

A Paper on Promotion of Organic Agriculture in India

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Abstract

Agriculture is a big part of India's gross production. About this, agriculture is in growing difficulty today. Currently, current research stresses the need to use organic waste to boost soil organic matter to preserve sustainability and productivity in farming. Most farmers are resource-poor, and the purchase of sufficient amounts of pesticides and fertilizers is beyond their ability to promote organic agriculture. Besides, organic agriculture is useful to small and remote producers. Organic agriculture provides hope for the future of which ecologically, safe, nutritious, and equally developed food and agricultural goods are produced. The current study was conducted to evaluate the status and trends of marketing and branding strategies in India. It was reported that It takes a paradigm change when addressing both farmers and customers within the supply chain when it comes to selling goods. Organic agriculture supplies plants with micro and macro-nutrients, and also enhances the biological, chemical and physical soil features. Further, this study will aid in the development of strategies to market and brand the organic products produced in India to increase the income of the farmers..

Key words: Agriculture, Farming, Farmers, Marketing, Organic Cultivation, Crop, Production, India.

Introduction

In the current agricultural paradigm, despite the maximization of chemical inputs, crop yield is dropping every day. Growing crop loss, higher input demand, low soil quality and also recurring plague and disease infestation are now subjected to the lethal process of synthetic agriculture. In addition, under the circumstances of uncertain environmental conditions, intervention in climate change is becoming very consistent against a rise in biotic capacity. The excessive and unjustified application of synthetic fertilizers has contributed to the incorporation into the food chain of toxic chemicals, the destruction of natural predators and the degradation of the climate [1]. Improved pesticide usage has had significant health effects on people and their ecosystem. Improving and sustaining machine efficiency and quality of services for sustainable farming is therefore important.

Organic farming can solve all of these issues because this method helps to sustain land fertility and efficiently manage pests by better, environmentally sustainable methods and cycles. The agriculture world today understands that organic farming isn't just the only way to protect/sustain soil plants, but also to offset the negative effects of climate change. The lack of good technical progress is, however, the most impediment to the real goals of organic agriculture. Against that backdrop, Inhana Rational Farming (IRF) Technologies has shown some anticipated outcomes that have revealed organic farming's significance in today's agriculture situation [2]–[4]. Figure 1 and Figure 2 are representing the Top Ten Countries that are the Largest Producers and Countries with the Largest Area of Organic Farming.

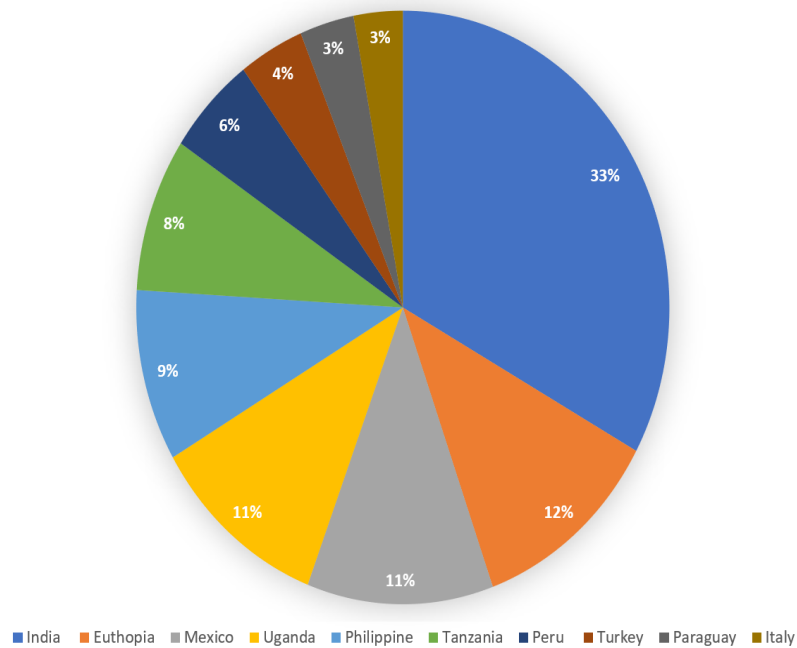


Figure 1: Countries (Top Ten) with the Largest Production of the Organic Food Products

