

Analytical Study on Growth and Performance of Agricultural Exports of India

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Abstract - Considering the country's conducive climate for food production and the ever-increasing demand for processed food items, India's food processing industry (FPI) is sometimes referred to as "the dawn sector" owing to its enormous potential for growth and development. When compared to the entire GVA produced by the economy in 2018–19, this industry accounted for around 1.62 percent. In fact, it accounts for 14.28% of the country's overall job output across all industries. Since the FPI in India is so focused on international trade, this research will analyze the success of Indian processed food exports. The research was conducted by relying on secondary resources, such as yearly reports from various government agencies and non-profits. The largest rates of expansion for exports to these markets were seen in Indonesia (102.42 percent), Bangladesh (94.9 percent), and Nepal (50.4 percent). The agricultural industry of India mainly exports agricultural goods, maritime goods, plantation goods, and agricultural byproducts including textiles and food. The value of exports of agricultural and associated goods increased by 17% to \$ 37.3 billion in 2020–21.

Keywords - Agriculture, export, Product, Government, Trade

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INTRODUCTION

Dr. Anup Wadhawan, Secretary of the Indian Government's Department of Commerce, recently reported that India's Agricultural Exports had a successful 2020-21 fiscal year. He told the press that agricultural exports had increased by 17.34% to USD 41.25 billion in 2020-21. Exports in 2020-21 are projected to reach Rs. 3.05 lakh crore, a rise of 22.62% from the 2019-20 total of Rs. 2.49 lakh crore. In 2019–20, India imported agricultural goods and services worth USD 20.64 billion; in 2020–21, that number is expected to rise to USD 20.67 billion. Agriculture trade balance increased by USD 20.58 billion, or 42.16 percent, from USD 14.51 billion before COVID-19.

Increasing from USD 23.23 Billion in 2019-20 to USD 29.81 Billion in 2020-21 in exports, the agricultural sector is expected to have an increase of 28.36%. This excludes the value of exports of marine and plantation goods. During the COVID-19 era, staples saw a rise in demand due to rising population, India has been able to capitalize on this situation.

In comparison to 2019-20, exports of many agricultural products, including oil meals, sugar, raw cotton, fresh vegetables, and vegetable oils, rose dramatically. The largest rates of expansion for exports to these markets

were seen in Indonesia (102.42 percent), Bangladesh (94.9 percent), and Nepal (50.4 percent). The largest rates of expansion for exports to these markets were seen in Indonesia (102.42 percent), Bangladesh (94.9 percent), and Nepal (50.4 percent).

Exported medicinal spices like ginger, pepper, cinnamon, cardamom, turmeric, saffron, etc., have also increased significantly. The export of pepper rose by 28.72 percent to \$1269.38 million in 2020-21; Exports of ginger, saffron, turmeric, thyme, bay leaves, etc. increased by 35.44 percent to \$570.6 million; cinnamon exports increased by 64.47 percent to \$11.25 million; nutmeg, mace, and cardamom exports increased by 132.03 percent to \$189.34 million from \$81.60 million. In 2020–21, spice exports topped \$4 billion, an all-time record.

GROWTH OF AGRICULTURE EXPORTS IN INDIA

India has been a major player in international trade for the past five hundred years, but the announcement of a new industrial policy in 1991 marked a turning point for the country in the post-independence era. In this context, the term "non-cash crops" refers to the fact that, traditionally, Indian farmers have prioritized growing food for themselves and their families rather than selling it on the market. Exports used to include even staples like wheat, rice, sugarcane, mentha, and sorghum. The

Indian government began prioritizing the growth of domestic industries in the late 1960s, and as a result, the vast majority of agricultural goods were consumed within India. Although some of the total agricultural output was exported, restrictions on exports and even quantitative restrictions have prevented producers and farmers from taking active steps in this direction. The main focus at the time was on developing domestic industry, despite the fact that the Indian Rupee was overvalued to some extent and the demand for imports appeared to be increasing at a high rate. However, a small number of sectors, including certain sectors of manufacturing and the exclusive agricultural products sector, are exempt from such documentation and related issues.

