

## Awareness of Organic Food on Athletic Performance in India

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**Abstract:** There is a growing interest in organic food in India as many individuals have become concerned about environmental and health issues. This research focused on the production and significance of organic foods in India, particularly for athletic performance. This research is based on previous reports, studies, and official data. The research found that small and marginal farmers who use traditional cultivation methods primarily do organic farming in India. Only a few states in India produce organic food; Sikkim was the first to declare that it was organic. India's main organic agricultural categories are cereals, pulses, fruits, and vegetables. Consumption of organic food in India is still low compared to conventional food. Yet, there has been a significant increase in demand for organic food in urban areas due to rising health enterprises and awareness about the harmful effects of pesticides and chemicals. People were unaware of organic food, especially in athletic performance, but now people are aware because organic food is essential for overall health, especially for Athletes. The Indian government has also introduced several initiatives to support organic farming and give farmers incentives. The Indian market for organic foods is still in its nascent age, but it is expanding quickly. The major players in the market are small and medium-sized companies that concentrate on original and indigenous markets. The market could be more organized, and organic product certification and standardisation are needed to increase consumer confidence. Overall, the study sheds light on the situation of organic food in India and why it is essential for athletic performance and identifies the sector's prospects and limitations. The research indicated that collaboration between the government, producers, and the commercial sector is necessary to improve organic farming, raise public awareness of organic food, and increase the demand for organic products in India, especially for Indian athletics, as it affects their performance.

**Keywords:** *Athletic Performance, Consumption, Organic food and Production.*

### Introduction

India is getting more and more popular for its organic food because of rising environmental and health issues [1]. India's desire for organic food is being driven by an increase in awareness of the harmful effect of pesticides, chemicals, and genetically wrought crops on both mortal health and the land [2]. Also, Organic food is said to be more delicious, nutritious, and healthier than conventional food [3,4].

### Organic farming in India:

Small and marginal farmers who employ conventional agricultural practices are the main practitioners of organic farming in India [5].

Conventional agriculture relies on chemical intervention to combat pests and weeds and supply plant nutrients, whereas organic agriculture does not. It includes insecticides, herbicides, and fertilisers that are synthetic. Organic agriculture focuses on natural principles such as biodiversity and composting to provide healthy and plentiful food.

Crucially, "Organic production is not only the avoidance of traditional chemical inputs nor the substitution of natural resources for manufactured inputs." Organic farmers employ practises that have been in use for thousands of years, such as crop rotations and the utilisation of composted animal manures and green manure crops, in economically viable ways. In organic production, a focus is placed on the health of the entire system, and the interplay of management methods is of paramount importance. Organic farmers employ a variety of techniques to increase biological diversity and replenish soil fertility".

Conventional farming – classic/modern technologies (following green revolution) including herbicides, chemical fertilizers and synthesis pesticides (efficient in controlling weeds, good control of pests and guaranteeing high

yield, and cheap/affordable food products, but often in detriment of quality: lower micronutrient content, pesticide residues in food products when management is deficient). A wide range of cultivars varieties are suitable for this system, because modern plant breeding programs were mostly directed for creating varieties for conventional farming, including but not limited to genetically modified crops. High yield varieties were created for high performance in this system. These crops are more widespread and feed most of the world population, and are high input-high output crops. Environmental impact is higher, fertilizer leaching causing eutrophic water bodies, intensive crops causing increased soil erosion.

Organic farming – subject to strict regulations defined by national and international standards. Farms undergo conversion and inspections on site for certification. Type of permitted fertilizers and natural-derived pesticides are limited (often more expensive), no synthetic herbicides permitted (weed control is a challenge and conducted only mechanically). Therefore, only certain cultivars/varieties are overall suitable for this type of farming. Not all existing plant varieties would resist and be productive in this system. Yield is lower, but of higher quality. The yields are lower both due to type of plant varieties that are designated specifically as suitable for this type of farming (that are generally lower yield), and difficult weed-pest control, and limited fertilizer options. Requires naturally highly quality/fertile lands. Crop is more labor-intensive. Lower environmental impact, enhances and protects natural biodiversity. Resulting products are more expensive due to organic farming costs and lower yield, but considered of higher quality do to higher content in micronutrients, and often more nutritious parameters. Disadvantage is that particularly in cereals, due to lack of fungicides applications, the flour can be rich in mycotoxins (that are dangerous substances produced by fungi and many are carcinogenic) and this occurs in years when weather conditions are favorable to high mycotic incidence in the crops.