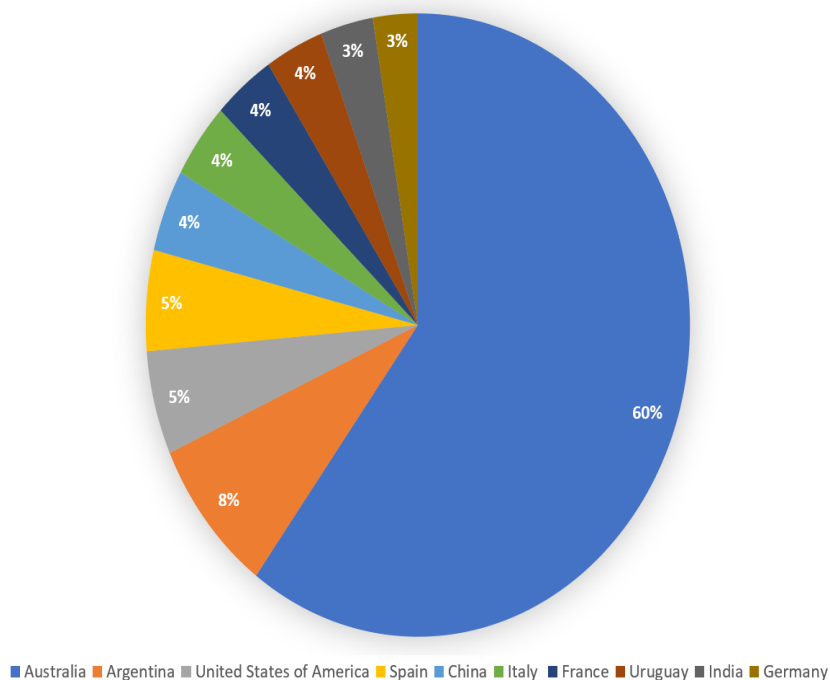


Figure 2: Land Capacity of Countries for Organic Farming in Million Hectares Percent

1.1 Definition and Objectives of Organic Farming

While the organic motion began over a decade earlier, leading to some inconsistencies it did not achieve the desired traction. The use of farmyard manure and natural methods of plant defense, rather than using conventional fertilizers/pesticides, is mainly meant to avoid and substitute synthetic ingredients with organic alternatives [5]. Yet organic agriculture is a much more profound idea than mere non-chemicalization. In reality, it refers to an overall approach to improving both the health of soil and plants' intrinsic performance

contributing to ecological enhancements, which is a necessity for sustainability in agriculture. IFOAM (The International Federation of Organic Agriculture Movements) says that 'Organic farming is a method of development that supports soil, ecosystem and human health'. It relies instead on the application of inputs with detrimental effects on biological systems, biodiversity, and cycles suited to local circumstances. The principal rationality for organic agriculture is the production of the sustainable agriculture method in accordance with nature that supplies pure food with an enhancement of its diversity with all its elements, both environmentally and financially viable [6].

1.2 Organic Farming in India: Present Status and Future

India is exceptional amongst 172 farming nations: 6, 50,000 organic growers, 699 mills, 669 export markets and cultivated hectares. However, with just 0.4% of total organically grown agricultural land, the sector is on a long way forward [7]. India produced some 1.35 million tons of organic certified products (2015-16) including all food types, namely Vegetables, Tea, Fruit, Sugarcane, Coffee, Cereals, Medicinal Plants, Cotton, Pulses, Spices and Oil Seeds (Figure 3). It is not only manufactured in the food industry, but also in organic cotton fibers, functional foods and so on. Figure 4 and Figure 5 are representing some of the advantages and disadvantages of organic farming [8], [9].

