Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 12, Issue 3, July 2021: 5155-5167

Research Article

### Impact Of Post Liberalization On Agricultural Exports In India

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### **ABSTRACT**

Export is very important for the growth of economy as it leads to the gaining of foreign exchange which helps in the growth of the economy. More growth of the economy leads to more prosperous nation. The main objective of the present study is to make a comprehensive analysis of India's agricultural exports growth in the post-liberalization period. (i) To analyze the trends and growth rate of agricultural exports in India during 1991-92 to 2016-17. (ii) To examine the impact of post liberalization on agricultural exports in India. (iii) To identify the determinants of agricultural exports in India. The present study is based entirely on secondary data. The study focuses on the impact of post liberalization on agricultural exports in India. The data for this study have been collected from secondary sources of information mainly from the journals, international trade data source such as Directorate General of Commercial Intelligence and Statistics (DGCI&S), World Trade Organization Trade Statistics 2017, Hand Book of statistics on Indian Economy 2017-18, Reserve Bank of India (RBI), World Bank, United Nations Trade Data, Commodity Trade Statistics. United Nations Trade Data, Commodity Trade Statistics, World Bank database. The study used multiple regression model mainly for examining the impact of post liberalization on agricultural exports in India.

Keywords: Post-Trade liberalization, agricultural exports, Multiple regression. INTRODUCTION

International trade played a prominent role in India's economic growth. In fact, the growth and development of exports earns valuable foreign exchange for the country. Exports are the main resources for a developing country to achieve a rapid growth. Exports help in enlarging the size of the market extending the international division of labour and specialization and scale of production. Agriculture plays a vital role in India's economy. Over 58 per cent of the rural households depend on agriculture as their principal means of livelihood. Agriculture, along with fisheries and forestry, is one of the largest contributors to the Gross Domestic Product (Hari Babu 2017). Exports is a prominent role of a country's national economy, and contributes substantially to the economic welfare of the people and the development of resources. Economies of scale and international specialization as also the fruits of scientific and technological progress in the world

become more easily accessible through the foreign trade. agricultural exports of India had come to occupy a crown position in the international market over the years (Agarwal 1975). Today, India

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is a major supplier of several agricultural products like tea, coffee, rice, spices, cashew, oil meals, fresh fruits, fresh vegetables, meat and its preparations and Miscellaneous products to the global market. However, the country faces cut throat competition from other major players in the field, both the existing and new entrants in the field. Ironically, the major challenge is from within Asia itself where countries like China, Malaysia, Philippines, Thailand, Singapore, United states of America, United Kingdom and Indonesia among others pose a big threat to Indian agricultural products (Raj Kumar and Varsha Dadhich, 2013). This paper seeks to examine the impact of post liberalization on agricultural exports in India during the period of 1991-92 – 2016-17.

### **OBJECTIVES OF THE STUDY**

The main objective of the present study is to make a comprehensive analysis of India's agricultural exports growth in the post-liberalization period.

- 1. To analyze the trends and growth rate of agricultural exports in India during 1991-92 to 2016-17.
- 2. To examine the impact of post liberalization on agricultural exports in India.
- 3. To identify the determinants of agricultural exports in India.

## RESEARCH METHODOLOGY

The present study is based entirely on secondary data. The study focuses on the impact of post liberalization on agricultural exports in India. The data for this study have been collected from secondary sources of information mainly from the journals, international trade data source such as Directorate General of Commercial Intelligence and Statistics (DGCI&S), World Trade Organization Trade Statistics 2017, Hand Book of statistics on Indian Economy 2017-18, Reserve Bank of India (RBI), World Bank, United Nations Trade Data, Commodity Trade Statistics. United Nations Trade Data, Commodity Trade Statistics, World Bank database.

### SEMI LOG MODEL & COMPOUND GROWTH RATE

Further the researcher has used the Semi log model, in order to compute the Instantaneous Growth Rate and the Compounded Annual Growth Rate (CAGR) the Semi-log is used and was computed using the following models.