According to projections, agriculture is expected to account for 17.2% of national GDP and 11.7% of total exports if all plans for its development are carried out. In fact, India is second only to the United States in terms of farmable land, with sixty percent of the country's landscape devoted to farming. Wheat, rice, potatoes, cashews, cotton, jute, beans, and many more are just a few of the key export crops. Currently, India ranks third in the world for food production and fourth for health and wellness product production, with the majority of these industries reliant on agricultural outputs. India is the world's second-largest producer of fruits and veggies, and 69% of the country's total industries are based on agricultural products.

LITERATURE REVIEW

Dr. P. Sekar et.al (2022) In today's global economy, exports play a crucial role in a country's growth. If a country can strengthen in this area, it will have a positive effect on its economy as a whole. It contributes to enhancing efficiency, generating revenue, and supporting various sectors of the Indian economy. The primary purpose of this research is to examine the following: (i) How and where India's agricultural exports have been growing from 1991–92 to 2016–17. (ii) Research the export growth rate of important agricultural products from India. Only secondary information was used in the creation of this study. Data was gathered in a secondary manner, from a variety of government agencies' published sources. Descriptive methods, such as tables, were used to examine the data. India's export performance for several major agricultural commodities has been analyzed using a semi-log model and compound growth rate. The study looks back over a 26-year time span, beginning in 1991-92 and ending in 2016-2017.

Vinod Kumar (2021) Earning valuable foreign exchange through exports of agricultural commodities, as a result of the contributions it has made to the national economy, the agricultural sector deserves special recognition and in moving toward the goal of an Aatmanirbhar Bharat. This research endeavors to examine the patterns and outcomes of agricultural trade from fiscal year 1990–1991 through fiscal year 2020–2021, with the final year coinciding with the COVID-19 pandemic. These percentage increases

represent growth of 20.75 percent and 39.94 percent, respectively. Further, the first quarter of 2021-22 (April-June) saw a 35.76 percent increase in agriproduct exports compared to the same period in 2020-21, largely due to increased demand from abroad. The first quarter of 2021-22 saw an increase in agri-imports over the same period in the previous year, led by an increase in the importation of vegetable oils, followed by an increase in the importation of fresh fruits and vegetables, and finally by an increase in the importation of cotton raw and waste. According to the research, between 1990–91 and 2020–21, There was an increase from 3.88% to 8.48% in the share of agricultural exports to agricultural GVA. India's reliance on foreign agricultural imports is reducing; the proportion of agricultural imports to agricultural GVA will fall from 6.54% in 2016-17 to 4.36% in 2020-21. Agricultural exports grew (13.9%) but agricultural imports grew (23.1%) between fiscal years 1990–1991 and 2020–21. While merchandise trade increased overall, agricultural trade increased even more. Important policy implications emerge from these findings. Agricultural exports need to be diversified to include more products and more destinations, besides increased investments in sanitary and phytosanitary measures and other international standards, improved infrastructure, skilled labor, and supporting facilities will help businesses rise in the value chain and comply with these regulations. Raising production efficiency is necessary to make the product cost effective on the global market. Production and shipping personnel need training and information on how to keep product quality up to par with international norms.

Dr. Md Mahmood Alam (2021) The agricultural sector of the Indian economy accounts for the vast majority of jobs and incomes in the country. In 2018-2019, agriculture accounted for 9.9 percent of India's total exports and 17.1 percent of the country's GDP. Rural areas and the agricultural and related industries create the majority of new jobs. Most of the world's population works in some aspect of the agricultural industry. Exports from India's agricultural sector primarily benefit the agro-based industries. This industry also employs a sizable portion of the population, both in urban and rural areas. Farmers, factory workers, shop owners, exporters, and everyone else who has a hand in getting goods from A to B. The export of food-based products has increased significantly, and now accounts for a sizable portion of India's GDP. If it wants to remain competitive in the international trade of agrosbased industries, India must increase the quality of its agricultural output. India's agro-based products can compete successfully in the global market because the country has access to one of the world's cheapest sources of agricultural labor.