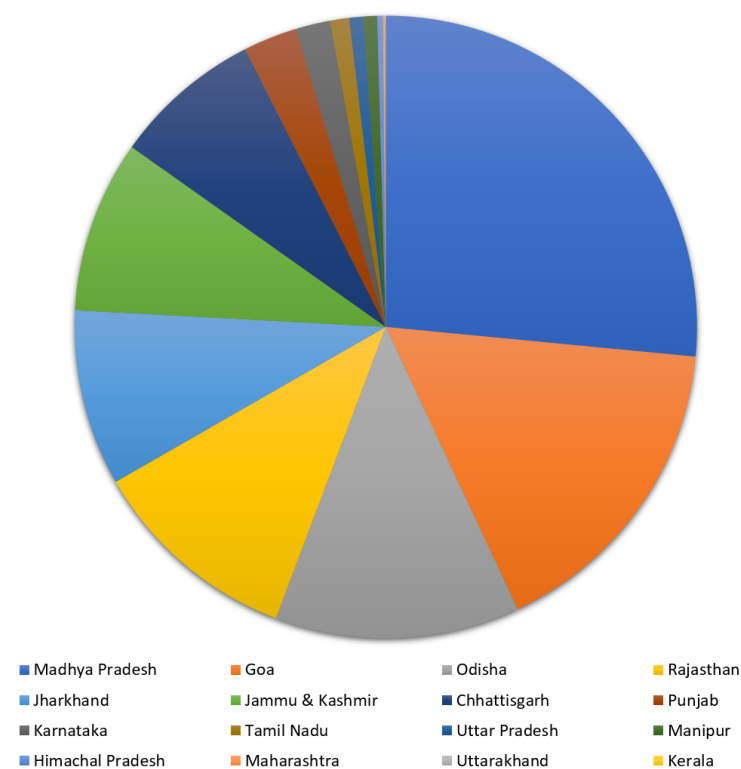


Figure 3: Indian States Production of Organic Food products from Wild Area in 2019-2020

1.3 Advantages of organic farming

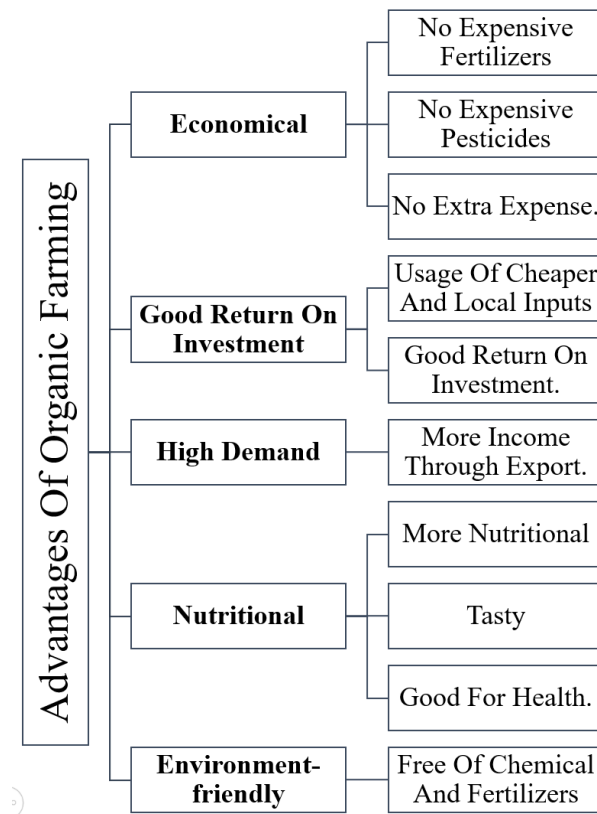


Figure 4: Advantages Associated with the Organic Farming

1.4 Disadvantages of organic farming

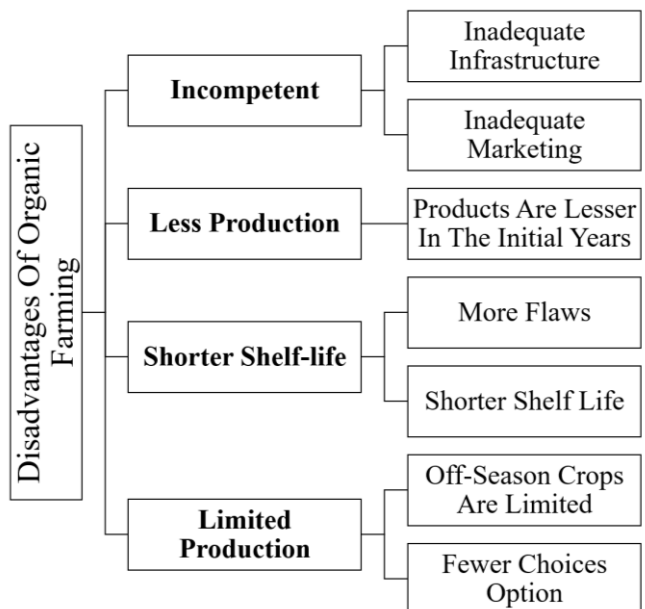


Figure 5: Disadvantages Associated with the Organic Farming

1.5 Important features of Organic Farming & Marketing in India[10]

1.5.1 Health-Aware Customers:

Organic feed is a potential option, which means that organic products continue to be of high interest to consumers as well as those worried about the effects of the high degree of chemical infusions of foodstuffs in terms of both eco-consumption and the atmosphere. People are more interested in their food basket and aim to substitute balanced, fresh food, add millets and prevent fast food. Millets like Jowar and Bajra are being used widely in cakes, biscuits, pastries and crackers, providing a chance to develop decreased water-absorbing solid crops especially for the arid area [11].

