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The Impact of Economic Reforms on India's Exports: A Comparative Study of pre-and post-reform Periods

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The purpose of this study is to examine the impact of economic reforms on India's export performance by comparing the pre- and post-reform periods. In the early 1990s, India implemented significant economic reforms, including steps for liberalisation, deregulation, and globalisation. These reforms shifted India's economy from a primarily closed and protected structure to a more open and market-oriented one. The study offers a thorough empirical analysis by employing both qualitative and quantitative methodologies. It evaluates several macroeconomic indicators, export statistics, trade regulations, and institutional changes to assess India's export industry transition. The pre-reform period, characterised by import substitution and trade restrictions, is contrasted with the post-reform period, characterised by a more open and competitive market environment.

This study focuses on the performance of India's exports and imports from 1980 to 2017 and the trajectory of exports, imports, and trade balance from 1968 to 2017. This study also looks into the commodity-wise analysis of agricultural trade from 1990-2021. The study used the paired sample t-test to empirically examine the impact of the 1991 economic reforms on exports and imports. According to the study, exports and imports performed better in the post-reform period. In the post-reform period, the compound growth rate of exports was 12.50%, whereas the compound growth rate of imports was 13.94%. The empirical tests revealed that economic changes favorably impacted both the growth rate of exports and imports. Agricultural exports from India increased from Rs. 253976 crore in 2019-20 to Rs.305469 crore in 2020-21, and net agriculture export surplus has also increased to Rs.147681 crore in 2020-21 from Rs.105530 crore in 2019-20, registering a growth of 20.75 percent and 39.94 percent, respectively compared to the previous year. The main drivers of the increase in Agri-exports in 2020-21 were wheat, vegetable oils, other cereals, non-basmati rice, and molasses, and during the first quarter of 2021-22, other cereals, meat, dairy, and poultry products, cereal preparations, miscellaneous processed items, oil meals, and marine products.

Keywords: Import and Export, Trade, Agriculture, Trade balance, Compound annual growth rate.

The economic position of a country determines its international standing. A country's economic strength is determined by its numerous economic components. The country's overseas commerce is one of its most important economic components.

Foreign exchange has been critical to any country's economic success and prosperity (Bhagwati, 2004). Because of economic interconnection, expanding specialisation, and joining regional cooperation, foreign exchange has taken enormous prominence and substance for a country's economic development in modern times (Krugman & Obstfeld, 2009). Foreign commerce has served as an "Engine of Growth" for developing nations such as India (Kumar, 2012). A country's foreign trade consists of the inward and outward movement of commodities and services, which impacts the inward and outward flow of foreign exchange from one country to another. Several Acts have been enacted to provide, regulate, and provide the virtual environment for its orderly expansion. i.e., Foreign Trade Development & Regulation Act, 1992, and its rules and orders govern India's trade with other nations. The Customs Act of 1962 and the Foreign Exchange Management Act of 1999 control the physical movement of products and services via various modes of transportation and payments for export and import operations. (Sahu, 2017; Ministry of Commerce & Industry, 2023). A foreign trade study reveals the composition and factors of overseas commerce. By design, we mean the numerous items exported and imported by the country. The factors determining the value of exports and imports are referred to as determinants (World Bank, 2020). Based on these characteristics, the countries could be classed as either developed or developing. Nations cannot exist in today's world if they are economically isolated. In other words, every country in the world can only claim to be self-sufficient in terms of having facilities for the economic production of all goods and services utilised by its people (Todaro & Smith, 2015). Some countries are rich in natural resources and agricultural goods such as fertile soil, lumber, fossil fuels, tea, rice, pulses, and so on, while others are deficient in many. As a result, international trade is required for the welfare of countries (UNCTAD, 2021).

During the first 30 years after independence, India performed poorly in economic growth, with an annual GDP growth rate of only 3.5% "Hindu Growth Rate" (Panagariya, 2008) from 1953-54 to 1966-67 and 3.8% from 1967-68 to 1980-81. However, contrary to popular belief, India's growth performance has not been poor since the 1980s. Through the early 1970s, India's savings rate rose quickly, and with a slight lag, India's growth began to pick up in the 1980s. Throughout the 1980s, Indian national income expanded at 5.8% per year. This was noteworthy not only in comparison to India's previous performance but also in cross-country terms (Ahluwalia, 2002). By the late 1980s, the excellent performance had been accompanied by the formation of clouds. Some felt that India was expanding by gambling with its future. Indeed, by the late 1980s, India was significantly in debt. The foreign debt-to-GDP ratio was at an all-time high, and the debt service ratio had surpassed the 30% barrier. Furthermore, India's fiscal deficit was extremely high. By 1990-1991, it had reached 8.3% of the national GDP. The inflation rate reached 13.5%. The inevitable disaster arrived in 1991. The Gulf War was the catalyst. It increased gasoline prices, reduced remittances from the Middle East, and caused a quick drying up of India's foreign reserves by instilling fear among India's creditors (Basu, 1993). To avoid default and bankruptcy, a new government took power in June 1991 and instituted drastic policy changes. When the administration presented its second Budget in 1992, the country was ready to reassess and reform its economic policies. Moreover, beginning in 1992, then-Finance Minister Manmohan Singh implemented significant reforms.

Before the July 1991 economic liberalisation, trading in India was restricted. The administration launched a program to liberalise the international commerce regime in July 1991. The tariff ceiling was gradually reduced, and the cumbersome import licensing procedure decreased dramatically in April 1992 (Rao & Sen, 2015). Foreign currency was deregulated in 1992 and progressed via several steps in the following years. Although foreign currency trading must still occur through authorised foreign exchange dealers, the dealers are now free to select the exchange rate (Reserve Bank of India, 2022).

Theoretical background of the study

Various theoretical frameworks and economic principles influence India's trading performance. Here is some theoretical context to assist in understanding India's trading performance:

David Ricardo's theory of comparative advantage implies that countries should specialize in providing commodities and services in which they have a comparative advantage. This theory argues that, in the context of India's trade performance, India should focus on exporting commodities and services that it can manufacture more efficiently or at a lower opportunity cost than other countries (Ricardo, 1817; Krugman & Obstfeld, 2009). This frequently includes labour-intensive businesses in India, such as information technology (IT) services, textiles, and pharmaceuticals (Panagariya, 2008). According to the Heckscher-Ohlin model of international trade theory, countries will export items that make extensive use of their rich factors of production. Because India has a relatively abundant labour force (Hecksher & Ohlin, 1933) it prefers to export labour-intensive commodities and services (Feenstra, 2015). This paradigm helps to explain India's dominance in industries such as information technology and textiles. Economic theorists such as Paul Krugman have established a new trade theory emphasizing economies of scale and product diversification as drivers of international trade (Krugman, 1979). This theory applies in India because of the expansion of IT and software services, where businesses such as Infosys, TCS, and Wipro have become globally competitive due to economies of scale and specialisation (NASSCOM, 2023). Trade liberalisation refers to the removal of trade barriers like tariffs and quotas. The theoretical basis for this can be found in free trade theories, which argue that opening up to international markets can lead to higher efficiency, increased consumer choice, and economic progress (Bhagwati, 2004). Trade liberalisation has influenced India's trade performance, particularly since the economic changes in 1991. The performance of India's trade involves a complex combination of theoretical principles, government policies, global economic trends, and internal situation. Over the years, India has had both achievements and setbacks in its efforts to improve its trade performance, and its approach has evolved as it navigates the global economy's complexities (World Bank, 2023).

