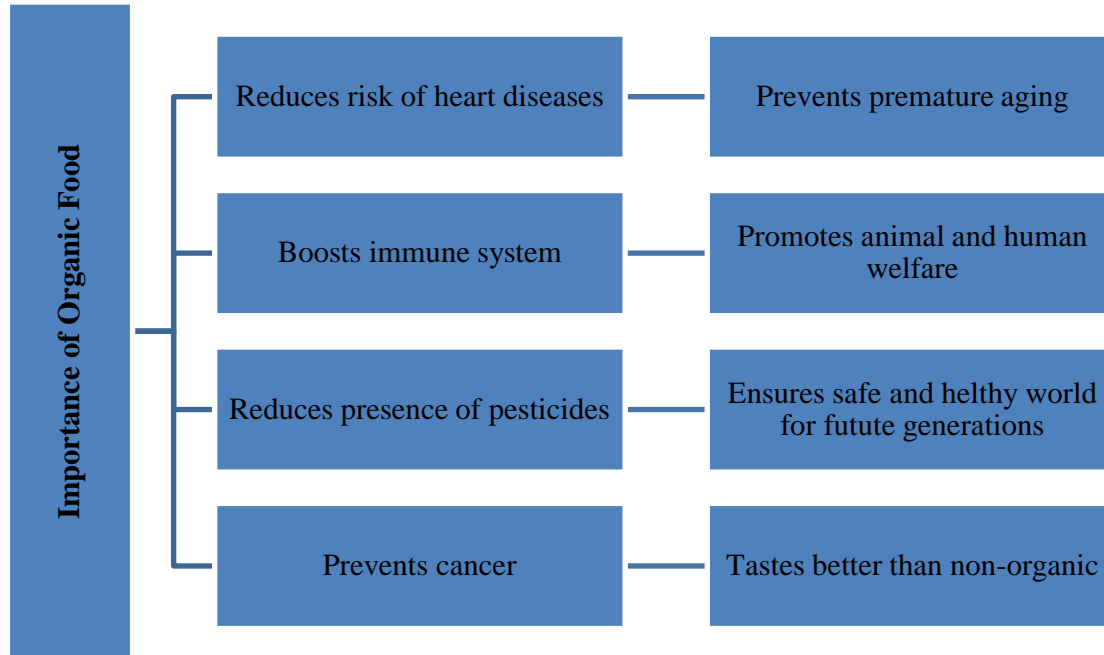
3. **Lower Input Costs** - Organic farming does not incur the use of expensive agrichemicals – they are not permitted! The greater resistance of their crops to pests and the diseases save farmers significantly from expensive insecticides, fungicides and other pesticides. Biodynamic farmers use a low cost microbial solution sprayed onto their crops.

4. **Drought Resistance** - Organically grown plants are more droughts tolerant. There is a discerning market of consumers who recognize the greater food value of organic produce and are willing to pay premium prices for it.

There are a few limitations with organic farming such as:-

- Lack of availability: Organic manure is not abundantly available
- More Expensive: On plant nutrient basis it may be more expensive than chemical fertilizers if organic inputs are purchased.
- Initially decline in production: Production in organic farming declines especially during first few years, so the farmer should be given premium prices for organic produce.
- Difficult to reach and understand: The guidelines for organic production, processing, transportation and certification etc. are beyond the understanding of ordinary Indian farmer.
- Marketing of organic produce is also not properly streamlined. There are a number of farms in India which have either never been chemically managed / cultivated or have converted back to organic farming because of farmers' beliefs or purely for reason of economics.

The Importance of Organic Food is:



Future Prospects of Organic Farming in India

India is an agriculture-based country with 67% of its population and 55% of manpower directly or indirectly depending on farming and related activities. Agriculture fulfills the basic needs of India's fastest-growing population accounted for 30% of total income. Organic farming has been found to be an indigenous practice of India that practiced in countless rural and farming communities over the millennium. The arrival of modern techniques and increased burden of population led to a propensity towards conventional farming that involves the use of synthetic fertilizer, chemical pesticides, application of genetic modification techniques, etc.

Indian traditional farmers possess a deep insight based on their knowledge, extensive observation, perseverance and practices for maintaining soil fertility, and pest management which are found effective in strengthening organic production and subsequent economic growth in India.

Conclusions

Organic farming yields more nutritious and safe food. The popularity of organic food is growing noticeably as consumer seeks the organic foods that are thought to be healthier and safer. Thus, organic food perhaps ensures food safety from farm to plate. **Organic food** diet saves people cost as compared to the convention **food**. This is simply because **organic foods** rarely do they cause eating disorders. If Americans were to shift to consuming **organic foods**, economy could grow faster that it is currently growing as well as prolong life of Americans. We should apply it in India.

The organic farming process is more eco-friendly than conventional farming. Organic farming keeps soil healthy and maintains environment reliability thereby, promoting the health of consumers. Moreover, the organic produce market is now the fastest growing market all over the world including India.

Organic agriculture promotes the health of consumers of a nation, the ecological health of a nation, and the economic growth of a nation by income generation holistically. India, at present, is the world's largest organic producers and with this vision, we can conclude that encouraging organic farming in India can build a nutritionally, ecologically, and economically healthy nation in near future.

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