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## **Trends and Performance of India's Agricultural Trade in the Midst of COVID-19 Pandemic**

**Vinod Kumar\***

### **ABSTRACT**

Agricultural sector has played an important role in the economic development of the country not only by earning precious foreign exchange by exporting agricultural commodities but also for achieving the goal of an Aatmanirbhar Bharat. The present study attempts to analyse the trends and performance of agricultural trade during 1990-91 to 2020-21, with the last year coinciding with the COVID-19 pandemic. Based on secondary data, the study highlights that despite of COVID-19 pandemic, 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 per cent and 39.94 per cent, respectively compared to the previous year. Further, exports of agri-products registered a 35.76 per cent increase in the first quarter (April-June) of 2021-22 as compared to the same period in 2020-21 due to reasons such as on higher overseas demand. The main drivers of increase in agri-exports in 2020-21 were wheat, vegetable oils, other cereals, non-basmati rice and molasses and during first quarter of 2021-22, other cereals, meat, dairy and poultry products, cereal preparations, miscellaneous processed items, oil meals and marine products. 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 in comparison to the same period in 2020-21. The largest markets for India's agricultural products are USA, China, Bangladesh, UAE, Vietnam, Saudi Arabia, Indonesia, Nepal, Iran and Malaysia. The study also revealed that share of agricultural exports to agricultural gross value added (GVA) increased from 3.88 per cent in 1990-91 to 8.48 per cent in 2020-21. While the share of agricultural imports to agricultural GVA decreased from 6.54 per cent in 2016-17 to 4.36 per cent in 2020-21 indicating decreased dependence on import of agricultural products in India. During 1990-91 to 2020-21, agri-exports grew (13.99 per cent) less than the agri-import (16.85 per cent). However, agriculture trade grew more than the total merchandise trade in the country. These results have important policy implications. Emphasis needs to be given for diversification of agricultural exports for more products and more destinations with improved infrastructure, trained human resources and support facilities to move up the value chain and meet international standards like sanitary and phytosanitary measures, etc. The efficiency at production level needs to be raised in order to make the product price competitive in the international market. The producers and exporters need to be educated and trained to maintain the quality of the products as per global standards.

**Keywords: Agricultural Trade, COVID-19 pandemic, Aatmanirbhar Bharat, trade agreement**

**JEL.: D81, I12, J54, Q17, Q18**

### **I**

### **INTRODUCTION**

Promotion of farm exports is extremely important not only for earning precious foreign exchange for the country but also for achieving the goal of an 'Aatmanirbhar Bharat,' for which self-reliant agriculture is critical. India is an agrarian economy and is a major contributor to the global food basket, thanks to the favourable agro-climatic

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The views expressed are those of the author and not of the organisation he belongs to, usual disclaimer applies.

conditions and the rich base of natural resources. As per WTO's *Trade Statistics 2020*, the share of India's agricultural exports and imports in the world agricultural trade in 2019 was 2.07 per cent and 1.46 per cent, respectively. India is among the world's leading producer for many commodities such as dairy, cereals, spices, fruits and vegetables, rice, wheat, cotton and others (Kumar, 2021). Total foodgrain production in the country increased from 176.39 million tonnes (MT) in 1990-91 to 305.45 MT in 2020-21 and horticultural production increased much faster, 96.6 MT in 1991-92 to 326.6 MT in 2020-21. The milk production has also increased significantly from 53.9 MT in 1990-91 to 208 MT in 2020-21. Fish production increased from 3.84 MT in 1990-91 to 14.07 MT in 2019-20 and egg production increased from 21101 million in 1990-91 to 114419 million in 2019-20. India has consistently maintained trade surplus in the agricultural products over the years. Despite COVID-19 pandemic, agri-exports from India increased to Rs.305469 crore in 2020-21 from Rs.252976 crore in 2019-20 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 per cent and 39.94 per cent, respectively as compared to the previous year.

Global economy saw an unprecedented disruption in 2020 owing to COVID-19 pandemic and subsequent strict lockdown to contain the spread of virus across the countries. As movement of people across the borders was severely curtailed, it led to disruptions in the supply-chains and demand shocks. These disruptions have further dampened the prospects of the global agri-trade after an event of trade war and protectionism in 2019. However, after considering the situation and its anticipated repercussion, agricultural trade from India reinforced India's position as a valued and trusted partner across the world. The present study has analysed the trends and performance in India's agriculture trade.

## II

### DATA AND METHODOLOGY

The present study is based on time series secondary data collected and compiled from various sources. To capture the trends and performance of agricultural trade a large number of commodities/products (46) were analysed. The study uses data from various published sources. The data on exports and imports of agricultural products/commodities were extracted from the export-import data bank maintained by Ministry of Commerce and Industry ([www.commercemistry.nic.in](http://www.commercemistry.nic.in)) and APEDA. The data on agricultural exports of other countries and other related global statistics were extracted from *Trade Yearbook* of Food and Agricultural Organization (FAOSTAT). Year-wise data on agricultural exports and imports and national exports and imports were extracted from *Agricultural Statistics at a Glance*, Publication of Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Government of India, Data on agriculture gross value added (GVA) were taken from CMIE and Economic Survey, etc. The data were compiled and analysed with simple tabular

techniques, graphs, compound annual growth rate (CAGR) and Coefficient of Variation (CV).