1.5.2 Increasing double revenue families and non-refundable revenue:

India's national income rose by 7.66% compared to ₹111,782 in 2017-18 with ₹103,219 in 2016-17. In addition, the supply of households is growing every day, encouraging households with a double income to replace natural foods [12], [13].

1.5.3 Development:

Growing rapid urbanization means increased buying power, evolving lifestyle and dietary preferences. Urban growth is rising exponentially, with 45% of the population living in urban areas existing before 2030. This causes financial opportunities for organic markets and increases organic agriculture in India [14].

1.5.4 Technology Expansion:

Private corporations for the organic food industry, amongst other, are developing innovative technical technologies utilizing aquaculture, machine learning, clean energies and ICT (Information & Communication Technology). Red Otter Farms has selected aquaculture to cultivate organic food and vegetables in an Uttarakhand-based setup. Aquaponics has also been used by developing nations on an economically feasible basis and is now implemented in India by new businesses. It integrates fish farming with the soil development of fewer plants and creates a symbiotic environment. The farm grows more than 20 vegetable variants and sells them to hotels. The farmer has begun selling subscriptions and focused residences in South Delhi and Gurgaon to enhance business relations. Likewise, Pune focused entrepreneurship ecoZen Solutions works on solar- and solar-powered cold-storage systems for fresh products that could be used in rural towns with an issue of intermittent electricity [15]. ICT and digital approaches also resolve the traceability issues of organic products, connect producers to the market and provide prompt data throughout the supply chain. These programmes accelerate infrastructure, motivate farmers/farmers and agri-preneurs in large measure and promote organic agriculture.

1.6 Important Encounters While Encouraging Organic Farming

1.6.1 Less Crop Harvest Through Changes:

Organic farming's production over the conversion cycle of three years is smaller than traditional methods and no premium pricing is paid for the crop. Organic cotton in Nagpur field tests have shown that cotton outcomes are low compared to traditional practices and that organic cotton outcomes are increasing after the third year [16]. In 2008 and 2014, nevertheless, a study of organic materials by USDA (United States Department of Agriculture) indicated that organic yields in a field were less than 84%.

1.6.2 Insufficient Quality Standard:

As the lot of organic farmers do not achieve the optimal output through organic production due to limited of knowledge of the kit of activities, they have difficulty guaranteeing a sustained market and competing for pricing strategy. Likewise, biomass and other input content specifications are not uniform according to the

industry requirements. The supply of organic improved seeds on the market is very different and hybrid seeds and fertilizer/chemical susceptible seeds are crowded on all markets, thereby inhibits the development of organic crops. Moreover, the export market is left unsupervised due to incoherent content and residues [17].

1.6.3 Policy Supports:

Political advocacy for organic agriculture is an unavoidable aspect of this. While many center sectors projects such as PM-PKVY (Pradhan Mantri Paramparagat Krishi Vikas Yojana), Rashtriya Krishi Vikas Yojana (RKVY) etc. build an environment for organic farming practices, farming as a State subject must make firm decisions to encourage organic agriculture in their countries. One of the biggest challenges for small-sized and moderate producers is the difficulty of organic certification with high expense and time (3 years most of the time).

1.7 Systematized Marketing Systems & Insufficient Agriculture Marketing Structure:

The lack of marketing resources, cold storage and manufacturing facilities contribute to contamination losses. The weak road infrastructure in the Himalayan and northeastern countries, whereby farm is standard organic, leads to delaying accessibility to the economy as a result of product quality and prices decreased.

1.7.1 Insufficient Market Researches:

Data analysis and market-oriented education programs regarding organic agriculture are not supported in India. Most peasants just have abstract thoughts about organic farming and branding and its advantages. There has so far been no successful work on the fractured and unaccompanied regulation of the whole organic production supply chain.

1.7.2 Inadequate Accessibility of Organic Food Product:

A serious concern for the development of the indigenous organic food industry is also the limited supply of organic food items on the market. Very few Indian grocery stores shop and selling organic produce goods. There are also several fake natural ingredients on the market that reduce legitimate suppliers' income. The restricted supply of organic foodstuffs thus leads customers to search for other retail opportunities. In the marketing and advertisement of organic farming in India, the activities will help overcome the above difficulties [18].