Dr.S.Varadharaj et.al (2018) This research aims to answer the question, "How have spice yields changed in India from 2001-02 to 2015-16?" for the decade covered by the study. The rate of increase in India's spice harvest has been trending upwards.

The Indian spice trade is a fast-growing, dynamic industry that is crucial to the country's economy. India's domestic market for spices is expanding rapidly, and rising demand for Indian spices abroad could lead to a similar upward trajectory for the country's spice trade.

Shabana Anjum et.al (2017) When the Agreement on Agriculture was concluded in 1995, agriculture became subject to the World Trade Organization's rules and regulations. India's economy is very sensitive to fluctuations in the global agricultural market since agriculture accounts for around 12% of the country's overall export revenues. While previous research has compared pre- and post-WTO export trends for India's agricultural sector, this paper goes further by also providing a commodity-by-commodity breakdown of that trade in order to get a sense of how things have changed in that sector, and by using the Simpson Index to quantify whether or not exports have converged or diverged over time. According to the research, an effort was made to specialize agricultural exports before the advent of the World Trade Organization but none has been made after its establishment. The results of the research indicate that WTO has a complicated relationship with India's agricultural exports. While this has boosted India's agricultural exports overall, it has prevented the country from becoming a specialist in the export of the item in which it has a competitive advantage.

RESEARCH METHODOLOGY

It is important to note that secondary sources have been used to compile this study's data, since the authors set out to examine the export performance of the Indian Food Processing Industry. The Annual Survey of Industries report, the KPMG report, and the KPMG report covering a number of years have been utilized to compile statistics on the state of the food processing industry and its exports.

Compounded Annual Growth Rate (CAGR) has been calculated using the formula to explain the growth rate of FPI exports-

$$CAGR = (V_{final} / V_{begin})^{1/t} - 1$$

V_{begin} = Beginning value, V_{final} = final Value, t = time (expressed in years)

DATA ANALYSIS

STATUS OF INDIAN FOOD PROCESSING INDUSTRY

The Indian food processing sector ranks fifth worldwide in output, imports, and exports, and it controls 32% of the country's total food market (ASA & Associates LLP, 2015). In 2019–20, the FPI market is predicted to be worth USD 263 billion, and by 2025, it is expected to be worth USD 535 billion (KPMG, 2021). There are around 40,160 registered firms and an additional 24,59,929 unregistered food processing

facilities, as reported by the Annual Survey of Industries for 2017–18. The registered FPI industry employs over 19.33 lakh people, or 12.28% of the total number of jobs produced across all industries in India in the same period. It is estimated that FPI employs 51,1 lakh persons in the nation, or 14.18 percent of the overall workforce. As a result, it's safe to assume that the food processing industry can use the whole spectrum of the country's labor force. Gross Value-Added statistics for this sector as a percentage of total value added in the economy might shed light on the sector's role in the economy. FPI's GVA increased from Rs. 1,300,000 crore (\$1.3 billion) in 2012–14 to Rs. 1,345,000 crore (\$1.61 billion) in 2015–16. 2016–17: 1.79 trillion; 2017–18: 1.91 trillion; 2018–19: 2.08 trillion. The proportion of total GVA contributed by FPI was 1.44 in 2013–14, 1.38 in 2014–15, 1.53 in 2015–16, 1.58 in 2016–17, 1.60 in 2017–18, and 1.62 in 2018–19. These figures show that the industry contributes very little to the country's GDP. However, as compared to figures from 2013–14, the percentage contribution to GVA has grown.