According to the Ministry of Agriculture and Farmers Welfare, in 2019–20, there were roughly 2.59 million hectares of organic farming in India [6]. Cereals, pulses, fruits, and vegetables are India's main organic agricultural categories [7]. Only a few states in India produce organic food; Sikkim was the first to declare that it was totally organic. Several states, together with Madhya Pradesh, Himachal Pradesh, and Uttarakhand, have made substantial progress in endorsing organic farming [8].

The Indian government has implemented a number of programmes to boost organic agriculture and provide incentives to farmers. The Parampara Krishi Vikas Yojana (PKVY) is a centrally funded programme that encourages small and marginal farmers to engage in organic farming. The National Program for Organic Production (NPOP) is a certification scheme that grants organic farming and processing facilities accreditation. The Organic Value Chain Development for North Eastern Region (OVCDNER) is a programme that promotes organic agriculture in India's northeastern area [9].

### Status of organic food in India

India's rank 5th in terms of World's Organic Agricultural land and 1st in terms of total number of producers as per 2021 data.

**Table: 1 Production of organic food in India**

<b>AREA</b>	As of March 31, 2022, the total area undergoing organic certification (registered under the National Program for Organic Production) is 9119865.91 hectares (2021-22). This contains 4726714.74 ha of cultivable land and 4393151.17 ha for gathering wild harvest. Madhya Pradesh, followed by Maharashtra, Gujarat, Rajasthan, Orissa, Karnataka, Uttarakhand, Sikkim, Chhattisgarh, Uttar Pradesh, and Jharkhand, has the greatest area covered by organic certification. In 2016, Sikkim accomplished the incredible feat of turning all of its cultivable land (more than 75,000 hectares) to organic certification.
<b>PRODUCTION</b>	India produced around 3430735.65 MT (2021-22) of certified organic products, including all types of food items, such as Oil Seeds, fibre, Sugar cane, Cereals & Millets, Cotton, Pulses, Aromatic & Medicinal Plants, Tea, Coffee, Fruits, Spices, Dried Fruits, Vegetables, Processed meals, etc. In addition to producing edibles, the company also manufactures organic cotton fibre, functional food items, etc. Madhya Pradesh is the most productive state, followed by Maharashtra, Rajasthan, Karnataka, and Odisha. Fiber crops are the largest category of commodities, followed by Oil Seeds, Sugar crops, Cereals and Millets, Medicinal/Herbal and Aromatic plants, Spices & Condiments, Fresh Fruit & Vegetable, Pulses, and Tea & Coffee.
<b>EXPORTS</b>	The overall volume of exports in 2021-22 was 460320.40 MT, while the value of organic food exports was around INR 5249.32 Crore (771.96 million USD). Organic goods are shipped to the United States, the European Union, Canada, the United Kingdom, Switzerland, Turkey, Australia, Ecuador, the Republic of Korea, Vietnam, and other nations. In terms of export value realisation, processed foods including soya meal (61%) lead the pack, followed by oilseeds (12.85%), cereals and millets (12.71%), sugar (4.77%), plantation crop goods such as tea and coffee (2.16%), spices and condiments (1.72%), pulses (1.1%0), and other items.

### Consumption of organic food in India

Although it's growing rapidly, the consumption of organic food in India is still comparatively low when compared to conventional food. The majority of organic food customers in India are urban, educated persons who are concerned about the environmental and health benefits of organic food. Another factor adding demand for organic food is the development of liver diseases, including diabetes, hypertension, and obesity [10]. According to a survey conducted by the Associated Chambers of Commerce (ASSOCHAM) and the Industry of India, the demand for organic food in India is anticipated to reach Rs. 10,000 crores by 2020. But the high cost of organic food discourages consumption significantly, especially for people with low income.