Review of Literature

Mukherji and Mukherji (2012) examined India's export performance between 1951 and 1960 and 1991 and 1999. They divided the entire period into five 10-year sub-periods and analyzed the performance of India's exports and imports as a proportion of GDP. It was discovered that India's export performance could have been better than its import performance before reform due to import substitution policies, inflation, budget deficits, and an unfavorable foreign aid position. They

discovered that Indian exports performed better than imports in the post-reform period. They discovered that between 1990 and 2008, India's share of exports went from 7.13% to 23.18%, while its share of imports as a percentage of GDP increased from 8% to 29%. The export competitiveness of India was calculated using Balassa's RCA model separately for merchandise goods exports and services exports. They discovered that services and merchandise exports had lower RCA before the reform, but India's service competitiveness increased dramatically after the change. Athukorala (2008) divides the post-independence period into four sub-periods, each of which is distinguished by unique shifts in policy regimes: The immediate post-independence period marked by open trade and investment policies, the age of economic dirigisme beginning in the early 1960s, the period of reform by stealth beginning in the late 1970s, and the era of considerable liberalisation measures starting in 1991. They discovered in their research that India's share of total world exports decreased in the three years preceding the 1991 reforms. India was the tenth largest exporter (2.6%) after the Philippines (2.9%). It has observed record-high growth in both services and merchandise exports. During 1991-2005, merchandise exports increased at an annual average rate of 12.6%, compared to 8.1% in the 1980s. Total exports increased quickly (14.2%), owing to faster service growth. They also inquired about India's export competitiveness using the RCA model.

Using data from the Standard International Trade Classification (SITC) at the three-digit level, the author approximated the RCA of India's exports during 1980-81, 1990-91, and 2004-05. In 1990-1991, there were 47 RCA products, accounting for 81% of total exports. In 2004-05, the number of items climbed to 61, while their combined share of total exports fell to 72%. Compared to manufactured items, it has been discovered that primary products (food, drinks and tobacco, agricultural raw materials, and minerals) occupy a relatively important position among RCA products. Sahni (2014) examines the patterns in India's exports using time series data from 1980-1981 to 2010-11. The influence of reforms on India's exports has been studied by separating the entire period into two sub-periods: 1980-1981 (pre-reform) and 1992-1993 (post-reform). It was discovered that India's export performance increased dramatically following the reform and that there was a perceptible change in the value, composition, and direction of India's exports. The compound growth rate was determined using the equation Yt = Y0 (1+ r) (r = compound rate of growth of Y). They discovered that the compound increase in India's exports was 14.8% in the post-reform period, compared to 7.9% in the pre-reform period. He attributes the increase to increased global demand, the resurrection of international trade policy reflecting the East Asian economy, and trade policy actions implemented by the Indian government.

Veermani (2007) examined different aspects of India's merchandise exports since the post-reform effort was implemented, such as export growth, changing export patterns, the influence of the global financial crisis, the changing trend of regional impact, and so on. The first decade of reforms (from 1993-94 to 2001-02) was distinguished by a relatively modest annual export growth rate of 8%, whereas the second decade stands out for its yearly solid growth rate of 21%. During the pre-financial crisis period of 2002-03 to 2008-09, the average yearly growth rate was an astounding 24%. Despite a dip in the aftermath of the financial crisis in 2009, exports recovered in the following years, with a 37% increase in 2010-11 and a 33% increase in the first eight months of 2011-12. The export commodity mix has shifted

consistently in favour of capital and skill-intensive products. The proportion of these products in India's export basket more than doubled from approximately 25% in 1993 to nearly 54% in 2010, while the proportion of unskilled labour-intensive products was cut in half from 30% to 15%. While export growth has been outstanding, imports have grown faster than exports during the post-reform era, resulting in a widening merchandise trade deficit. The export pattern has also shifted from conventional markets to emerging markets like the UAE and China. Banik (2001) examined an analysis of India's exports during the 1990s and discovered that the decline in Indian exports during 1996-1997 resulted from the growth rate of export volumes.

The analysis reveals the nature of demand-side factors, as opposed to supply-side bottlenecks, that have constrained the growth of exports; however, easing supply-side constraints would have also aided the revival of export growth. Veeramani (2007) investigated the Sources of India's Export Growth Before and After Reform. It has been scientifically demonstrated that the rapid rise of India's merchandise exports since 2002 leaves no space for complacency because a thriving global economy has primarily determined it. Although the competitiveness effect has been favourable, it has not been the primary contributor to the recent acceleration in the growth rate of merchandise exports. Finally, he finds that the recent rise in the real effective exchange rate has had a negative impact on exports. Harikumar (2014) examined the impact of India's foreign trade before and after the Indian economy's liberalisation in 1991 by implementing the New Economic Policy to implement structural changes in the Indian economy when it faced a chronically negative balance of payment situation. He conducted his analysis using the paired T-test instrument and the pair of null hypotheses, H0: ì1 = 2: There is no significant difference in A's Total Trade before and after the liberalisation period. H0: 1 = 2: There is no statistically significant change in India's exports before and after liberalisation. Finally, he rejected the null hypothesis and confirmed the existence of a structural divide between the pre- and post-reform periods. Misra, Jena, and Shil (2011) evaluated India's post-liberalisation foreign trade stance regarding volume, composition, and direction. Based on the study's findings, it also suggests strategies and means for India to improve its foreign trade. Yadav (2012) described the regional patterns of trade activity inflows and outflows, which include changes in commodity composition and direction. With this context, the paper proposes that globalisation has resulted in the specialisation of production and the expansion of consumption. Finally, the manufacturing sector has grown its share relative to other trading sectors, and Indian commerce is steadily shifting away from low-value-added products. Singh (2014) examined the trend and composition of international commerce in the post-liberalisation era and the impact of foreign trade on India's economic growth. According to this study, while both total exports and imports have improved, the growth rate of imports is higher than that of exports. Most exports are manufactured, while petroleum and crude products account for most imported goods. It has also been discovered that there is a positive association between exports and economic growth, while imports are negatively associated with India's economic growth. Jadhav and Satpute (2014) examined India's international trade trajectory and composition from 2003-04 to 2012-13. As with the trade imbalance, India's exports and imports have gradually increased.

India has strong trading ties with all of the world's major economies. More than

half of India's total exports are to Asia and the ASEAN region, and the same nations account for roughly 60% of India's total imports. Regarding international trade composition, India has likewise witnessed significant changes since its independence. The composition of exports has changed as the economy has become more industrialised. India now exports machinery, chemicals, and marine products. As a result, we may claim that India now exports the same products that we used to import. This is encouraging news for one of the world's fastest-emerging economies. As a result, the current research study has tried to shed light on India's trend and composition of foreign trade, particularly after 2000. Kabita Kumari Sahu (2017) investigated India's foreign trade before and after liberalization. This analysis discovered that overall trade after liberalization was much higher than total trade before liberalization, and imports exceeded exports in all years. Thus, the liberalisation phase has had a negligible impact on India's exports. According to this analysis, import restrictions on non-essential commodities are necessary to reduce the trade deficit. Since the early 1990s, India has had the world's third-fastest growth rate in both total and manufactured exports. This expansion has been critical for India's overall economic success, establishing the country as an exemplar of the export-led growth model, despite prevalent concerns that it may not be completely engaged in this approach (Chatterjee & Subramanian, 2020; Manhas, 2025).