1.8 Marketing Approaches to Encourage Organic Farming:

1.8.1 Direct Marketing:

A win-win scenario must therefore be generated for both suppliers and customers, and direct marketing is important. Direct marketing frameworks provide a strategy in which manufacturers will directly distribute their products to customers. Direct marketing is the benefit of Abhinav Farmers Club, a Pune-centered national farmers' organization. Based on market research and contractual arrangements with customers, Mr. Bodke (Chairperson of the Group) decides whether to expand at the pre-agreed price. Approximately 25 vegetables are produced following consumer demand and planting seed and production plans. Many people visiting the farmer and collect the pre-reserved vegetables personally for the sale of the products, and the majority of the products are distributed to local communities via vegetable vehicles. Over the years the club has built customer confidence in quality and daily vegetable supplies. To stay rentable in organic agriculture, specific measures are necessary.

1.8.2 Uses of Technologies:

The investors should encourage recent technical ventures by agriculture research administrations including the usage of waste decomposers, the use of crop residues, the biomass usage of non-conventional trees and shrubs,

nutrient handling vermicomposting, bioagent and disease as well as pests control predatory treatments, waste water management and water recycling activities.

1.8.3 Advancement of High-Value Crops:

At first, as traditional farming becomes an organic farmer (in most cases for three years), lower yields will be offset by cash crops like western tomatoes, medicinally produced and aromatic seeds, superfoods like basmati rice, millets etc. Customers are increasingly prepared to pay two or three times the amount for these goods, and so massive resources are possible both on national and export markets [19].

1.8.4 Crop Diversity and Planning:

Proper preparation of crops is vital to cultivation and distribution in order to make organic farming profitable. Substantial practices during development include conservation of soil quality, adequate diversity, microbial activity, maintenance of organic material, crop rotation. Likewise, whether farmers jointly or independently launch agricultural companies in the selling of organic products, crop preparation is crucial. If you want a demand, you have to develop a wide selection of goods. They must also move output to have a reliable and varying supply over an amount of time. Instead, agri-businesses that have started at retail outlets profit from obtaining a wide range of goods and customers commit to making whatever combination of vegetables they market at any time.

1.8.5 Contract Farming:

Since organic farms need strict quality monitoring and traditional farmers also are well behind the requirements of standards, contract agriculture can become an alternative for de-risk farming at different points within the value chain, help producers control their inputs and provide all parties with a win-win situation. The Contract Farming Act 2018 prototype is one of the GoI reforms that could be particularly ideal for organic crops. There are many Contract Farming positive outcomes in India that have enabled farmers to earn good rates [20].

1.8.6 Collectivization of Farmer:

Collectivization of farmers in producer organizations, particularly of marginal and small growers, is an important way to solve different problems like access to capital and finance, technology, promotion of information, input and market connectivity. Farmer Production/Collectives Association will be able to mobilize their output capacities and marketing capability to boost the wellbeing of peasants. This is particularly relevant if attempts are taken to promote farmers' enlargement during development processes and pre-production preparation at the edge of the field, the outcomes will be in terms of improved development and scale in the post-production period. Instances include the Belgaum Bio-food Club, the Mumbai Organic Farmer and Consumers Association (MOFCA), the Rhythu Mittra Manufacturer Organization, which have demonstrated the strength of collectability in all areas, including the main marketing challenge. MOFCA is a collaborative organic farmers' organization, which works along with customers in Mumbai (based within a 200 km radius from Mumbai) [21]. Previously, this has a "Hari Bhari Tokri," a home-to-home neighborhood concept that was often abandoned after a benefit, and had launched a new framework, an extensive, very selective, marketing prototype wherein households and schools are chosen for mass sale. These community-based funding for organic farming and marketing campaigns can only be made available in a collective [22].

1.8.7 Elevation of Input-Based Inventiveness:

Attempts to transform chemical intensives into organic farming have been produced via different government programmes, but the outcomes weren't quite satisfying. The schemes are principally contained in agriculture or the FPO (Farmers Producers Organization), whereas organic businesses may play a key role in the conversion process. Input-based companies must also be promoted at a local level. It cannot only speed up the proliferation of organic agriculture but also can provide the rural population with alternative livelihoods.