For the fiscal year 2017–18, various sectors of the food processing industry contributed as follows in terms of gross value added (IN USD Millions): a) the dairy sector contributed roughly \$2009 million; b) cereals, grains, and oilseeds; c) meat and marine; d) packaged food; e) fruits and vegetables; f) nonalcoholic beverages; g) 925 million. For the period between 2012 and 2018, the projected growth rates (in terms of CAGR) for several food and drink categories were as follows: dairy: 16%; cereals, grains, and oilseeds: 1%; meat and marine: 18%; packaged food: 16%; fresh fruits and vegetables: 11%; and beverages (non-alcoholic): 12%. (KPMG, 2021). One thing to keep in mind is that various food subsectors now account for varying percentages of the total processed food market due to shifts in customer preferences. In 2007-08, for instance, the six sub-sectors' combined market share was as follows: 10% for dairy; 44% for cereals, grains, and oilseeds; 3% for meat and fish; 25% for packaged food; 1% for fruits and vegetables; and 17% for beverages (non-alcoholic). While cereals, grains, and oilseeds accounted for 40% of the market in 2013-14, in 2017-18, dairy products took 15%. Meat and seafood goods, packaged foods, and fresh produce all saw increases in their market share, reaching 6%, 32%, and 2%, respectively. While the percentage of sales from drinks fell to 6%. (KPMG, 2021).

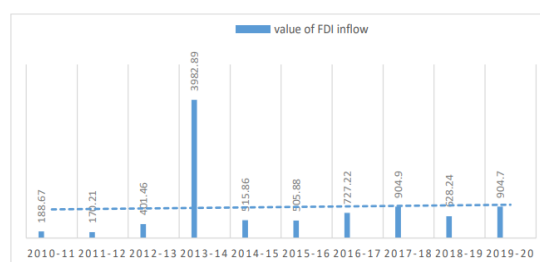


Figure 1: value of FDI inflow in Food Processing Industry (in millions)

EXPORT PERFORMANCE OF INDIAN FOOD PROCESSING INDUSTRY

FPI export performance is examined by looking at export values over a 10-year time period. Compounded Annual Growth Rate is calculated from 2011-12 using 2010-11 as the base year, and then extrapolated to 2019-20. The food processing sector's contribution to the country's total exports over the past six years is then calculated as a percentage. Moreover, the export performance of various food categories is examined, and India's percentage share of global food trade is calculated.

Table 1: Table showing export value of FPI, annual growth rates and Compounded Annual Growth Rate

YEARS	VALUE OF EXPORT (IN MILLIONS)	GROWTH RATE (%)
2010-11	20277.60	-
2011-12	31459.58	55.1
2012-13	35898.06	14.10
2013-14	38051.43	6
2014-15	36171.92	-4.9
2015-16	29672.37	-17.96
2016-17	30871.47	4.04
2017-18	35317.79	14.4
2018-19	35303.19	-0.04
2019-20	32731.98	-7.28
COMPOUNDED ANNUAL GROWTH RATE(CAGR)		5%

The value of FPI exports from fiscal year 201011 through fiscal year 201920 is shown in the table above. During the fiscal year 2010-2011, processed food exports were estimated to be worth approximately \$2,021,780,000 USD. During 2011–2012, exports totaled \$31,459.58. The projected export value of processed foods over the next few years is as follows: \$35,898.06 in 2012–13; \$38,051.43 in 2013–14; \$36,171.92 in 2014–15; \$29,672.37 in 2015–16; \$30,871.47 in 2016–17; \$35,317.79 in 2017–18; \$35,303.19 in 2018–19; \$32,731.98 in 2019–20. Once again, using the export value from 2010-2011 as a starting point, annual growth rates are computed for a period of nine years. In 2011-12, the export growth

rate was 55.1%, followed by 14.10% in 2012-13 and 14.4% in 2017-18. The rates of growth slowed to -4.9% in 2014–15, -17.96% in 2015–16, -.04% in 2018–19, and -7.28% in 2019–20, respectively. Once again, we find a positive growth rate of 5% when we base our calculations on data from 2010–11. A thorough analysis of export value and export growth rates reveals that the industry has been experiencing fluctuations in its export performance, rather than stable and persistent growth.

Export Destinations

The Republic of Korea, the Japanese, the Italians, and the British are the other importers. In 2021–22, 11.5% of India's total exports went to the United States, making it the country's top import market for Indian agricultural goods. At US\$ 3.8 billion, Bangladesh is far and away the largest importer of Agri & allied products, with the UAE coming in at a distant second at US\$ 2.3 billion. The United States and China are two of India's largest markets for maritime exports.