India's agricultural exports have grown significantly, from 3.35 billion in 1990-91 to 35.93 billion in 2019-20. This approximately 12-fold increase over 30 years demonstrates the beneficial effects of economic changes on agricultural trade. The economic reforms implemented in 1991 resulted in significant changes in the composition and number of agricultural exports. Liberalisation policies aimed at integrating the Indian economy into the global market have had a considerable impact on the agriculture sector, resulting in diversification and growth (Chaoudhari, 2024; Iqbal, 2025). Since the 1990s, India's trade policies have been dramatically liberalised, with lower import tariffs and increased market competitiveness. This change aims to boost Indian industries' competitiveness in the global market. The trade-to-GDP ratio in India has increased from 13% in 1990 to 27% in 2019-20, reflecting growing integration with the global economy. However, this increase has led to a greater reliance on imports, mainly from China (Dhar, 2023; Mohammadi, 2025). India's agricultural commerce has changed significantly as a result of worldwide crises, most notably the COVID-19 outbreak and the Ukraine crisis. These events have boosted India's agricultural exports, resulting in record levels in 2021 and 2022, with exports totalling $50.2 billion. Despite a rise in exports, the trade surplus for agricultural items has dropped. In 2021-2022, the surplus totalled 17.8 billion. The current surplus is 17.8 billion, lower than the 27.7 billion reported in the highest export year of 2013-2014. This means that while exports have grown, the increase in imports has countered that growth (Ahmed, 2023).

Objectives and Methodology

The main objective of the present study is to make a comprehensive study of India's export performance from 1980-2017. The sub-objectives of the study are under

1. To examine the trends in exports in terms of value during the period 1968-2017.

2. To examine India's import trend and growth pattern from 1968 to 2017.
3. To examine the trade balance of India from 1968 through 2017.
4. To test empirically whether the reforms had a significant impact on India's trade performance
5. To examine the commodity-wise agricultural trade performance in India

Methodology:

The whole period of analysis has been divided into two sub-periods: 1980-1991 (Pre-Reform period) and 1991-2017 (post-reform period). We have used the compound annual growth rate (CAGR) to analyze the growth rate of exports in the pre- and post-reform periods. The formula used to compute the compound annual growth rate (CAGR) is given by

$$Y_t = Y_o (1+r)^T$$

Where Yt = Value of Y in period t, Y_o = Initial value of Y

r = CAGR

T = the period between y_o and Y_t. The value of CAGR is given by;

$$r = (Y_t/Y_O)^{1/T} - 1$$

For the empirical tests to check whether the reforms had a significant effect on the trade performance of India, we have used the Student's Paired Samples t-test. The period taken to test the hypotheses is 1968-2017.

Table 1: **Performance of Import and Export**

Variables	Pre-reform period (1980-1991 CAGR (%)	Post-reform period (1991-2017) CAGR (%)
Export	6.54	12.50
Import	2.63	13.12

Source: World Development Indicators, World Bank & Authors' Calculations

It can be seen from Table 1 that the growth of India's exports and imports has been more enormous in the post-reform period than in the pre-reform period. The better performance of exports and imports in the post-reform period can be attributed to the structural reforms that the government of India carried out in July 1991. In the pre-reform period, the compound annual growth rate of exports was 6.54% only, whereas in the post-reform period, it was as high as 12.50%. The CAGR of imports in the pre-reform period was a mere 2.63% compared to a buoyant 13.12% in the post-reform period. In the period before 1991, the Government of India followed a mixed economy strategy with greater emphasis on innovation. Immediately after independence, the govt. It adopted the policy of import substitution and export promotion. In the second five-year plan, the heavy investments in the primary industries led to increased imports. It imposed quantitative restrictions and other tools like licenses to curb imports and promote exports. However, until the 1980s, the country had a high trade deficit and faced the worst balance of payment crisis. It has led to the New Economic Policy of 1991, among other reasons. Post reforms, India adopted a free trade policy, and its trade flourished, as seen in Table 1. India

traditionally exported primary commodities, whose demand was inelastic, which means that export performance was not good. It heavily depended on imports of oil and petroleum, manufactured goods, etc., causing imports to be higher.

Export Trend

The export graph below in Figure 1 depicts India's exports from 1968 to 2017. The graph shows that exports began to climb after 1991-1992 and have continued to rise dramatically since the turn of the century. Exports have increased substantially faster in recent years, particularly since 2010. The rising increase in India's exports can be traced to the liberalisation policy implemented in July 1991. However, due to the global financial crisis, exports fell in the fiscal year 2008-09. Since then, exports have been increasing. Since the turn of the century, there has been a significant acceleration in export development, with a notable spike in exports since around 2010. This epoch relates to the post-reform era, distinguished by continuous economic growth, more integration with the global economy, and a higher emphasis on export promotion. Various factors have contributed to India's export growth, including increased infrastructure, enhanced manufacturing capabilities, more access to international markets, and the advent of service sectors such as IT and business process outsourcing.

Import trend

The following import graph demonstrates the rising trend of imports in the post-reform period. Imports increased at a considerably faster rate beginning in 2001 and have reached a higher level in the recent decade. Imports decreased between 2011 and 2015. This rising trend in imports post-reform period can also be linked to trade policy liberalisation and openness. Following reforms, quantitative limits on imports were eliminated, licenses were abolished, the current account was converted, and so on. These causes, among others, have contributed to increased imports in India since 1991. The liberalisation policies introduced in 1991 resulted in considerable changes in India's trade environment, including removing quantitative constraints on imports, abolishing licenses, and facilitating current account convertibility. These changes seek to strengthen the Indian economy's openness and competitiveness, enabling more significant involvement in global trade. As a result, as Indian businesses and consumers acquired access to a broader choice of goods and services from overseas markets, imports began to climb.

India's External Trade Balance:

Figure 3 below depicts India's external trade balance during the entire period. The graph shows that India has always run a trade deficit. As noted in the graph, exports and imports were nearly equal until 1973, but after 1973 (the First Oil Shock), the disparity appears to have increased and has continued to do so. Exports expanded astoundingly in the post-reform period, but imports also increased and increased faster than exports, resulting in a trade deficit. India's trade deficit mainly results from massive crude oil imports and rising crude oil prices. Following the oil shock, India's trade gap worsened, with imports outpacing exports. The graph shows that, despite a tremendous rise in India's exports during the post-reform period, imports climbed significantly, outpacing export growth. This pattern has contributed to the country's chronic trade deficit. The considerable import of crude oil is one of the

critical causes of India's trade deficit. India relies mainly on oil imports to cover its energy needs, and rising crude oil prices have exacerbated the trade imbalance in recent years. According to the graph, the trade deficit is primarily driven by the higher cost of importing crude oil and the volume of oil imports. It is important to note that while the graph depicts the trade balance across the whole time, it does not capture year-to-year fluctuations or specific policy initiatives that may have influenced the trade balance over different eras. Factors affecting India's trade balance include volatility in global commodity prices, currency rate dynamics, and domestic demand patterns. The graph illustrates that imports increased significantly beginning around 2001. This period coincides with India's tremendous economic growth and incorporation into the global market. Economic expansion, growing earnings, and changing consumer preferences all increased demand for imported goods and raw materials. Furthermore, the liberalised trade policy and lower trade barriers created a favourable climate for imports to thrive. It is also worth noticing that the graph shows a brief decrease in imports between 2011 and 2015. Global economic worries, such as the Eurozone crisis and a slowdown in international trade, characterised this period. These external reasons and home economic concerns resulted in a temporary reduction in India's imports. However, the downward trend was reversed as the global economy rebounded and domestic demand increased.

Empirical testing: We have used the conventional Student's t-test statistic for empirical testing. We have specifically used the Paired Samples t-test to compare the average of exports and imports in the pre-and post-reform periods to check whether the economic reforms of 1991 have had a significant effect on the performance of exports and imports of India.

Exports Paired samples 't-Test."