### III

#### RESULTS AND DISCUSSION

Table 1 and Figure 1 gives the trends in India's exports and imports of agricultural commodities for the period 1990-91 to 2020-21. 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 the span of 30 years and grew at 13.99 per cent in 2020-21. However, in 2019-20, there was a slight drop in agri-exports by around 8 per cent. While, during 2020-21, India's agri-exports surged and reached the highest so far which was possible due to hard work put by our farmers and a slew of measures/schemes initiated by the Government of India and institutions including Farmers Producer Organisations (FPOs).

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

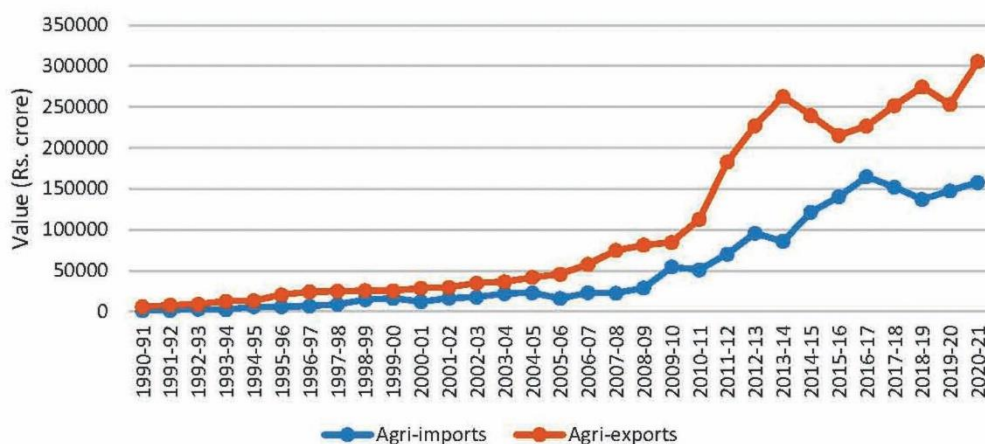


Figure 1. Trends in Exports and Imports of Agricultural Commodities.

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

Year (1)	Share of agricultural imports to total national imports (per cent)				Share of export: Net agri export to total national exports (per cent)				(Rs. Crore)		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
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 &amp; 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.

India has thus showcased an impressive growth trajectory from a food scarce country to a food sufficient and to a food surplus one now. 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 thereafter. The share of agricultural exports to total exports increased from 18.47 per cent in 1990-91 to 20.33 per cent in 1996-97, after that it decreased sharply and reached to 9.64 per cent in 2008-09 and later on has shown a mixed trend and finally reached at 14.20 per cent in 2020-21. It may also be observed that agri-export grew (13.99 per cent) less than the agri-import (16.85 per cent) 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).

The share of agricultural exports to agricultural GVA increased from 3.88 per cent in 1990-91 to 13.64 per cent in 2013-14. Thereafter, it slipped from this peak and stood at 8.45 per cent in 2020-21. The agricultural imports as a percentage of India's agricultural GVA has also increased from 0.78 per cent in 1990-91 to 6.54 per cent in 2016-17. While the agricultural imports as a percentage of India's agricultural GVA has declined from 6.54 per cent in 2016-17 to 4.36 in 2020-21 per cent indicating exportable surplus and decreased dependence on 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 per cent) during 1996-97 and lowest (9.64 per cent) in 2008-09 and the share of agri-imports to India national imports was highest (8.17 per cent) in 1998-99 and lowest (2.09 per cent) in 2008-09 after implementation of World Trade Organisation agreement (Table 1).

#### *COVID-19 Pandemic and India's Agri-Exports*

India's agricultural exports have surpassed the pandemic registering a growth of 20.75 per cent to Rs.3.05 lakh crore in 2020-21 against the Rs.2.56 lakh crore in the previous year. India's agricultural and allied imports during 2019-20 were Rs.1.47 lakh crore, and the corresponding figures for 2020-21 are Rs.1.58 lakh crore. Despite COVID-19 pandemic, the balance of trade in agriculture has improved by 39.94 per cent from Rs.1.06 lakh crore to Rs.1.48 lakh crore.

The largest markets for India's agricultural products are the USA, China, Bangladesh, UAE, Vietnam, Saudi Arabia, Indonesia, Nepal, Iran and Malaysia. These top 10 countries accounted for 52.2 per cent of the total agricultural exports in 2020-21.

