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Opportunities for organic horticulture in India

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Introduction:

Through the time of hunting and gathering through shifting cultivation, settled agriculture, and intense production to the present day of organic farming, agricultural production techniques have progressed steadily over time. Agriculture has a long history that is filled with inventions, hardships, and human attempts to raise food for themselves and their livestock. Before the 19th century, manures were utilized to create food, and horses and oxen were the primary sources of farm power because chemical fertilizers, insecticides, and tractors or other farm equipment were not yet developed. After the Green Revolution in the middle of the 1960s, India's own agricultural production successes have been outstanding and mostly because of greater usage of modern agriculture's key elements, such as high-yielding varieties, fertilizer, pesticides, and farm machinery. The world's most populous nation is India. The amount of arable land available is decreasing daily as a result of the growing population.

The productivity of agricultural land and soil health must be increased in order to meet the rising population's demands for food, fiber, fuel, fodder, and other necessities. In the post-independence era, the Green Revolution provided developing nations with a roadmap for achieving food self-sufficiency, but the challenge of sustaining agricultural production in the face of limited natural resource demands has changed from "resource debasing" chemical agriculture to "resource protective" biological or organic agriculture.

Current status

The majority of the world's organic growers are located in India, which has the greatest population. India exported 135 goods worth a total of $403 million during 2013 and 2014. The United States, the European Union, Canada, Switzerland, Australia, New Zealand, South-East Asian nations, West Asia, and South Africa were major markets for organic products coming from India. The majority of the goods and commodities shipped were soybeans, which made up 70% of them.

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Other products exported were cereals and millets besides basmati rice (4%), sugar (3%), tea (2%), pulses and lentils (1%), dried fruits (1%), and spices (1%).

Indian farmers and business owners are increasingly turning to organic farming, particularly in low-productivity regions, rain-fed areas, mountainous regions, and the northeastern states where fertilizer usage is less than 25 kg/ha/year. In India, nine states have developed laws and initiatives pertaining to organic farming. In order to improve the economy and standard of living of its mountain farmers, Uttrakhand has made organic farming a priority. Mizoram and Sikkim announced that they would switch to entirely organic farming. Maharashtra, Tamil Nadu, and Kerala have backed public-private partnerships to advance organic farming, and Karnataka has developed organic policies.

Definitions of Organic Farming

According to the US Department of Agriculture, organic farming is "a system that is designed and mailed to produce agricultural products by the use of methods, and substances that maintain the integrity of organic agricultural products until they reach the consumer". In order to maintain long-term biological activity, ensure effective management, recycle waste to return nutrients to the land, provide attentive care for farm animals, and handle agricultural products without the use of extraneous synthetic additives or processing in accordance with the act and regulations, this is accomplished by using, where possible, cultural, biological, and mechanical methods rather than substances to fulfill any specific fluctuations within the system.

Funtilana (1990) stated that "Organic farming is giving back to the environment what has been taken from it." It is a farming method built on essential relationships, not only pure non-chemicalism. Soil, water, plants, microorganisms, and the overall interaction between the plant and animal kingdoms should all be understood. The foundation of organic farming is comprised of all of these relationships.

Key Opportunities in India

An estimated 10% of the world's fruit production is produced in India, one of the top producers in the globe. Fresh, domestic product is largely consumed. Middle East, European, and Southeast Asian countries are the primary destinations. India is the world's greatest producer of mangoes, but due to high domestic demand, only a small fraction of its fresh and processed mangoes (42,998.31 MT) are exported. A market for organic mangoes exists in the UK, Netherlands, and Germany that India may try to take advantage of. India exports very little of its organic bananas to the global market. To increase exports of organic

bananas, India must employ a two-pronged strategy. The market for processed organic bananas (pulp, purees, and concentrates) should be the first area of concentration, followed by the EU and the geographically nearby Japanese markets.

Since the U.S., the EU, and Japan are India's three main importing markets, there is good potential for the export of organic pineapples from India. The Middle East is India's main export market for grapes, as it is for the majority of other fruits, although there are few chances for organic grapes there. The EU, particularly the UK and the Netherlands, is the primary target destination market for Indian organic grapes. Additionally, there is a contemporary consumption trend that favors organic wine more and more, which raises the demand for organic grapes. Litchi, passion fruit, pomegranate, sapota, apple, walnut, and strawberry are additional organic fruits that could be shipped effectively.

After China, the Middle East, Singapore, Malaysia, Sri Lanka, Bangladesh, Nepal, the EU, and Australia are the other top vegetable-producing nations in the world. Asparagus, celery, paprika, sweet and baby corn, cherry tomatoes, and other non-traditional vegetables are all exported along with traditional veggies like onion, potato, okra, bitter gourd, and green chilies. veggies grown organically are in greater demand worldwide, and Indian growers of organic veggies might increase their market share in the EU, Australia, and Singapore. Organic tea is also primarily produced and exported by India. The European Commission has awarded "equivalence" status to Indian organic certifying agencies, allowing Indian organic tea growers to extend their markets in Europe, one of the biggest markets worldwide. Most developed nations, including the U.S., Germany, France, Italy, Japan, and the EU, eat organic coffee. India's share of the global organic coffee market is anticipated to be 1%, thus there is a significant opportunity to boost exports in the short term. Currently, India makes up approximately 12% (in terms of volume) of the global spice market. Germany, the UK, France, Japan, and the U.S. are the top five countries for purchasing organic spices. However, the percentage of organic spices in India's total spice production is incredibly small. Pepper, ginger, turmeric, cloves, mace, nutmeg, vanilla, cardamom, chili, mustard, tamarind, camboge, thyme, rosemary, oregano, marjoram, parsley, and sage (fresh, dehydrated, and oil) are among the organic spices produced by India that have export potential. India, which has a large area dedicated to the cultivation of medicinal and aromatic plants, is a significant provider of certified organic components to the international organic cosmetics and health care