Here, we wish to see whether the export performance in the post-reform era significantly differed from the pre-reform performance of exports. The null and the alternative hypotheses of the test are given by:

H_o: Exports in the two periods are not significantly different from each other

H_1: Exports in the two periods are significantly different from each other

Table 2 Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Export's pre-reform	9654809975.2609	23	6017126029.96627	1254657508.44599
Export post-reform	233213738869.9131	23	174901017481.19370	36469383178.07729

Table 3 Paired Samples Test

	Paired Differences			T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Export's pre-reform	-22355892889 4.6	1693816993 58.7	35318525 793.77	-6.330	22	.000
Exports post-reform	5220	3040	727			

From the above test results, we can reject the null hypothesis that the exports in the two periods were not significantly different because the significance of the test statistic is less than 0.05 (5%). Thus, we can conclude that the export performance in the post-reform period was more significant than in the pre-reform period, as shown in Table 3.

Imports paired Samples 't-Test.'

We also want to check whether imports in the post-reform period were higher than in the pre-reform period. The null and the alternative hypotheses of the test are given by;

H_o: Imports are not significantly different in the two periods

H_1: Imports are significantly different in the two periods

Table 4 Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Imports pre-reform	11996196452.30 43	23	7807922006.359 56	1628064282.15940
Imports post-reform	272114744202.0 435	23	207287370645.61 145	43222404631.60 135

Table 5 Paired Sample Tests

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Imports pre-reforms – imports post-reforms	-2601185 47749.7 3914	200033479 443.98828	4170986 3758.06 113	-6.23 6	22	.000

From the above results of the paired samples t-test, it can be seen that the

significance of the test statistic is less than 0.05(5%); therefore, we can reject the null hypothesis that the imports in the two periods are not significantly different. The import performance in the post-reform period has been much higher than in the pre-reform period, as shown in Table 5.

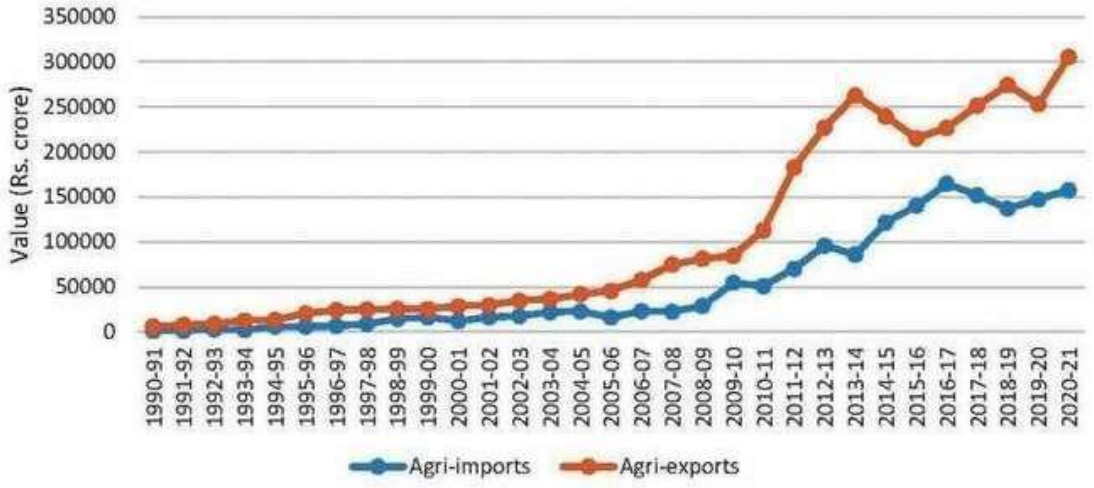
Trends and performance of agricultural commodities in the post-reform period

Agriculture is essential to India's economy and foreign commerce scene. While its percentage of Gross Domestic Product (GDP) has gradually fallen, accounting for approximately 18.3% of India's GDP in 2022-23. Agriculture employs more than 43% of the workforce (World Bank, 2022), making it a crucial industry not only for economic stability but also for equitable development and rural well-being. Agriculture accounts for a considerable portion of India's export profits. In fiscal year 2022-23, India's agricultural exports hit USD 53.15 billion, the highest ever reported, accounting for about 11% of overall merchandise exports (Ministry of Commerce and Industry, 2023). This is a significant accomplishment given the global trade obstacles created by the Russia-Ukraine conflict and the post-pandemic economic recovery. According to the Agricultural and Processed Food Products Export Development Authority (APEDA), India has continually maintained its global leadership in basmati rice exports, accounting for about 75% of the international market. Non-basmati rice, wheat, sugar, and cotton are also key exporters. India is also a major producer and exporter of spices, such as chilli, turmeric, and cumin. In 2022, spice exports alone produced USD 4 billion, making India the world's largest spice exporter (Spices Board India, 2023). Furthermore, marine products and buffalo meat are major agricultural exports, with India being one of the largest exporters of frozen prawns to nations such as the United States and Japan. These diversified export commodities demonstrate India's comparative advantage in labour- and resource-intensive agricultural production, which is consistent with international trade theories such as Ricardo's comparative advantage and the Heckscher-Ohlin model. Empirical research also reveals a beneficial macroeconomic link between agricultural exports and rural development. According to the FAO (2021), a 1% rise in agricultural exports in developing nations such as India leads to large rural income improvements. Similarly, the OECD (2020) stated that trade liberalisation and export incentives through schemes such as MEIS (Merchandise Exports from India Scheme) and the Remission of Duties and Taxes on Exported Products (RODTEP) had made Indian agricultural goods more competitive globally. Furthermore, India's state investment in agricultural infrastructure, including warehousing, cold chains, and irrigation, through programs like the PM-Agriculture Infrastructure Fund, has bolstered the trade ecosystem. Despite global supply chain issues, India's agriculture sector proved resilient during the COVID-19 epidemic, which severely impacted global food trade. India continued to export important agricultural goods such as grains, pulses, and sugar, thereby enhancing food security in various low-income Asian and African countries. This dependability boosted India's reputation as a steady Agri-exporter during global crises (FAO, 2021; WTO, 2021). However, challenges still exist, such as shifting worldwide pricing, sanitary and phytosanitary (SPS) requirements, and non-tariff barriers imposed by industrialised countries. Furthermore, India's agricultural trade potential is hampered by its low level of value addition and minimal penetration in high-value markets (such as processed goods). To counter this, India is focusing

on export diversification, organic farming, digital platforms such as e-NAM, and bilateral trade agreements to minimise its reliance on a limited number of export destinations and commodities.

India has consistently maintained a trade surplus in agricultural commodities over the years. India's Agri-exports increased from Rs. 6012.76 crore in 1990-91 to Rs. 305469 crore in 2020-21, registering an increase of nearly 50 times in 30 years and growing at 13.99 percent in 2020-21. However, in 2019-20, Agri-exports slightly dropped by around 8 percent. During 2020-21, India's Agri-exports surged and reached the highest so far, which was possible due to hard work put in by our farmers and a slew of measures/schemes initiated by the Government of India and institutions ,including Farmer's Producer Organizations (FPOs).

Figure 4: **Trends in Exports and Imports of Agricultural Commodities**.



Likewise, the import of agricultural products has also increased over the years. In 1990-91, Agri-imports were worth Rs 1206 crore, up to Rs 164726.83 crore in 2016-17, recording a growth of almost 136 times. However, since 2016-17, Agri-imports' value dropped to Rs 137019 crore in 2018-19. In 2019-20, India's Agri-imports were worth Rs. 147446 crore; during 2020-21, the Agri-imports were worth Rs. 157788 crore.