The main drivers of the increase in agri-exports in 2020-21 are wheat (809 per cent), vegetable oil (268 per cent), other cereals (252 per cent), non-Basmati rice (146 per cent) and molasses (143 per cent). 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 per cent of agriculture exports in 2020-21. In rupee terms, marine products are the most exported with over Rs.44176 crore worth exports in 2020-21. However, their exports have dropped by 7.86 per cent in 2020-21 as compared to Rs.47618 crore worth marine exports in 2019-20. The exports of Basmati rice have also marginally dropped by 3.79 per cent in 2020-21. The exports of Basmati rice and non-Basmati rice grew at the CAGR of 9.48 per cent and 39.77 per cent, respectively during 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 per cent (Table 2).

Looking at agri-imports, about 52 per cent of agri-imports by India is 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 cashew. Together, these five products accounted for 79.4 per cent 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 per cent. Import of niger seeds grew by 67 per cent, tea by 60 per cent, other oil seeds grew by 42 per cent, marine products by 27 per cent, castor oil by 26 per cent, pulses by 17 per cent, and cereal preparations by 20 per cent. However, this increase was neutralised by the significant drop in agri-imports of raw cotton and non-Basmati rice (69 per cent each), other cereals (73 per cent), fresh vegetables (62 per cent), guar gum meal (57 per cent), processed vegetables (36 per cent) and wheat (100 per cent).

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 per cent. Meanwhile, the imports had also increased by 90.28 per cent, from that Rs.19937.39 crore to Rs.37936.49 crore during the same period in 2020-21 and 2021-22, respectively. During April- June 2021, increase in exports of other cereals (401 per cent), meat, dairy and poultry products (106 per cent), cereal preparations & miscellaneous processed items (65 per cent), oil meals (61 per cent) and marine products (46 per cent) in comparison to the same period during 2020. Similarly, agri-imports in April-June 2021 grew highest for vegetable oil (109 per cent), followed by fruits and vegetables (61 per cent) and cotton raw and waste (45 per cent) in comparison to the same period during 2020. It may be concluded that despite the severe second COVID-19 wave, the exports in the agriculture sector were performed remarkably well.

The sub-category wise share of exports of agricultural products was highest for agriculture and allied products (77.34 per cent) followed by marine products (14.46 per cent), Textile and allied products (4.57 per cent) and plantation (3.62 per cent) in 2020-21. The sub-category wise share of imports of agriculture products was highest for

TABLE 2. INDIA'S EXPORTS OF PRINCIPAL AGRICULTURAL COMMODITIES

Commodity (1)	(Rs. Crore)												CAGR (per cent) (14)
	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)	
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
Guar gum 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.

Commodity (1)	(Rs. Crore)													CAGR (per cent) (14)
	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)		
Cereal	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	
preparations														
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	1346.99	1696.97	2120.36	2208.55	2169.49	2385.49	2693.57	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	307.63	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 incl. waste	9537.08	13162.42	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	226652	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 &amp; Statistics, Department of Commerce, Agricultural Statistics at a Glance, 2020.

TABLE 3. INDIA'S IMPORTS OF PRINCIPAL AGRICULTURAL COMMODITIES

Commodity	(Rs. crore)													CAGR (per cent)
	2009-10 (1)	2010-11 (2)	2011-12 (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)	
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	469.52	795.72	0	0	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	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	45.60	
Wheat	231.9	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	9448.55	13344.63	11036.75	17062.94	25619.06	28523.18	18748.57	8035.3	10221.45	11937.59	2.79	
Tobacco	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	
unmanufactured														
Tobacco	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	
manufactured														
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	0.33	2.08	10.03	5.6	3.67	5.66	21.05	22.94	7.17	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	44.14	44.14	82.82	29	40.62	24.43	40.71	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	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	4610.84	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.