Compared to conventional food, organic food is more expensive due to the high cost of production and the limited quantity of organic ingredients [11]. Well-off people [12] primarily consume organic food, which is seen as a

luxury good. Lack of knowledge about the advantages of organic food is another obstacle to its usage [13]. Indian customers are unfamiliar with the harmful consequences of pesticides and other chemicals used in conventional farming, as well as the concept of organic farming [14]. To increase the use of organic food, additional education and knowledge about its advantages are required. To promote organic food consumption, more organic products must be accessible and readily available. [15]. To increase the production of organic food and make it accessible at affordable prices, the government and the private sector should collaborate [16]. Additionally, the expansion of organic food markets and the promotion of direct marketing channels like farmers' markets and community-supported agriculture may increase consumer access to organic food. [17].

### The organic food request in India:

India's organic food industry is still in its infancy, but it is rapidly expanding. With a compound annual growth rate (CAGR) of 21.00%, it is anticipated that India's demand for organic food will rise from \$177.14 million in FY 2020 to \$553.87 million in FY 2026. This development can be ascribed to the public authority's support of natural cultivating and the extension of natural establishing regions. [ 18].

Small and medium-sized businesses that specialise on original and indigenous requests are the key participants in the request [19]. The market is mainly disorganised, and certification and standards of organic products are required to boost customer confidence. Because there is no established certification mechanism in India, the organic food sector confronts considerable challenges [20]. Customers' scepticism about the authenticity and quality of organic products contributes to low customer confidence [21]. Consumer trust may be increased, and the organic food market can grow, with the support of a strong certification system and product consistency [22]. The Indian government has launched many programmes to encourage organic product certification and standards [23]. The National Program for Organic Production (NPOP) is a certification programme that gives organic agricultural and processing units with accreditation [24]. Organic food exports are certified by the Agriculture and Processed Food Products Export Development Authority (APEDA). The urban population of India, which is more health-conscious and health-aware, drives a substantial chunk of the organic food industry. The increase of e-commerce and online shopping, which makes it simpler for customers to get organic products, also helps to the expansion of the organic food industry [25].

### Date on organic agriculture production and consumption of different crops:

1. Organic fruits and vegetables production:
  - In 2020, organic fruits and vegetables production was 80.6 million tons globally.
  - The top five organic fruits and vegetables producers in 2020 were China, India, Mexico, Turkey, and the United States.
    - Organic bananas are the most produced organic fruit, with a global production of 5.5 million tons in 2019.
    - Organic carrots are the most produced organic vegetable, with a global production of 1.9 million tons in 2019.
2. Organic grains and cereals production:
  - In 2020, organic grains and cereals production was 29.7 million tons globally.
  - The top five organic grains and cereals producers in 2020 were India, China, Ethiopia, Uganda, and the United States.
  - Organic rice is the most produced organic grain, with a global production of 2.5 million tons in 2019.
  - Organic wheat is the most produced organic cereal, with a global production of 1.6 million tons in 2019.
3. Organic dairy and meat production:
  - In 2020, organic dairy and meat production was 8.3 million tons globally.
  - The top five organic dairy and meat producers in 2020 were India, China, Argentina, the United States, and Germany.
  - Organic milk is the most produced organic dairy product, with a global production of 24.3 million tons in 2019.
  - Organic chicken is the most produced organic meat, with a global production of 1.1 million tons in 2019.

Here are some tables that show the importance of organic foods:

**Table 1: Top organic fruits and vegetables producers in 2020**

Country	Organic fruits and vegetables production (tons)
China	12,803,000
India	7,322,200
Mexico	5,947,000
Turkey	4,093,250
USA	3,982,750

Table 2: Top organic grains and cereals producers in 2020

Country	Organic grains and cereals production (tons)
India	8,985,000
China	7,050,000
Ethiopia	2,925,000
Uganda	1,922,000
USA	1,500,000

Table 3: Top organic dairy and meat producers in 2020

Country	Organic dairy and meat production (tons)
India	1,426,200
China	1,216,400
Argentina	1,108,500
USA	962,200
Germany	782,600

### Relationship between organic food and sports performance

The simultaneous growth of all activities carried out by society is necessary for its development and expansion. The economic strength of a society is directly proportional to the number of healthy individuals it has [26]. The health and productivity of an individual go hand in hand, and living and working in a healthy manner for an extended period increases the national output and gross national product [27].