Thus, India has showcased an impressive growth trajectory from a food-scarce country to a food-sufficient and food-surplus one. All revolutions in agricultural production, triggered by innovations, incentives, and institutions, have successfully made India a net exporter of agricultural produce. As a result, agricultural exports increased significantly from Rs. 6012.76 crore in 1990-91 to Rs. 305469 crore in 2020-21 (Table 1). However, after achieving this peak in 2013-14, exports declined slightly due to falling global Agri-commodity prices. On the other hand, agricultural imports also increased sharply, from Rs. 1205.86 crore in 1990-91 to Rs. 164726.83 crore in 2016-17, and came down slightly after that. The share of agricultural exports to total exports increased from 18.47 percent in 1990-91 to 20.33 percent in 1996-97; after that, it decreased sharply and reached 9.64 percent in 2008-09 and later on showed a mixed trend and finally reached 14.20 percent in 2020-21. It may also

be observed that Agri-export grew (13.99 percent) less than Agri-import (16.85 percent) during 1990-91 to 2020-21. However, Agri trade grew more than the total merchandise trade in the country. Not only this, India's net Agri-export surplus has also increased from Rs. 4806.9 crore in 1990-91 to Rs. 147680.84 crore.

TABLE 1. INDIA'S IMPORTS AND EXPORTS OF PRINCIPAL AGRICULTURAL COMMODITIES

(*Rs. Crore*)

Year	Agricultural imports	Total national imports	Share of agricultural imports to total national imports (per cent)	Agricultural exports	Total national exports	Share of export to total nationa exports (per cent)	Net agri export surplus (Agri-exports-agri-imports)	Agriculture GVA at current prices	Share of agri-import in agri-GVA (per cent)	Share of agri-export in agri-GVA (per cent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990-91	1205.86	43198.00	2.79	6012.76	32553.00	18.47	4806.90	154953	0.78	3.88
1991-92	1478.27	47850.84	3.09	7838.04	44041.81	17.80	6359.77	181017	0.82	4.33
1992-93	2876.25	63374.52	4.54	9040.30	53688.26	16.84	6164.05	203009	1.42	4.45
1993-94	2327.33	73101.01	3.18	12586.55	69748.85	18.05	10259.22	235483	0.99	5.34
1994-95	5937.21	89970.70	6.60	13222.76	82673.40	15.99	7285.55	271162	2.19	4.88
1995-96	5890.10	122678.14	4.80	20397.74	106353.35	19.18	14507.64	294848	2.00	6.92
1996-97	6612.60	138919.88	4.76	24161.29	118817.32	20.33	17548.69	354521	1.87	6.82
1997-98	8784.19	154176.29	5.70	24832.45	130100.64	19.09	16048.26	376207	2.33	6.60
1998-99	14566.48	178331.69	8.17	25510.64	139751.77	18.25	10944.16	432065	3.37	5.90
1999-00	16066.73	215528.53	7.45	25313.66	159095.20	15.91	9246.93	457081	3.52	5.54
2000-01	12086.23	230872.75	5.24	28657.37	203571.00	14.08	16571.14	462407	2.61	6.20
2001-02	16256.61	245199.71	6.63	29728.61	209017.96	14.22	13472.00	500567	3.25	5.94
2002-03	17608.83	297205.86	5.92	34653.94	255137.26	13.58	17045.11	486974	3.62	7.12
2003-04	21972.68	359107.61	6.12	36415.48	293366.74	12.41	14442.80	546794	4.02	6.66
2004-05	22811.84	481371.53	4.74	41602.65	375339.51	11.08	18790.81	567635	4.02	7.33
2005-06	15977.75	574190.89	2.78	45710.97	456417.85	10.02	29733.22	639988	2.50	7.14
2006-07	23000.28	840506.30	2.74	57767.87	571779.27	10.10	34767.59	715179	3.22	8.08
2007-08	22549.81	1012311.69	2.23	74673.48	655863.51	11.39	52123.67	820532	2.75	9.10
2008-09	28719.24	1374435.37	2.09	81064.52	840755.05	9.64	52345.28	925878	3.10	8.76
2009-10	54365.29	1363735.54	3.99	84443.95	845533.63	9.99	30078.66	1066008	5.10	7.92
2010-11	51073.97	1683466.96	3.03	113046.58	1136964.25	9.94	61972.61	1299884	3.93	8.70
2011-12	70164.51	2345463.23	2.99	182801.00	1465959.39	12.47	112636.49	1501947	4.67	12.17
2012-13	95718.89	2669161.95	3.59	227192.61	1634318.28	13.90	131473.72	1675107	5.71	13.56
2013-14	85727.30	2715420.78	3.16	262778.54	1905011.08	13.79	177051.24	1926372	4.45	13.64
2014-15	121319.02	2736676.99	4.43	239681.04	1896348.42	12.64	118362.02	2093612	5.79	11.45
2015-16	140289.22	2490303.76	5.63	215396.32	1716384.39	12.55	75107.10	2227533	6.30	9.67
2016-17	164726.83	2577671.14	6.39	226651.91	1849433.54	12.26	61925.08	2518662	6.54	9.00
2017-18	152095.20	3001028.71	5.07	251563.94	1956514.52	12.86	99468.74	2829826	5.37	8.89
2018-19	137019.46	3594674.22	3.81	274571.28	2307726.19	11.90	137551.82	3016277	4.54	9.10
2019-20	147445.81	3360954.45	4.39	252976.06	2219854.17	11.40	105530.25	3394033	4.34	7.45
2020-21	157788.16	2909830.00	5.42	305469.00	2151770.00	14.20	147680.84	3616523	4.36	8.45
2021-22*	37936.49	930961.10	4.35	65768.07	703545.37	9.35	27831.58			
CAGR	16.85	17.21		13.99	15.87			10.82		

Source: Directorate General of Commercial Intelligence & Statistics, Department of Commerce, Ministry of Commerce and Industry and CMIE.
Note: CAGR was calculated for the period 1990-91 to 2020-21. (*) April- June 2021.

TABLE 2. INDIA'S EXPORTS OF PRINCIPAL AGRICULTURAL COMMODITIES

(*Rs. Crore*)