TABLE 3. 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	188.92	243.43	316.39	359.98	419.34	583.93	575.42	579.03	659.68	971.36	1007.66	1213.18	17.07
Cocoa products	376.08	584.21	934.32	1049.25	1071.55	1551.63	1398.91	1542.28	1473.1	1845.89	1833.97	2020.99	13.51
Milled products													
Misc processed items	552.34	664.01	915.19	1268.33	1474.47	1785.23	1811.12	2115.82	2249.73	2560.2	2635.85	2263.39	14.64
Animal casings	0	0	0	0	0	0	0	0	0	0	0	0	0.49
Buffalo meat	0	0	0	0	0	0	0	0	0	0	0	0	0
Sheep/goat meat	1.22	0.8	0.21	1.52	5.13	8.73	4.8	8.5	13.36	10.83	13.21	0.94	24.10
Other meat	6.67	7.01	12.48	15.71	15.8	19.5	17.18	19.03	27.8	30.65	32.82	17.5	12.65
Processed meat	9.79	7.56	9.74	9.02	7.64	5.17	2.75	4.47	3.22	4.14	4.52	5.12	-8.41
Dairy products	333.64	847.83	1219.41	184.25	232.68	375.01	371.58	254.84	312.59	254.12	371.68	364.51	-4.95
Poultry products	26.72	14.46	19.72	18.29	23.39	38.22	26.42	29.46	26.87	41.8	40.44	25.75	5.88
Floriculture products	45.88	45.48	68.64	85.67	112.19	113.37	114.4	133.81	136.46	174.09	229.64	160.38	14.10
Alcoholic beverages	1244.26	1029.13	1309.77	1416.77	2076.18	2508.66	2935.85	3590.33	3876.14	4678.72	4643.52	4036.6	15.92
Marine products	303.09	429.04	569.53	452.7	411.01	453.9	639.77	633.39	793.3	1088.13	1290.17	1636.36	13.98
Ayush and herbal products	136.36	155.12	184.75	243.75	318.5	352.58	354.35	358.87	392.72	510.23	598.49	0	0
Jute, raw	149.49	302.49	449.17	370.79	146.25	139.58	363.44	704.13	289.02	235.86	350.39	179.00	1.13
Jute hessian	231.22	169.43	177.34	87.34	79.92	177.79	181.41	57.45	122.38	184.4	237.83	257.00	1.84
Cotton raw incl. waste	1241.37	622.24	1059.19	2466.74	2375.78	3101.92	2566.21	6338.92	6306.77	4383.4	9371.21	2860.9	19.51
Total agricultural imports	53056.4	51074	70164.5	95718.9	85727.3	121319	140289	164727	152095	137019	147446	157788.2	11.31
Total national imports	1363736	1683467	2345463	2669162	2715421	2736677	2490304	2577671	3001029	3594674	3360954	2909830	6.45
Per cent share of agricultural imports in national imports	3.89	3.03	2.99	3.59	3.16	4.43	5.63	6.39	5.07	3.81	4.39	5.42	

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

agriculture and allied products (93.23 per cent) followed by plantation (3.92 per cent), textile and allied products (1.81 per cent) and marine products (1.04 per cent) in 2020-21 (Table 4).

TABLE 4. COMPOSITION OF EXPORTS AND IMPORTS OF AGRICULTURAL PRODUCTS DURING 2020-21  
(Rs. crore)

Sub-category (1)	Exports (2)	Imports (3)
Agriculture & Allied Products	236258.80 (77.34)	147111.70 (93.23)
Marine Products	44176.03 (14.46)	1636.36 (1.04)
Plantation	11066.25 (3.62)	6179.19 (3.92)
Textile & Allied Products	13968.33 (4.57)	2860.90 (1.81)
Total	305469 (100)	157788 (100)

Source: Directorate General of Commercial Intelligence & Statistics, Department of Commerce.  
Figures in the parentheses indicate percentage to total.

India has been successful with exporting a set of value chains in recent times, including rice and marine products, which comprise a third of India's total agri-exports. India has a comparative advantage in these products and they are specified as value chains of opportunities by APEDA and the 2018 Agriculture Export Policy. India exports about 70 per cent of its commodities and agricultural products to nearby geographies including Middle East, Africa and Asia Pacific, only 30 per cent exporting to Europe and Americas. It may be observed from figure that rice (both Basmati and non-Basmati) emerged as the single largest commodity group of agricultural exports from India in 2020-21 with a share of 21.4 per cent, followed by marine products (14.5 per cent), spices (9.7 per cent), buffalo meat (7.7 per cent) and sugar (6.8 per cent) (Figure 2). These top five products/commodity together accounted for 60.10 per cent of the total agricultural exports, so there is a need to diversify our exports for more products

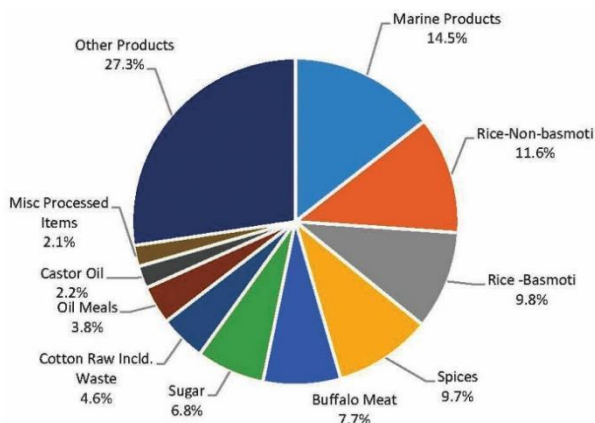


Figure 2. Share of Top 10 Exported Agricultural Commodities in 2020-21.

and more destinations (Kumar, 2020). Further, all export restrictions on organic and processed food should be removed and trade restrictions on tomato, onion and potato (TOP) crops should be reviewed keeping in view the price and production in the domestic markets. It may be revealed that agricultural products were exported to USA, China, Bangladesh, UAE and Vietnam. These five countries, together, accounted for 35.9 per cent of the total agri-exports (Figure 3).