Sports and organic agriculture have a common goal of protecting human health [28], and their significance increases accordingly. Physical activities in nature promote individuals' adaptation to their environment and maintain their physical and spiritual integrity [29]. Modern-day hazards, such as stress and inactivity, significantly impact human health, and sports help people respond to these risks and stay safe [30].

To create an optimal sports environment, it is essential to have healthy food produced in a natural environment. Organic farming practices aim to produce food that conforms to the natural balance of the environment in which it is grown [31]. Therefore, organic agriculture enables the production of nutritious meals, a safe food supply, and the preservation of a high-quality environment. The ability to maintain health is essential for human life [32].

The interaction between sports and organic agriculture has a significant impact on enhancing this ability. We can say that the objective of both activities is to safeguard and enhance individuals' health. Besides this common objective, we can describe the relationship between the two activities under the following three categories: first, both sports and organic farming have the long-term objective of preserving human health [28]. While sports promote physical activity, organic agriculture contributes to the continuation of these activities by generating high-quality food. Second, sports and physical activities enable people to adapt to the natural environment, while organic agriculture ensures the creation and sustainability of a high-quality environment by producing high-quality food in harmony with the natural balance. Finally, most sports and organic agricultural activities are dependent on and have diverse effects on the natural environment. Outdoor sports activities require a quality environment, and organic farming practices provide the solution to achieve this requirement. Therefore, the objective of both sports and organic farming is to save human life and ensure its continued existence.

### Significance of the study

In recent times, organic food has grown in popularity, and its implicit influence on athletic performance is significant. In India, still, exploration of the impact of organic foods on athletic performance is limited. Organic food is frequently considered to be more nutrient-dense and chemical-free, which might be profitable for athletes seeking optimal nutrition and health in

order to perform at their peak. In addition, organic food may help reduce inflammation, which might be advantageous for athletes suffering from training-related discomfort. Organic food is not readily available or inexpensive in India, especially in rural regions where many athletes reside. So, many athletes may have restricted access to organic food. However, understanding of organic food and its possible influence on athletic performance is not prevalent in India, and some athletes and trainers may be doubtful of its benefits because it is not a well-talked or pushed issue in the athletic community.

## Literature Review

Organic crops showed higher concentrations of certain minerals, including vitamin C, iron, and magnesium, than those cultivated conventionally. The study also discovered that crops grown organically contained less nitrate and pesticide residue [33]. The essential and unnecessary amino acid situations in organic foods and supplements were veritably variable and, in some cases, did not match the salutary guidelines for these nutrients.

The trust ability may have been compromised because of the lack of standardization in the ways employed to measure amino acid content. In order to provide customers with precise and reliable information regarding the nutritional composition of these goods, the authors suggest that regulatory organizations set rules for the analysis of amino acids in them. [34]. Organic crops contain higher concentrations of certain antioxidants and lower concentrations of heavy metal cadmium than crops cultivated conventionally. Moreover, pesticide residues were less common in organic crops [35]. Organic farming has the implicit in ameliorating global food security, increasing soil health and biodiversity, and has lower an adverse impact on the terrain [36]. Eating organic food was linked to a lower incidence of several illnesses, including allergies and eczema. The study also showed that eating organic food didn't significantly affect other health issues, similar to cancer and cardiovascular complaint [37]. A variety of quality parameters, including nutrient content, sensory quality, and the presence of secondary metabolites. Vitamin C, phenolic composites, and dry matter content were all shown to be greater in organically cultivated potatoes than in conventionally grown potatoes.