Commodity	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	CAGR (per cent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Tea	2943.53	3354.34	4078.53	4718.79	4873.34	4171.25	4719	4905.64	5396.65	5828.34	5851.11	5603.36	5.53
Coffee	2032.06	3009.91	4534.62	4711.07	4799.1	4973.25	5125.45	5646.43	6245.36	5721.98	5236.76	5339.62	6.93
Rice- basmati	10889.6	11354.63	15449.6	19409.39	29291.82	27586.71	22718.6	21512.91	26870.67	32804.3	31026.33	29849.89	9.48
Rice (other than Basmati)	365.3	231.29	8659.13	14448.81	17795.21	20441.55	15483.39	16929.88	23437.23	21171.17	14400.32	35476.61	39.77
Wheat	0.05	0.7	1023.2	10529	9277.65	4991.81	1061.77	447.85	624.37	424.47	444.2	4037.60	69.81
Other cereals	2973.19	3648.49	5492.92	8180.61	7178.14	5262.16	1702.5	1425.77	1604.28	2426.07	1454.71	5119.37	-7.45
Pulses	408.32	870.04	1067.93	1284.99	1748.81	1218.31	1655.9	1277.7	1469.63	1801.51	1511.8	1978.36	9.53
Tobacco unmanufactured	3621.44	3151.58	2899.46	3815.76	4782.74	4162.71	4373.45	4249.85	3828.13	3984.53	3761.37	3840.06	1.47
Tobacco manufactured	722.96	833.61	1106.96	1214.47	1351.72	1705.88	2078.91	2174.12	2193.58	2874.07	2648.02	2656.03	13.40
Spices	5948.73	7886.51	13102.5	15176.75	15146.36	14847.74	16630.14	19111.25	20084.91	23217.77	25642.04	29535.64	12.80
Cashew	2801.58	2819.39	4390.16	4067.21	5095.49	5565.85	5027.99	5278.61	5945.28	4579.17	4018.35	3112.22	2.31
Cashew nut shell liquid	27.62	33.77	59.46	29.84	38.61	55.81	57.59	43.99	32.63	26.91	23.09	19.72	-4.04
Sesame seeds	1494.1	2307.52	2641.66	2880.85	3583.46	4717.77	3012.31	2695.84	2990.93	3761.62	3723.31	3159.22	4.98
Niger seeds	24.23	44.51	117.27	90.13	113.61	108.96	123.27	117.22	69.86	95.5	106.01	160.23	9.55
Groundnut	1425.93	2178.41	5246.45	4065.36	3187.66	4675.37	4075.63	5444.33	3386.3	3297.32	5096.39	5381.61	7.08
Other oil seeds	139.36	113.40	201.43	414.61	945.53	1135.36	964.47	846.58	1126.32	926.75	437.42	455.90	15.16
Vegetable oils	182.90	114.62	269.1	469.35	324.82	580.13	522.94	779.97	566.04	744.58	1208.65	4450.16	26.35
Oil meals	7831.79	11069.58	11796.46	16519.53	17070.13	8129.18	3599.56	5410.1	7043.15	10557.48	5861.35	11618.34	-3.67
Guargum meal	1133.31	2938.7	16523.87	21287	11735.39	9478.26	3233.87	3106.62	4169.56	4707.05	3261.6	1949.07	-5.14
Castor oil	2179.28	2982.92	4571.67	4309.82	4364.33	4710.42	4616.1	4521.51	6730	6170.12	6323.84	6801.99	8.64
Shellac	71.3	140.07	256.79	401.74	514.03	267.47	203.31	225.53	285.18	304.79	411.94	649.83	11.35
Sugar	110.21	5472.79	8766.78	8576.32	7178.5	5328.83	9824.52	8659.54	5225.6	9523.14	13981.56	20671.55	25.65
Molasses	19.77	214.09	204.33	223.03	147.29	193.01	656.84	314.94	97.45	586.8	517.51	1258.08	23.51
Fruits / vegetable seeds	145.08	184.92	287.76	347.72	416.58	427.04	529.19	522.75	670.91	866.31	771.66	929.49	17.12
Fresh fruits	1524.21	1355.19	1937.22	2686.57	3645.62	3160.08	4191.24	4974.21	4913.28	5538.15	5496.38	5650.78	14.45
Fresh vegetables	3014.32	2620.48	3023.31	3407.19	5384.47	4666.45	5237.1	5790.71	5297.72	5679.1	4617.34	5374.23	6.65
Processed vegetables	743.12	747.92	1043.72	1102.56	1288.86	1721.89	1697.22	1765.75	1823.36	2055.41	2212.03	3149.12	12.56
Processed fruits and juices	1904.18	1859.96	2277.04	2577.32	3332.05	3626.86	3767.08	3921.08	4169.13	4481.25	4590.96	5150.52	9.80

Contd.

TABLE 2. CONCLD.

(*Rs. Crore*)

Commodity (1)	2009-10 (2)	2010-11 (3)	2011-12 (4)	2012-13 (5)	2013-14 (6)	2014-15 (7)	2015-16 (8)	2016-17 (9)	2017-18 (10)	2018-19 (11)	2019-20 (12)	2020-21 (13)	CAGR (per cent) (14)
Cereal preparations	1030.09	1264.15	1888.62	2240.76	2856.26	3036.64	3358.12	3565.55	3561.69	3859.46	3885.3	4705.81	12.98
Cocoa products	96.99	126.97	175.98	293.92	573.22	848.66	1267.61	1086.77	1144.35	1350.86	1274.69	1108.38	28.15
Milled products	153.63	197.06	359.92	603.61	1008	1030.61	1102.73	813.54	876.62	1063.03	1074.62	1536.02	18.88
Misc processed items	838.19	1065.48	1434.17	1853.98	2531.48	2772.44	2907.85	3053.79	3548.95	4613.38	4586.8	6389.72	18.07
Animal casings	32.82	33.24	33.98	21.46	28.46	19.33	17.02	13.84	327.44	480.66	398.5	416.54	32.36
Buffalo meat	5481.43	8613.31	13741.11	17408.99	26457.82	29282.58	26684.22	26161.38	26035.19	25091.43	22661.12	23459.89	11.37
Sheep/goat meat	745.94	258.83	252.83	426.47	694.12	828.11	837.76	869.84	843.61	867.53	654.05	330.45	4.33
Other meat	10.75	9.51	3.67	2.33	3.4	2.67	0	0.21	7	13.73	16.57	18.07	0.00
Processed meat	8.79	13.96	9.5	9.37	7.68	14.2	6.16	4.58	9.89	13.92	15.25	12.65	1.89
Dairy products	796.99	1216.76	647.79	2324.68	4407.78	2169.03	1677.46	1701.18	1954.63	3375.73	1983.84	2388.21	8.77
Poultry products	372.53	314.33	458.05	494.93	566.8	651.19	769.14	530.44	552.09	687.22	574.65	435.53	3.74
Floriculture products	294.46	296.04	365.32	423.45	455.9	460.8	483.41	546.71	507.32	571.43	541.61	575.98	6.29
Alcoholic beverages	584.87	819.86	1469.07	1932.45	2429.67	2264.89	2030.92	2004.79	2105.78	2103.97	1649.31	2445.90	8.86
Marine products	9899.98	11917.11	16584.71	18841.2	30627.28	33688.38	31219.48	39593.78	47646.41	47664.94	47618.1	44176.03	15.67
Ayush and herbal products	1247.05	1345.99	1696.97	2120.36	2208.55	2169.49	2385.49	2593.57	2940.06	3127.26	3033.04	0	
Jute, raw	54.4	128.33	80.92	95.67	113.35	119.2	113.58	76.63	95.43	107.74	103.48	191	4.52
Jute hessian	507.63	722.87	945.83	876.68	859.59	770.08	824.89	927.32	909.94	795.77	729.54	804	3.53
Cotton raw incld. waste	9537.08	13152.42	21624.24	20276.51	22337.84	11642.64	12821.13	10907.32	12200.05	14627.55	7539.53	13968.33	-2.81
Total agricultural exports	86171.1	113047	182801	227193	262779	239681	215396	226852	251564	274571	252976	3,05,469	8.74
Total national exports	845534	1136964	1465959	1634318	1905011	1896348	1716384	1849434	1956515	2307726	2219854	2151770	7.31
Per cent share of agricultural exports in national export	10.19	9.94	12.47	13.9	13.79	12.64	12.55	12.26	12.86	11.9	11.4	14.20	

Source: Directorate General of Commercial Intelligence & Statistics, Department of Commerce. Agricultural Statistics at a Glance, 2020.