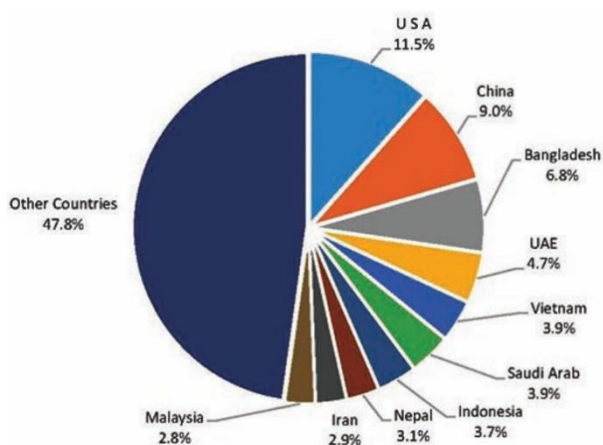


Figure 3. Share of Top 10 India's Agri-Export Destinations in 2020-21.

As regards the import of agricultural products/commodities, vegetable oils have been the single largest product, with a share of 52 per cent in total agri-imports in 2020-21 (Figure 4). Fresh fruits constitute the second largest import item in agricultural products with a share of 10 per cent, followed by pulses (7.6 per cent), spices (5.1 per cent) and cashew (4.7 per cent). Among the major commodities imported by India, it is notable that as compared to previous year, India imported 90.8 per cent more of the sugar in 2020-21 while the imports of vegetable oils increased by 19.8 per cent and

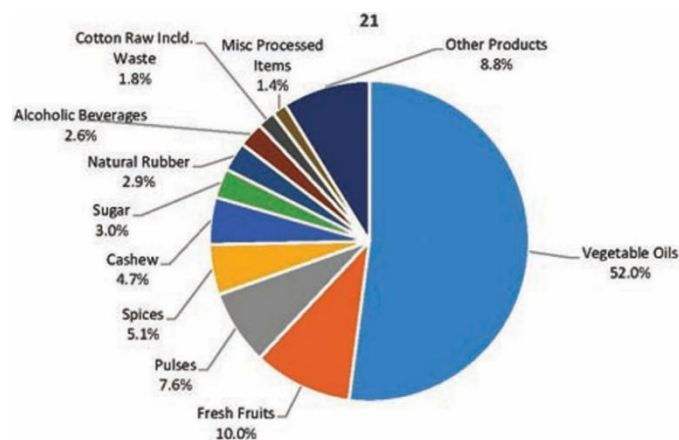


Figure 4. Share of Top 10 Imported Agricultural Commodities in 2020-21.

pulses imports grew by 16.8 per cent and cotton imports decreased by 69.4 per cent during the same period. India should spell out the strategies to increase the domestic production of heavily imported agricultural products (vegetable oils, oil seeds, pulses, etc). Indonesia emerged as the largest agri-exporters to India with 17.9 per cent share followed by Malaysia (11.3 per cent), Argentina (10.4 per cent), Ukraine (7.6 per cent) and USA (7.3 per cent). These five top countries together accounted for 54.5 per cent of the total India's agri-imports during 2020-21 (Figure 5).

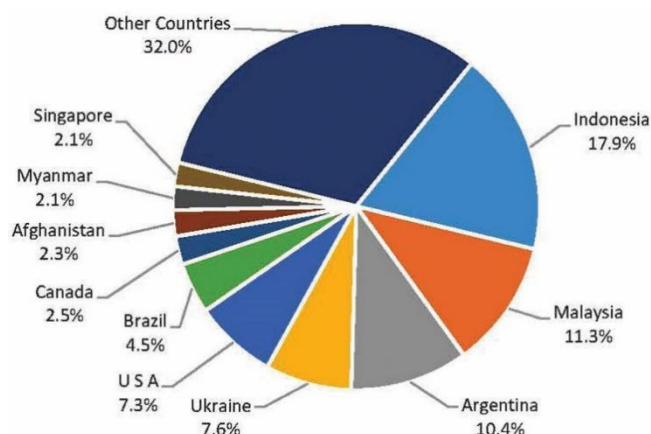


Figure 5. Share of Top 10 Destination for Agri Imports in 2020-21.