1.8.8 Agri-preneurs to Deliver Markets:

Agri-preneurs should be encouraged and motivated to build capacity to help farmers to achieve greater performance, volume and market connection. Specific focus on Agri-Startups focused on e-commerce in agri-marketing by new ventures, specific initiatives to promote and develop capability amongst peasants to fulfill e-commerce demands are crucial [23].

1.8.9 Connecting Growers to Exporters and Processors:

The disparity among consumer and producer preferences must be identified and addressed by preparation, facilities and technologies. Farmers are thereby made more appropriate to producers and export markets for their harvest. Each FPO can be supported by a specialist who's really successful in agriculture every day.

1.8.10 Prevalent Extensions:

Both states need to implement State-Wise Intensive Organic Agriculture Campaigns such as "Bio Village." When health-conscious customers want registered organic produce in their food baskets, they have to teach farmers/FPOs their processes, documents and activities with business relations. Besides, expansion functionaries should increase the sustainability of necessary inputs like bio-perpetrators, bio-pesticides and bio-agents requiring expertise in this sector as they promote organic agriculture. Consequently, the expansion functionaries require a broad capacity building time in this path. Moreover, in collaboration with the National Institute of Agricultural Marketing (NIAM) and the National Institute of Agricultural Extension Management (MANAGE), state institutions for the extension of agriculture need to plan tailored training programmes to meet the basic needs of organic agriculture in terms of promotion and sensitization.

1.9 Approaches to Encourage Organic Farming:

1.9.1 Agro Tourism:

Agricultural pluck and pay concept can be encouraged, where urban residents or tourists tour the field, produce as well as compensate farmers the vegetables and fruit they want. This will make farmers known and still in the minds of the consumer as the premium rates for production and farms.

1.9.2 Professionals for Branding:

Experienced staff from producer suppliers for the marking of their goods increases the appeal of the commodities. Suggestions include wild coffee, tribal honey, etc. GI labelled goods will produce stronger organic farmers' advertising and brand creation.

1.9.3 Certifications:

A farmer will market, mark and symbolically symbolize its goods as organic, thus generating trust between consumers. It assists in the shopping of products and encourages customers to quickly recognize and defend organic products from fraud. In terms of brand construction, therefore, the task of certification is crucial. 29 organic certificate credentialing authorities in India have been approved to certificate organic farms/manufacturing by (Agricultural and Processed Food Products Export Development Authority) APEDA, and their position is therefore equally critical in promoting consciousness of processes via capacity-building programmes.

Retailing, Packaging and labelling: Producers' organizations, by having the requisite equipment, facilities and market linkage for growing wrapped vegetables and fruits. Products manufactured or wrapped may be sold in attractive packaging and branding to improve advertising on the market via its own retail outlets or via others. Attractive recycled waste packages will be more costly. In surplus control, this is also good and will bring better prices.

1.9.4 Exhibitions & Fairs:

Exhibitions and shows like Agri Exhibitions, Agri Expo, Kisan Mela, Agri trade shows etc. are normally available to a wide size and offer a platform for a big group to sell the commodity. It's an efficient way to meet clients and creating brand names.

Discussion

Schemes or Yojanas like Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) and PM- PKVY are some implementations of the Government of India (GoI) that have encouraged the farmers to produce and market the organic products that are being grown in India. But still, many of the farmers are still not aware of such yojanas. The main aim of GoI by implementing these yojanas is to reduce the prices for producing the organic products as well as also to increase the price of the yield produced by the farmers. These yojanas will also help in decreasing the suicides of the farmers happening in India due to the burden of loans taken for producing the crops. The government of India has also implemented yojanas that aim to create awareness regarding the decomposition of waste, organic fertilizer, vermicomposting, Phosphate rich organic manure (PROM) etc. which in turn will decrease the cost used for producing the organic crops. Many states like Bihar and Madhya Pradesh have implemented Bio-Village schemes to provide financial aid to the farmers in the rural areas. Although more awareness schemes or yojanas are required to create awareness.

Conclusion

Judgments on selecting plants and future areas play a key role in promoting organic agriculture. Concerning other plants, high-value crops with economic feasibility, industrial use as well as exporting capacity must be recognized. In the promotion of organic farming, utilization of bio-inputs, technologies, and extensive expansion are also important. The organic market is considered a significant quality premium sector. These principles must be respected across the whole commodity supply chain, from crop preparation to manufacturing and post-production. In order to be able to sell products in the context of agriculture and customers in the supply chains, the mechanism needs a paradigmatic change. There must be strict quality management, the marketing of inputs companies and the expansion of farmers to farmers will play a significant role.

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