The researchers did find some evidence of genetic differences across the potato cultivars, however, which could account for the observed disparities in qualitative attributes [38]. The developments in sports nutrition science, shifting consumer preferences, and general interest in health and well-being as forces propelling the sector forward. Protein supplements, energy bars, and caffeine are just some of the goods and substances that are discussed in this overview as examples of what sells well in the sports nutrition industry. Growing consumer interest in on-the-go and tailor-made nutrition products is cited as a key factor in the predicted sustained expansion of the sports nutrition market [39]. The effects of pomegranate fruit supplementation on exercise performance indicators such as endurance, strength, and power. Supplementation with pomegranate fruit may improve exercise performance, as measured by measures similar to abidance and recovery from exercise-convicted muscle injury [40]. The possible health benefits of Plant-based proteins like soy, pea, and rice protein are similar to lowering the threat of habitual conditions and adding physical function in the senior [41]. The benefits of a vegan diet, similar to a lower threat of habitual conditions and enhanced performance, are banded, along with the nutritive enterprises and problems of adopting such a diet. The authors conclude that athletes can get all the nutrients they need from a well-planned vegan diet, and it may indeed have certain benefits like lowering inflammation and oxidative stress. Yet, they also stress the importance of taking into account personal circumstances and preferences while settling on a diet [42]. The pros and cons of numerous different diet plans, similar to those that are high in fat or protein or concentrate on vegetables. The authors concluded that there are some data that suggest specific diets may be good for abidance athletes, but there's also contradicting information, and fresh exploration is demanded to fully understand the impact of different diets on sports performance. They also emphasize the need to take into personal account characteristics, including an athlete's training schedule and dietary preferences [43]. Grape polyphenol supplementation may help mitigate exercise-induced oxidative stress, and taking grape polyphenol supplements may be useful as a natural antioxidant supplement for athletes since they may assist in lowering signs of oxidative stress in response to exercise [44]. Antioxidants, antibacterial, and antiseptics are just some of the bioactive components the writers address in this article about honey. Benefits to energy metabolism, exercise performance, and muscular fatigue are discussed, along with the possibility that honey consumption could provide these advantages for athletes. It also draws attention to honey's potential usefulness for sportsmen dealing with injuries by highlighting its antibacterial and wound-healing capabilities. Both pieces emphasize the value of proper nutrition in enhancing fitness and health. The first piece provides an overview of recent developments in the field of food and sports nutrition, while the second examines honey's unique advantages as a fuel source for athletes [45]. Most Olympic boxers polled had only a moderate understanding of the nutritional benefits of organic foods. Knowledge of people was also affected by individuals' gender, degree of education and socioeconomic status. These boxers said they learned about proper diet through their trainers, nutritionists, and the internet. However, some of the information they received was contradictory, which suggests a need for more consistent and evidence-based information on organic food nutrition. Overall, the study suggests that while Olympic boxers in Turkey have a moderate level of knowledge about organic food nutrition, there is room for improvement. The authors recommend that coaches and nutritionists provide more targeted education on the benefits of organic food and its role in optimizing athletic performance [46]. Those who regularly exercise are more likely to see healthy foods favourably and to regularly consume them. Those who cleave to particular diets (similar to veganism or gluten-free diets) also tend to have further favourable views on similar products. As for why people like or dislike healthy foods, the survey indicated that both flavour and convenience had a role. As a whole, the results indicate that increasing opportunities for physical exercise and praising the deliciousness and ease of preparation of healthy foods may be useful methods of increasing people's propensity to eat them [47]. There is a strong relationship between sports and organic agriculture, as athletes need healthy food to fuel their bodies, and organic farming practices provide a sustainable and healthy source of food. The article explains how organic farming helps the planet by minimizing the use of toxic chemicals and increasing biodiversity. The paper also argued how eating organic foods have been shown to have positive effects on health, including enhanced general well-being and

sports performance. The author goes on to say that the sports industry can do a lot to help spread the word about organic farming by backing sustainable agricultural efforts and pushing for organic food consumption among athletes. The article cites several instances where sports-related organizations or events have taken steps to reduce their impact on the environment. The essay as a whole emphasizes the significance of encouraging sustainable and organic food production for the sake of athletes' health and the environment [28].