The share of agricultural exports to agricultural GVA increased from 3.88 percent in 1990-91 to 13.64 percent in 2013-14. It slipped from this peak and stood at 8.45 percent in 2020-21. The agricultural imports as a percentage of India's agricultural GVA have also increased from 0.78 percent in 1990-91 to 6.54 percent in 2016-17. Meanwhile, the agricultural imports as a percentage of India's agricultural GVA have declined from 6.54 percent in 2016-17 to 4.36 percent in 2020-21, indicating exportable surplus and decreased dependence on the import of agricultural products /commodities in India. Further, it may be seen that the share of Agri-exports to India's exports was highest (20.33 percent) during 1996-97 and lowest (9.64 percent) in 2008-09, and the share of Agri-imports to India national imports was highest (8.17 percent) in 1998-99 and lowest (2.09 percent) in 2008-09 after implementation

TABLE 3. INDIA'S IMPORTS OF PRINCIPAL AGRICULTURAL COMMODITIES

(*Rs. crore*)

Commodity (1)	2009-10 (2)	2010-11 (3)	2011-12 (4)	2012-13 (5)	2013-14 (6)	2014-15 (7)	2015-16 (8)	2016-17 (9)	2017-18 (10)	2018-19 (11)	2019-20 (12)	2020-21 (13)	CAGR (per cent) (14)
Tea	276.52	202	218.91	274.52	291.68	388.66	377.47	338.35	356.99	417.96	411.06	658.87	8.07
Coffee	297.34	295	459.52	795.72	729.02	930.47	801.83	926.81	996.5	958.59	962.16	900.57	10.87
Rice- basmati	0	0	2.47	0	0	0	0	0	0	0	0	0	
Rice (other than Basmati)	0.37	0.92	3	3.96	8.29	10.83	5.91	7.25	12.18	32.14	78.75	24.67	48.60
Wheat	251.9	255.84	0.08	6.03	26.92	61.34	872.59	8509.05	2357.84	5.44	4.63	0.01	-20.99
Other cereals	76.33	59.53	30.04	111.01	98.03	61.76	344.31	493.18	433.9	471.28	1221.12	331.1	30.43
Pulses	10629.16	7512.49	9448.35	13344.63	11036.75	17062.94	25619.06	28523.18	18748.57	8035.3	10221.45	11937.59	2.79
Tobacco unmanufactured	37.76	44.61	68.57	91.94	79.52	98.17	137.3	77.21	69.47	102.89	154.73	129.1	9.67
Tobacco manufactured	78.73	80.36	113.01	155.01	168.87	200.28	193.92	228.54	185.92	257.52	237.2	159.09	9.15
Spices	1476.04	1595.91	2284.85	2715.76	3451.69	4393.25	5399.95	5760.25	6385.26	7932.7	10186.93	8014.28	19.11
Cashew	3047.5	2649.07	5381.43	5433.91	4667.8	6599.74	8701.28	9027.09	9134.33	11162.32	9026.34	7491.21	11.40
Cashew nut shell liquid	0	0.07	0.32	0.35	2.08	10.03	5.6	3.67	5.66	21.05	22.94	7.17	
Sesame seeds	53.26	37.66	3.93	296.03	808.64	379.99	179.66	442.15	176.77	875.17	1450.19	910.76	40.27
Niger seeds	13.33	0.79	0.39	0	3.73	3.73	44.14	82.82	29	40.62	24.43	40.71	
Groundnut	1.7	0	0.47	0.29	0.36	0.49	0.31	1.39	13.04	8.14	11.47	7.95	
Other oil seeds	118.18	74.76	88.77	109.74	166.79	163.29	218.62	392.36	364.59	745.35	1527.78	2165.28	33.62
Vegetable oils	22316.68	25919.59	38909.02	53561.61	44038.04	64889.6	68676.62	73038.98	74995.91	69023.79	68558.16	82115.82	11.20
Oil meals	104.69	75.03	98.72	210.38	199.87	272.65	429.91	974.59	746.67	869.56	1519.48	1017.61	31.75
Guar Gum meal	2.41	2.66	9.9	33.61	21.85	5.72	13.93	2.41	3.3	5.9	25.9	11.02	5.85
Castor oil	0.44	0.91	1.29	2.23	2.04	1.81	1.1	1.5	2.54	5.32	8.03	10.13	24.75
Shellac	34.1	50.55	22.15	172.61	45.8	59.54	19.48	13.43	18.38	19.35	23.49	21.22	-9.66
Sugar	5965.8	2789.54	313.83	3094.38	2286.86	3668.21	4037.86	6868.61	6035.84	3175.39	2473.25	4720.01	6.97
Molasses	32.29	6.15	4.35	7.5	8.93	30.14	7.5	9.04	69.29	1.38	10.21	0.91	-10.89
Fruits / vegetable seeds	284.42	291.22	380.15	471.1	449.48	611.53	703.03	653.33	768.26	835.81	851.79	1060.24	12.37
Fresh fruits	2843.47	3586.51	4510.84	6180.47	7715.96	9566.81	11071.57	11290.62	12524.55	13931.65	14137.09	15764.86	16.53
Fresh vegetables	8.14	40.6	7.31	11.24	41.67	11.14	394.45	11.12	25.64	24.22	594.82	225.57	28.99
Processed vegetables	77.9	117.48	120.19	149.01	173.94	104.45	120.33	115.26	134.83	161.83	253.68	163.52	5.60
Processed fruits and juices	191.12	251.54	314.93	432.02	410.83	499.54	526.49	548.1	803.81	909.34	771.22	662.86	13.10

Contd

of World Trade Organization agreement.

The main drivers of the increase in Agri-exports in 2020-21 are wheat (809 percent), vegetable oil (268 percent), other cereals (252 percent), non-Basmati rice (146 percent), and molasses (143 percent). Marine products, Basmati rice, non-Basmati rice, spices, and buffalo meat were among the top five commodities to be exported, in terms of value, in 2020-21. Together, these five products/commodities accounted for 53.20 percent of agriculture exports in 2020-21. Marine products are the most exported in rupee terms, with over Rs 44176 crore worth of exports in 2020-21. However, their exports dropped by 7.86 percent in 2020-21 compared to Rs 47618 crore worth of marine exports in 2019-20. Basmati rice exports have also marginally dropped by 3.79 percent in 2020-21. The exports of Basmati rice and non-Basmati rice grew at the CAGR of 9.48 percent and 39.77 percent, respectively, from 2009-10 to 2020- 21, and marine products also increased from Rs 9899.98 crore to Rs 44176.03 crore in 2020-21, registering a growth of 15.67 percent (Table 2).

Looking at Agri-imports, about 52 percent of Agri-imports in India are of vegetable oils. India's vegetable oil imports in 2020-21 are worth Rs 82116 crore (Table 3). Other major Agri-imports are fresh fruits, pulses, spices, and cashews. These five products accounted for 79.4 percent of India's total Agri-imports. In the case of other commodities, there is a growth in India's sugar imports in 2020-21 by 91 percent. Import of Niger seeds grew by 67 percent, tea by 60 percent, other oil seeds grew by 42 percent, marine products by 27 percent, castor oil by 26 percent, pulses by 17 percent, and cereal preparations by 20 percent. However, this increase was neutralised by the significant drop in Agri-imports of raw cotton and non-Basmati rice (69 percent each), other cereals (73 percent), fresh vegetables (62 percent), guar gum meal (57 percent), processed vegetables (36 percent), and wheat (100 percent).

Comparison of exports of agriculture and allied commodities by value during the first quarter (April-June) of 2020-21 and 2021-22 shows that the exports during April to June 2021 were Rs 65768.07 crore as compared to Rs 48444.16 crore during the same period in 2020-21, indicating an increase of 35.76 percent. Meanwhile, the imports had also increased by 90.28 percent, from Rs 937.39 crore to Rs 37936.49 crore during the same period in 2020-21 and 2021-22, respectively. During April- June 2021, there was an increase in exports of other cereals (401 percent), meat, dairy, and poultry products (106 percent), cereal preparations and miscellaneous processed items (65 percent), oil meals (61 percent), and marine products (46 percent) in comparison to the same period during 2020. Similarly, Agri-imports in April-June 2021 grew highest for vegetable oil (109 percent), followed by fruits and vegetables (61 percent) and cotton raw and waste (45 percent) in comparison to the same period during 2020. Despite the severe second COVID-19 wave, the exports in the agriculture sector performed remarkably well.