#### *Relationship between Agri-Trade of India and the World*

Though India's agri-trade intensity ratio has been rising over the period, now the question arising is how India play a big role in changing world ecosystem in general and COVID-19 pandemic in particular in the world? India's total exports share in the total world trade increased from 0.52 per cent in 1990 to 1.71 per cent in 2019, growing at the CAGR of 12.39 per cent as compared to 7.03 per cent of world total exports (Table 5). Similarly, agri-exports in dollar terms went on rising continuously from 0.94 per cent 1991 to 3.04 per cent in 2013. It is interesting to note that from 2013 to 2016, agri-exports declined both in absolute and relative terms, and did not reach the 2013 level till date. When India's agri-exports were declining in absolute terms, the world agri-exports were also declining. They came to the later levels one year after India, i.e., in 2014. The decline in the agri-exports earnings starting from 1997 has been attributed to the South-east Asian crisis, slowdown in the world economy and decrease in the agricultural prices (Sathe and Deshpande, 2016). The share of India's agri-exports in world agri-exports has increased from 0.94 per cent in 1990 to 3.04 per cent in 2003, after that this share is continuously in declining trends reached at 2.03 per cent in 2019. India's agri-exports and agri-imports have grew at a much higher CAGR of 10.41 per cent and 12.74 per cent, respectively as compared to 6.28 per cent and 6.14 per cent of world agri-exports and agri-imports. Study, further revealed that India's agri-imports

TABLE 5. INDIA'S SHARE OF IMPORT AND EXPORT IN WORLD TRADE  
(Value in US \$billion)

Year (1)	Import			Export		
	India (2)	World (3)	Share (per cent) (4)	India (5)	World (6)	Share (per cent) (7)
1990	24.19	3597.78	0.67	18.22	3492.12	0.52
1991	19.62	3615.84	0.54	18.06	3497.26	0.52
1992	24.08	3874.33	0.62	20.40	3750.49	0.54
1993	23.39	3785.51	0.62	22.32	3747.12	0.60
1994	27.89	4313.70	0.65	26.46	4275.27	0.62
1995	38.03	5144.46	0.74	32.97	5112.82	0.64
1996	39.21	5389.30	0.73	33.54	5340.74	0.63
1997	42.46	5573.36	0.76	35.83	5538.24	0.65
1998	43.22	5523.53	0.78	33.87	5465.73	0.62
1999	49.99	5754.22	0.87	37.06	5665.65	0.65
2000	51.37	6536.89	0.79	45.30	6402.41	0.71
2001	51.96	6279.13	0.83	44.29	6121.73	0.72
2002	62.41	6555.49	0.95	53.58	6439.84	0.83
2003	77.14	7631.41	1.01	63.02	7516.16	0.84
2004	105.56	9367.16	1.13	79.87	9103.54	0.88
2005	149.78	10595.61	1.41	103.52	10368.67	1.00
2006	181.18	12305.42	1.47	124.49	11932.61	1.04
2007	216.76	14168.64	1.53	147.03	13980.25	1.05
2008	321.03	16421.57	1.95	194.83	16143.19	1.21
2009	257.20	12675.85	2.03	164.91	12532.23	1.32
2010	350.23	15396.14	2.27	226.35	15267.82	1.48
2011	464.46	18390.54	2.53	302.91	18297.52	1.66
2012	488.59	18506.02	2.64	296.81	18404.63	1.61
2013	466.04	18781.56	2.48	313.24	18818.41	1.66
2014	462.91	19046.72	2.43	322.69	18988.44	1.70
2015	392.87	16722.90	2.35	267.44	16536.89	1.62
2016	361.21	16227.04	2.23	264.14	16036.34	1.65
2017	448.42	17987.33	2.49	299.28	17736.58	1.69
2018	514.46	19807.69	2.60	324.78	19451.55	1.67
2019	486.06	19272.55	2.52	324.25	18928.92	1.71
CAGR (per cent)	13.82	6.99		12.39	7.03	
CV	89.55	54.57		84.48	54.90	

Source: Computations based on data from [www.fao.org](http://www.fao.org).

have grown at a higher rate than that for the total imports (13.82 per cent and 12.74 per cent, respectively). The Coefficient of Variation (CV), estimates indicates that world agri-exports and agri-imports was 53.76 per cent and 52.72 per cent, respectively. In case of India's agri-exports and CV of agri-imports was 83.74 per cent and 88.75 per cent, respectively. Its variability is about 30 percentage point higher than that for the world agri-trade. It may be concluded that India's trade in agriculture is highly volatile (Table 6).

#### *Challenges to Indian Agricultural Exports*

Giant strides have been made in agri export since independence. In 1950-51, India's agri export was only about Rs. 149 crore which has risen to the level of Rs. 305469 crore in 2020-21. There has been substantial increase in export of almost all the