## Materials and Methods

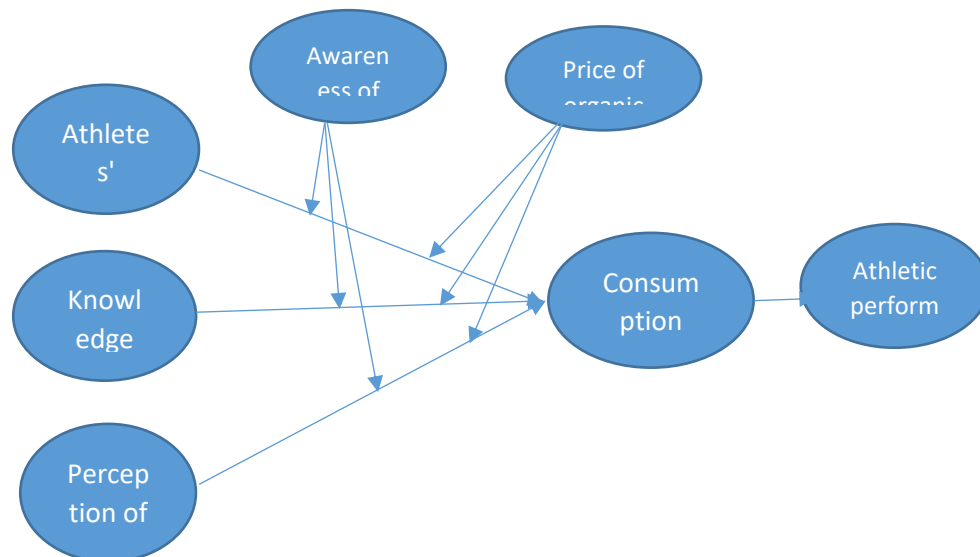
This research consists of a literature review. A comprehensive technique was used to search for articles in research journal databases such as Web of Science (WOS), Scopus, and ABDC. Organic food, athletic performance, nutrition, illnesses, and protein are the keywords employed. Journals that explore Organic food, athletic performance, nutrition, illnesses, and

protein meet the inclusion criteria. In addition, articles published during the previous five years from 2022 are excluded. 50 publications were obtained, and 16 were evaluated based on the topic, aims, study procedure, and research outcomes.

## Findings

Following the completion of the literature review, it was discovered that people, particularly athletes, do not consume organic food because they are not aware of the benefits of organic food, and somewhere the price of organic food is stopping them from consuming it. The reason for this was discovered. If we look at the benefits of organic food, we can see that it is very useful for everyone, but it is especially beneficial for athletes because they cannot risk their health in any way. The authors of the study have presented a model based on the data:

## Proposed Model



## Most important crops that must be grown:

The most important crops that must be grown can vary depending on factors such as climate, soil conditions, and local dietary preferences. However, here are some crops that are considered essential for food security and nutrition worldwide:

1. **Wheat:** Wheat is one of the most widely cultivated crops in the world and a staple food for many countries. It is rich in carbohydrates, proteins, vitamins, and minerals, making it an important source of nutrition for millions of people.
2. **Rice:** Rice is another staple food for many people, especially in Asia. It is high in carbohydrates and a good source of vitamins and minerals.
3. **Maize:** Maize, also known as corn, is a versatile crop that is used for food, animal feed, and biofuel. It is rich in carbohydrates, fiber, and essential vitamins and minerals.
4. **Soybean:** Soybean is a protein-rich crop that is used for food, animal feed, and industrial purposes. It is also an important source of essential amino acids and fatty acids.
5. **Potatoes:** Potatoes are an important source of carbohydrates and fiber and a staple food for many countries. They are also rich in vitamin C, potassium, and other essential nutrients.
6. **Cassava:** Cassava is a drought-tolerant crop that is an important source of food and income for millions of people, especially in Africa. It is rich in carbohydrates and a good source of essential vitamins and minerals.

7. Beans: Beans are a good source of protein, fiber, and essential nutrients, making them an important crop for food security and nutrition.
8. Fruits and vegetables: Fruits and vegetables are essential for a healthy diet and provide a wide range of essential vitamins and minerals. Some of the most important fruits and vegetables include tomatoes, carrots, bananas, apples, and citrus fruits.