Conclusion

This study suggests that economic reforms positively impacted India's external sector. Exports increased significantly after the reforms compared to the pre-reform period. After reforms, exports' compound annual growth rate reached 12.50%, up

from a much lower 6.5% growth rate. Imports have also shown an excellent compound yearly growth rate in the post-reform period, totalling 13.94% compared to 2.63% in the pre-reform period. Throughout the analysis period, India ran a trade deficit, which has increased in the last decade or two. Furthermore, the study demonstrates that imports significantly increased CAGR during the post-reform period, reaching 13.94% vs. 2.63% in the pre-reform period (Mehta, 2022; IJHSSE, 2021). The agricultural sector has played an essential role in the country's economic development by earning precious foreign exchange by exporting agricultural commodities and achieving the goal of an Aatmanirbhar Bharat. Agricultural exports from India increased from Rs.253976 crore in 2019-20 to Rs.305469 crore in 2020-21, and net agriculture export surplus also increased to Rs.147681 crore in 2020-21 from Rs.105530 crore in 2019-20, registering a growth of 20.75 percent and 39.94 percent, respectively compared to the previous year (APEDA, 2022; Ministry of Commerce and Industry, 2021). The main drivers of the increase in Agri-exports in 2020-21 were wheat, vegetable oils, other cereals, non-basmati rice, and molasses, and during the first quarter of 2021-22, other cereals, meat, dairy, and poultry products, cereal preparations, miscellaneous processed items, oil meals, and marine products (WTO, 2021). Agri-imports in the first quarter of 2021-21 also grew, being highest for vegetable oils, followed by fruits and vegetables, and cotton raw and waste, compared to the same period in 2020-21. This indicates that trade policy liberalisation and the opening up of the Indian economy increased the inflow of imported products and services. Import growth has been accelerated due to rising domestic demand, access to a broader choice of imported goods and technology, and India's inclusion into global supply chains (FAO, 2021; Economic Survey, 2023).

References

Ahluwalia, M. S. (2002). Economic reforms in India since 1991: Has gradualism worked? *Journal of Economic Perspectives, 16*(3), 67–88.

Athukorala, P. C. (2008). Export performance in the reform era: Has India regained the lost ground?. In *The Indian Economy Sixty Years After Independence* (pp. 95-115). London: Palgrave Macmillan UK.

Banik, N. (2001). An Analysis of India's Exports during the 1990s. *Economic and Political Weekly*, 4222–4230.

Basu, K. (1993). *Lectures in industrial organization theory*. Blackwell.

Bhagwati, J. (2004). *In defense of globalization*. Oxford University Press.

Chakraborty, C., & Nunnenkamp, P. (2006). *Economic reforms, foreign direct investment and its economic effects in India* (No. 1272). Kiel Working Paper.

Ghemawat, P., & Patibandla, M. (1997). India's Exports Since the Reforms: Three Detailed Case Studies. *Harvard Business School (miimeo), November*.

Goldar, B. (2014). Productivity in Indian manufacturing in the post-reform period. *Productivity in Indian Manufacturing: Measurements, Methods and Analysis*, p. 75.

Harikumar, M. A., & Palanichamy, P. (2019). Changing Phases of India's International Trade Before and After Liberalization Period. *ECONOMIC REFORMS IN INDIA: ACHIEVEMENTS AND CHALLENGES*, 213.

Iqbal, Z. (2025). Impact of educational attainment on employment outcomes in Jammu and Kashmir. International Journal of Advanced Engineering and Management Research, 11(1), 195-207. https://doi.org/10.51505/ijaemr.2025.1109

Jadhav, B. R., and A. S. Satpute. "Direction and Composition of india Foreign Trade." Zenith International Journal of Business Economics and Management Research 4, no. 10 (Octobar, 2014): 46–58.

Joshi, V., & Little, I. M. D. (1994). *India: Macroeconomics and political economy, 1964–1991*. World Bank.

Krugman, P. R., & Obstfeld, M. (2009). *International economics: Theory and policy* (8th ed.). Pearson.

Kumar, N. (2000). Economic reforms and their macro-economic impact. *Economic and Political Weekly*, 803–812.

Kumar, N. (2012). Trade, investment and economic growth: Perspectives from India. *Economic and Political Weekly*, *47*(32), 63–71.

Manhas, I. (2025). The Impact of Foreign Direct Investment (FDI) Inflows on Carbon Dioxide (CO,) Emissions in India: An Empirical Study. *Saudi J Econ Fin*, *9*(2), 14-20.https://doi.org/10.36348/sjef.2025.v09i02.002

Ministry of Commerce & Industry. (2023). *Annual report 2022-23*. Government of India. https://commerce.gov.in

Misra, D. P., Jena, A. B., & Shil, N. C. (2011). India's Foreign Trade During Liberalization Era: An Assessment. *Journal of International Economic Review*, *4*(1), 39-50.

Mohammadi, M. S. (2024). An Explanatory Study of Food Insecurity in Afghanistan Over the Last Two Decades (2000-2022). Iranian Journal of Asian Studies, 1(2) 309-328. https://doi.org/10.22099/ijas.2025.52232.1025

Mukherjee, S., & Mukherjee, S. (2012). Overview of India'export performance: Trends and drivers. *IIM Bangalore Research Paper*, (363).

Panagariya, A. (2008). *India: The emerging giant*. Oxford University Press.

Rao, M. G., & Sen, T. K. (2015). *Fiscal policy in India: Trends and trajectory*. Oxford University Press.

Reserve Bank of India. (2022). *Handbook of Statistics on Indian Economy 2021-22*. https://rbi.org.in

Sahni, P. (2014). Trends in India's exports: a comparative study of pre and post reform period. *IOSR Journal of Economics and Finance (IOSR-JEF)*, *3*(2), 8-18.

Sahu, K. K. (2017). A Comparative Study of Performance of India's Trade in Pre and Post Liberalization Period. *Asian Resonance*, *6*(3), 61-67.

Sahu, P. K. (2017). *Research methodology: A guide for researchers in agricultural science, social science and other related fields*. Springer.

Siddiqui, K. (2010). Globalisation and neo-liberal economic reforms in India: A critical review.

Singh, A. P. (2014). Performance of foreign trade in India in the post liberalization era. *International Journal of Humanities Social Sciences and Education*, *1*(10), 11-17.

Tiwari, N. K., & Mishra, S. K. (2021). A Comparative Study of India's Foreign Trade in Pre and Post Reform Era. *International Journal for Research in Applied Science & Engineering Technology*, *9*, 2040-2048.

Todaro, M. P., & Smith, S. C. (2015). *Economic development* (12th ed.). Pearson.

UNCTAD. (2021). *World Investment Report 2021: Investing in sustainable recovery*. United Nations Conference on Trade and Development.

Veeramani, C. (2007). Sources of India's export growth in pre-and post-reform periods. *Economic and Political Weekly*, 2419-2427.

Veeramani, C. (2012). Anatomy of India's Merchandise Export Growth, 1993-94 to 2010-11. *Economic and Political Weekly*, 94-104.

World Bank. (2020). *Global economic prospects*. https://www.worldbank.org/en/publication/global-economic-prospects

Yadav, P. (2012). India's changing trade pattern in the process of globalization. *Procedia-Social and Behavioral Sciences*, *37*, 157-166.