sectors. India also contributes significantly to global essential oil production. Given these benefits, India may rise to prominence as a major supplier of organic components to the international organic beauty and pharmaceutical industries.

The four principles of organic agriculture are as follows

The Principle of Health - The health of the soil, plants, animals, and people should be sustained and improved by organic farming as a whole.

The Principle of Ecology - Based on live ecological processes and cycles, organic agriculture should cooperate with them, imitate them, and contribute to their sustainability.

The Principle of Fairness - Organic farming should be based on connections that guarantee fairness with regard to the shared environment and opportunities for life.

The Principle of Care - In order to safeguard the health and welfare of both present and future generations as well as the environment, organic agriculture should be managed with caution and responsibility. Although the sustainable development of mankind is not expressly stated in the fundamental principles, they give organic farming a foundation for guaranteeing the health of the environment.

Certification and Legislation of Organic Food in India

The following six accredited accreditation agencies are currently recognized in India by the Ministry of Commerce, Government of India. Those are

- APEDA (Agricultural & Processed Food Product Export Development Authority).
- Coffee Board
- Spices Board
- Tea Board
- Coconut Development Board
- Cocoa & Cashew nut Board
- In addition there are four Certification Agencies accredited by APEDA such as
- IMO Control Pvt. Ltd., Bangalore (Institute fur Market ecologie, Switzerland)
- Skal International (The Netherlands), India, Bangalore
- SGS (Societe Generale de Surveillance, Switzerland) India Pvt. Ltd., Gurgaon
- ESCOCERT (Ecological Certification, France) International, Germany

The Indian Organic emblem is promoted internationally by APEDA, an organization that promotes exports of agricultural and processed food products. By raising awareness through active participation in international conferences, Expo-Import

Bank and APEDA are promoting organic agriculture products. Additionally, it has begun to identify special Agri Export Zones (AEZ) for organic produce in specific regions of the nation, such as Tripura, where organic pineapple is grown with little to no usage of chemical pesticides and fertilizers. NSOP (National Standards for Organic Production): It was developed for the National Program for Organic Production (NPOP) by the Department of Commerce, Government of India. The term "Organic" may be used by any production that has received NSOP certification. When a product has been made in India to an organic standard other than NSOP, such as EU regulations, IFOAM, etc., it may be marked "For export only." For domestically manufactured organic goods that adhere to the NSOP and worldwide organic standards, truthful label claims are permitted. Organic Certificates were good for a year or until the following choice was made. When you suspend your certification voluntarily or when the certification agencies suspend it, the organic certification standards become invalid. Typically, inspections take place once a year. Inspecting is done again wherever it is deemed essential. The NSOP has established guidelines regarding the improper usage of the term "Organic". Any business that intentionally markets or labels a product as "Organic" while not adhering to the National Standards could face civil liability. In order to provide trustworthy and reasonably priced organic inspection and certification services to farmers, processors, input suppliers, and merchants, India's first local organic certification body, INDOCERT (Indian Organic Certification Agency), was founded in March 2002. It is a nonprofit organization that is independent and operates across the country with the main goal of conducting inspections and awarding certification for organic agriculture practices. It offers certificates for both domestic and international markets. Additionally, INDOCERT serves as a forum for networking, information sharing, raising awareness, and training in the area of organic farming. It was established by a number of corporate and NGOs in India with technical assistance from FiBL, bio-inspecta, and the Swiss State Secretariat of Economic Affairs (SECO). Two reputable Swiss institutions, FiBL (Research Institute of Organic Agriculture) and bio.inspecta (the top Swiss certification body), have close technical partnerships with INDOCERT. Through a re-certification process, Bio.inspecta assists INDOCERT with certification in accordance with the USDA National Organic Program (NOP) and JAS (Japanese Agricultural Standard for Organic Agriculture). It assesses inputs used in organic farming and verifies their adherence to both the European

Regulation EC 2092/91 and the Indian National Organic Standards. Currently, INDOCERT limits its input approval scheme to inputs linked to plant protection (pesticides, repellents, etc.) as well as fertilizers and soil conditioners.

Conclusion: With the business, government, and non-governmental organizations joining together to promote farmers, India's organic export markets would expand. Given that the market for organic food is expanding quickly in the EU, the US, Canada, Japan, Australia, and a few developing nations, the future looks quite promising. The organic food industry has grown to be a desirable market for exports from developing nations as consumer awareness of food safety, health, and environmental issues has increased.