To promote the geographical indications registered with agricultural and processed food products, the government of India is keen to host virtual buyer-seller meetings on these goods with the world's major importing countries. There have been 17 V-BSMs set up so far, including countries like Iran, Switzerland, Belgium, and Kuwait.

Indian embassies in Vietnam, the United States, Bangladesh, Nepal, the United Arab Emirates, Iran, Saudi Arabia, Malaysia, Indonesia, Singapore, China, Japan, and Argentina have each established an Agri-Cell to provide real-time feedback on how to boost Indian exports to those countries.

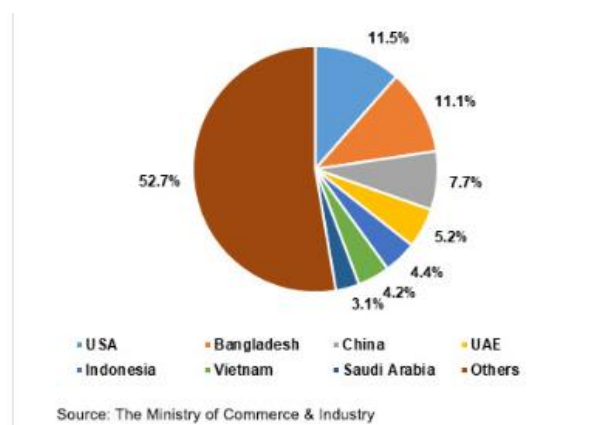


Figure 2: Export performance

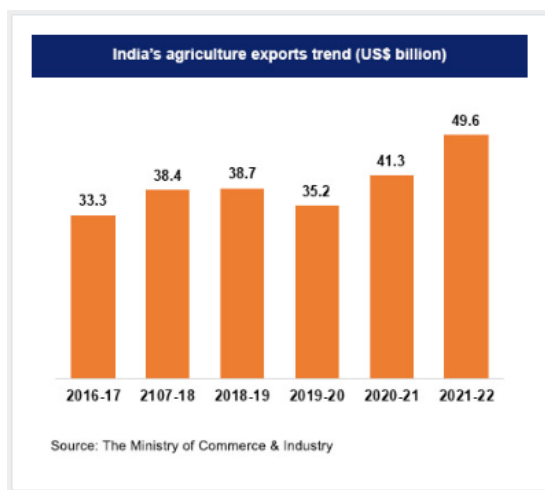
Export Performance

To put it simply, India is a major player in the global agricultural export market. The country's total agricultural exports grew by 20%, from \$41.3 billion in 2020-21 to \$49.6 billion the following year. Most of India's agricultural exports are in the categories of "agri & allied products," "marine products," "plantation products," and "textile & allied products."

The total value of exported agricultural and allied products increased by 17% from 2020-21 to reach US\$ 37.3 billion.

More than 19% of India's total agricultural export in 2021-22 came from rice, the country's most popular crop. In 2021-22, the value of wheat exports increased dramatically from the US\$ 568 million shipped the previous year to a staggering US\$ 2.1 billion. As a result of this increase, coffee producers in Karnataka, Kerala, and Tamil Nadu are seeing higher incomes.

Government efforts to increase farmers' income have paid off, with a sharp increase in Agri-exports as a direct result. Exports have increased thanks to the government's efforts, led by APEDA. These include holding trade shows for businesses to meet with one another in other countries and researching new markets to sell to. 50 agricultural products with high export potential have been included in the government of India's product matrix, and 220 labs have been approved to offer testing services for a wide variety of exportable goods.



CONCLUSION

Given the country's favorable agro-climatic conditions for cultivating a wide variety of crops and India's food processing industry may benefit greatly from the rising demand for processed meals throughout the world. And when it comes to food production, India is second only to China. In light of this situation, the Indian government has been enacting a number of initiatives aimed at boosting the industry. The Pradhan Mantri Kisan Sampada Yojana is one such program, and it serves as an umbrella under which other programs are carried out. Food safety and quality assurance infrastructure, human resources and institution development; mega-food parks; cold chain and infrastructure development; food processing and preservation capacity building; agro-processing cluster creation; backward and forward linkage setup, and the like are all examples of the types of initiatives that fall under this category, and the implementation of operational greens.

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