TABLE 6. INDIA'S SHARE OF AGRI-TRADE IN WORLD AGRI-TRADE

Year (1)	Import			Export		
	India (2)	World (3)	Share (per cent) (4)	India (5)	World (6)	Share (per cent) (7)
1990	1.08	351.33	0.31	3.07	325.62	0.94
1991	0.74	352.95	0.21	2.80	328.71	0.85
1992	1.35	386.07	0.35	2.95	357.37	0.82
1993	1.04	355.07	0.29	3.36	338.70	0.99
1994	2.20	402.42	0.55	3.24	388.44	0.83
1995	2.22	460.98	0.48	5.49	442.96	1.24
1996	2.21	480.16	0.46	5.85	465.63	1.26
1997	2.58	468.42	0.55	5.66	457.67	1.24
1998	3.83	457.07	0.84	5.23	437.78	1.19
1999	3.97	443.46	0.90	4.64	417.23	1.11
2000	2.88	433.11	0.66	4.95	411.16	1.20
2001	3.92	441.83	0.89	5.23	414.53	1.26
2002	4.03	465.34	0.87	5.52	442.86	1.25
2003	4.91	551.81	0.89	6.50	525.54	1.24
2004	5.12	638.54	0.80	7.06	607.64	1.16
2005	5.36	679.98	0.79	9.02	653.81	1.38
2006	7.07	754.18	0.94	11.26	721.85	1.56
2007	8.09	913.51	0.89	16.71	873.72	1.91
2008	9.14	1118.87	0.82	17.31	1068.03	1.62
2009	12.82	988.34	1.30	15.66	951.56	1.65
2010	10.66	1107.93	0.96	19.97	1085.63	1.84
2011	17.26	1358.25	1.27	30.29	1321.45	2.29
2012	20.19	1371.19	1.47	38.17	1338.96	2.85
2013	19.22	1430.67	1.34	42.49	1397.95	3.04
2014	21.30	1451.10	1.47	36.18	1421.84	2.54
2015	22.40	1317.42	1.70	28.66	1275.06	2.25
2016	24.08	1315.20	1.83	26.49	1287.32	2.06
2017	27.39	1441.46	1.90	30.42	1411.29	2.16
2018	21.68	1500.34	1.45	30.74	1454.10	2.11
2019	21.69	1486.99	1.46	29.30	1444.67	2.03
CAGR (per cent)	12.74	6.14		10.41	6.28	
CV	88.75	52.72		83.74	53.76	

Source: Computations based on data from www.fao.org.

agricultural items in the last 12 years (Table 2), but despite being one of the top producers of agricultural products, India does not figure among top exporters of agricultural produce. There are five critical challenges contribute to India's relatively low rank among global agriculture exporters: low productivity and high logistics costs; limited value addition; export promotion and branding challenges; non-tariff barriers and quality issues (Government of India, 2020).

#### *Measures Taken to Enhance the Agricultural Exports*

Government of India and other institutions have taken slew of measures to increase the agricultural exports even during COVID-19 pandemic and are given as under:

- 1) Trade Infrastructure for Export Scheme (TIES), Market Access Initiatives (MAI) Scheme and Merchandise Exports from India Scheme (MEIS) and Transport and

Marketing Assistance to promote trade infrastructure and marketing of agriculture products to boost agri-exports from India.

- 2) The institutions such as Agriculture and Processed Food Products Export Development Authority (APEDA), The Marine Products Export Development Authority (MPEDA), various Commodity Boards such as Coffee Board, Tea Board, Rubber Board, Spices Board, etc., are authorised to promote the export of various agriculture related commodities. APEDA, MPEDA and the commodity boards also provided blanket extension of validity of various recognitions/accreditations viz., packhouse recognition, peanut units registration, registration-cum-membership certificates, integrated meat plant recognition, registration of plants for export of rice to China and USA, certifications and accreditations under the National Programme for Organic Production to ensure uninterrupted exports.
- 3) Arrangements were also made for online issuance of various certificates required for exports.
- 4) A 24\*7 emergency response cell was created in APEDA/ Commodity Boards to help exporters in addressing their issues related to the movement of consignments/trucks/labour, issuance of certificates, lab testing reports, sample collection, etc.
- 5) Virtual inspections were introduced for new pack house applicants. The validity of existing pack houses was extended, without inspections, based on the past performance. Around 216 pack houses have continued to function uninterrupted, without the process of physical inspections and compliances. During the second COVID-19 wave also, automatic extension of recognition to the pack houses has been allowed. Around 100 pack houses, whose period of recognition was expiring, have benefited, providing relief to exporters of horticultural products.
- 6) The Export Inspection Council and Export Inspection Agencies have ensured that the services offered to the exporters' fraternity, such as issuance of certificate for export, health certificates and certificate of origin, are delivered in timely and smooth manner.
- 7) In order to promote ease of doing business, the process of minimising regulatory compliances and decriminalization of various offence has been initiated.
- 8) APEDA has developed, in-house, a platform for organising virtual trade fairs (VTF) to establish contact between Indian exporters and importers. Two VTFs namely 'India Rice and Agro Commodity Show' and India Fruits, Vegetables & Floriculture Show have organised recently. APEDA has also plan to organise VTFs Indian Processed Food Show; Indian Meat and Poultry Show; Indian Organic Products Show during 2021-22.
- 9) APEDA opened Regional/Extension/Project offices during 2020-21 in order to facilitate exporters in various regions of the country.
- 10) Operation Greens Scheme has been extended from 3 TOP crops (tomato, onion and potato) to 22 horticultural and perishable crops. This will lead to better price

realisation to farmers, reduced wastages, and affordability of products for consumers.