### **How to promote the importance of organic food:**

1. Education and Awareness: Educate people about the benefits of organic food through campaigns, seminars, workshops, and social media. Share information about the health benefits of organic food, the environmental impact of conventional agriculture, and the benefits of supporting local farmers.
2. Labelling: Clear labelling of organic products can help to promote their importance. Make sure that organic products are labelled clearly, so that consumers can easily identify them.
3. Media Coverage: Promote the importance of organic food by getting media coverage. Arrange interviews with experts, organic farmers, and other stakeholders to discuss the benefits of organic food.
4. Local Markets: Promote the availability of organic food by setting up local markets. This will provide consumers with easy access to organic food and support local farmers.
5. Discounts and Coupons: Offer discounts and coupons on organic food to encourage people to try it. This can be done through retailers, local farmers' markets, or community-supported agriculture programs.
6. Collaboration: Collaborate with local organizations, schools, and health institutions to promote the importance of organic food. Work together to raise awareness about the benefits of organic food and encourage people to try it.
7. Support for Farmers: Provide support for farmers who are transitioning to organic farming. This can include providing technical assistance, training, and financial incentives.
8. Online Resources: Create online resources such as blogs, videos, and social media posts to promote the importance of organic food. Share information about organic farming practices, recipes, and the benefits of organic food.

### **Conclusion**

In India, organic food is gaining popularity due to increased knowledge of health and environmental concerns. Small and marginal farmers who apply conventional farming methods predominantly practise organic farming in India.

In India, only a few states produce organic food; Sikkim was the first to proclaim it to be entirely organic. Despite its rapid growth, India consumes very few organic goods in comparison to conventional meals. The majority of organic food buyers in India are urban, educated persons who are uncertain about the environmental and health benefits of organic food. The organic food industry in India is still in its infancy, but it is expanding rapidly.

To assist the growth of the organic food business in India, the government, farmers, and the commercial sector should collaborate to expand the production of organic food, make it more economical, raise awareness of its advantages, and establish an adequate instrument system for organic products.

Organic food may have inherent benefits for athletic performance, but its influence on Indian athletes is now limited by a lack of accessibility and awareness. Organic food has the potential to enhance athletic performance in India, but its influence is hampered by a lack of accessibility and awareness of its advantages. Although organic food can boost nutritional viscosity, reduce inflammation, and improve general health, it is neither widely accessible nor economical in India, particularly in rural regions. Organic food and its implied effect on sports performance are not widely acknowledged in India. So, although organic food may have a good impact on the performance of some Indian athletes, more accessibility and awareness are required to fully realise its inherent advantages.

### **Recommendations:**

Concerted efforts from all interested parties are required to realise the enormous growth potential of the organic food business in India. The growth of the industry can benefit the environment, farmers' lives, and the health and happiness of customers.

Despite India's increasing consumption of organic food, problems still need to be resolved. Major obstacle to its usage is low level of knowledge of consumers and Indian athletics.

In order to increase the consumption of organic food in India, the business community and the government should work together to increase its awareness and availability as well as public mindfulness of the benefits of organic food.

### **Recommendations about how to increase the producing areas of organic food**

1. Increase awareness: Increase public awareness about the benefits of organic agriculture and the demand for organic products. This can be done through education campaigns, promoting organic food in schools, and raising awareness through social media.

2. Provide incentives: Governments can provide incentives for farmers to switch to organic farming by offering tax breaks, subsidies, and low-interest loans.
3. Encourage research: Develop technologies that can boost organic crop yields and encourage research into organic farming practices.
4. Make the soil better: Utilizing organic fertilizers, crop rotation, and cover crops can all improve the quality of the soil. Soil health and crop yields can both benefit from this.
5. Encourage organic certification: To help boost the market's supply of organic food, encourage more farmers to obtain organic certification. This can be accomplished by offering training to farmers to assist them in meeting organic standards or by lowering the cost of certification.
6. Encourage small-scale farming: Certification and market access are frequently problematic for small-scale farmers. By establishing local markets, providing training, and offering technical assistance, governments can support small-scale farmers.
7. Encourage local agriculture: Promote community-supported agriculture programs and provide land and resources for community gardens to encourage community farming.
8. Energize natural cultivating in metropolitan regions: By providing resources for rooftop gardens and community gardens, you can encourage organic farming in urban areas. In urban areas, fresh, organic produce that is grown locally may become more readily available because of this.

## Further Research

To further investigate the proposed model, researchers might perform surveys on the knowledge of organic food among athletes and their consumption patterns. The survey should assess a variety of factors, including the dietary habits of athletes, their understanding of organic food, and their perception of its impact on athletic performance.

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