- 11) KrishiUdan and Krishi Rail schemes launched to ease out pressure of high freight rates resulting in smooth movement of perishables to the important Middle East, European Union and South East Asian markets. The Krishi Rail project has decisively helped exporters of fresh fruits and spices from the North Eastern States.
- 12) During COVID-19 pandemic, all the accredited Certification Bodies under the National Programme for Organic Production are operational through electronic mode to enabling them to access and operate the online traceability system and issue certificates.
- 13) The Agri-Exports Policy (2018) identifies the first two steps, i.e., identify commodities where India has a global comparative advantage and develop clusters in states to create global value chains for those. Study conducted by ICRIER revealed that eleven commodities, namely, marine products, rice, meat, spices, cotton, fresh fruits and vegetables, sugar, coffee, groundnut, oil meals and cashews - comprise more than 80 per cent of agri-exports basket in 2016-17. Study of 10 years of data of 70 per cent of Indian agricultural output (20 commodities), shows that most Indian crops were globally price-competitive in most years. However, since 2013-14, many of these commodities suffered competitiveness loss due to falling global prices (Gulati and Saini, 2018).
- 14) One District One Focus Product (ODOFP) programme under Pradhan Mantri Formalisation of Micro Food Processing Enterprises Scheme cover products of agriculture and allied sectors for 728 districts of the country to reap the benefits of scale in terms of procurement of inputs, availing common services and marketing of products. The identified products have potential for both domestic demand and export. It envisages strengthening backward and forward linkages, provision of common facilities, incubation centres, training, research and development, marketing and branding. The enhanced capacity of processing and value addition in agriculture and allied sector products is for better price realization by the farmers. Besides the improvement and integration of agri value chains, the scheme is expected to reap many positive externalities likes improved health and safety standards, integration with retail markets, improved incomes of the farmers and also help in reaching the untapped export markets.
- 15) The comprehensive action plan for promotion of agri-trade for product-specific Export Promotion Forums (EPFs) have been created to lead agri exports to new heights.
- 16) EPFs for eight agricultural and allied products - grapes, mango, banana, onion, rice, nutri-cereals, pomegranate and floriculture have been constituted under the APEDA.
- 17) Cluster activation for promotion of agri-exports through APEDA for linking Farmers producer Organisations and exporters.

- 18) Emphasis is being given on strengthening the existing 'agri-clusters' and creating 46 product-specific/district clusters to fulfil the gap of bulk quantity and quality of supplies and export promotion.
- 19) Agri Infrastructure Fund with an amount of Rs.1,00,000 crore has been initiated to provide funding for agriculture infrastructure projects at farm-gate & aggregation points (Primary Agricultural Cooperative Societies, Farmers Producer Organisations, Agriculture entrepreneurs, Start-ups, etc.). This will provide the necessary impetus for development of farm-gate and aggregation point, affordable and financially viable post-harvest management infrastructure (NABARD, 2021).

## IV

## CONCLUSION

The Government of India has been providing several export incentives to promote the export of agricultural commodities, despite the restrictions imposed by the WTO regime and other regional trade agreement. Growth trend analysis of agri-imports and agri-exports suggest that almost all the commodities/products showed the positive trend during 2009-10 to 2020-21. The study also revealed that despite COVID-19 pandemic, agri exports registered an impressive growth of 20.75 per cent in 2020-21 and 35.76 per cent in first quarter of 2021-21 as compared to the same period in the previous year. The share of India's agri-exports in world agri-exports has increased from 0.94 per cent in 1990 to 2.03 per cent in 2019. India's agri-exports and agri-imports have grown at a much higher CAGR of 10.41 per cent and 12.74 per cent, respectively as compared to 6.28 per cent and 6.14 per cent of world agri-exports and agri-imports. The study further revealed that India's agri-imports have grown at a higher rate than that for the total imports (13.82 per cent and 12.74 per cent, respectively). The Coefficient of Variation (CV), estimates indicates that world agri-exports and agri-imports was 53.76 per cent and 52.72 per cent, respectively. In case of India's agri-exports and agri-imports was 83.74 per cent and 88.75 per cent. Its variability is about 30 percentage point higher than that for the world agri-trade. It may be concluded that India's trade in agriculture is highly volatile.

There is a need to develop efficient global value-chains and encourage contract farming on medium- to long-term basis (Gulati, 2018). Exporters and processors must be encouraged to buy directly from farmer producer organisations (FPOs). Attention may be given for diversification of agricultural exports for more products and more destinations with improved infrastructure, trained human resources and support facilities to move up the value chain and meet international standards like sanitary and phytosanitary measures, etc. The efficiency at production level needs to be raised in order to make the product price competitive in the international market. The producers and exporters need to be educated and trained to maintain the quality of the products as per global standards.

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