If  $Y_t$  = Variable at time t and  $Y_t$  = initial year value of the variable, simple compounding is explained as

 $logY=a+b_t$ 

**CGR**= (**Anti log b-1**)100

### **MULTIPLE REGRESSION MODEL**

The study used multiple regression model mainly for examining the impact of post liberalization on agricultural exports in India. The multiple regression model used for the present analysis are specified as follows

 $LogY = b_0 + b_1 log X_1 + \\ + b_2 log X_{2+} b_3 log X_{3+} \\ b_4 log X_{4+} b_5 log X_{5+} \\ b_6 log X_{6+} b_7 log X_7 + \\ \epsilon_t$ 

Where Y is the dependent variable selected for the analysis and  $X_{its}$  are the explanatory variables selected and  $\varepsilon$ t is the error term.

India's Trade Liberalization policy introduced in 1991. The composition of export trade of India has undergone a change. India is a very old participant in world trade. India is making export of few traditional goods like; coffee exports, tea & mate exports, oil cakes exports, tobacco exports, cashew kernels exports, spices exports, sugar and molasses exports, raw cotton exports, rice exports, fish and fish preparations exports, meat and meat preparations exports, fruits, vegetable & pulses exports, miscellaneous processed foods exports. The present study examines the impact of trade reform on Indian's agricultural exports in 1991-92 to 2016-17. Annual average growth and the trend values are presented in Table No.1.1.

TABLE NO.1.1, INDIA'S AGRICULTURAL EXPORTS DURING 1991-92 TO 2016-17

Year	<b>Indian Exports</b>	<b>Agricultural Exports</b>	AAGR (%)	Trend	Share
1991-92	17865	3338		-3669	18.7
1995-96	31797	6320	44.7	2584	19.9
2000-01	44076	6256	10.3	10400	14.2
2005-06	103092	10549	24.5	18217	10.2
2010-11	251136	24448	36.1	26033	9.7
2015-16	262290	33049	-16.0	33849	12.6
2016-17	276280	33994	2.9	35413	12.3

Source: Economic survey, 2017-18.

It is understood from the Table No. 1.1 that the agricultural exports have increased from US \$3,338 million dollar in the year 1991-92 to US \$33,994 million dollar in the year 2016-17. Similarly, its share in Indian total exports also incessantly declined from 18.7 per cent to 12.3 per cent.

FIGURE NO.1.1, INDIA'S AGRICULTURAL EXPORTS y = 10404x350000  $R^2 = 0.9174$ 300000 250000 200000 150000 y = 1267.1x100000  $R^2 = 0.8953$ 50000 96-5661 2002-03 2005-06 2009-10 26-9661 1997-98 1998-99 2006-07 2008-09 2014-15 2015-16 1992-93 1994-95 2000-01 2004-05 2010-11 1993-94 00-6661 2001-02 Total Exports ---- Agricultural Exports

TABLE NO.1.2, COFFEE EXPORTS IN INDIA

Year	Coffee	AAGR (%)	Trend	Share
1991-92	135		124	4.0
1995-96	449	34.0	230	7.1
2000-01	259	-17.8	363	4.1
2005-06	359	59.6	496	3.4
2010-11	662	54.7	628	2.7
2015-16	783	-3.8	761	2.4
2016-17	845	8.0	788	2.5

Source: Economic survey, 2017-18.

It is inferred from the Table No.1.2 that the Agricultural export earnings, coffee export gone up from US \$135 million dollar in the year 1991-92 to US \$845 million dollar in the year 2016-17. The Coffee exports share of India in Agricultural exports fell down from 4.0 per cent in 1991-92 to 2.5 per cent in 2016-17.

TABLE NO.1.3, TEA & MATE EXPORTS IN INDIA

Year	Tea and mate	AAGR (%)	Trend	Share
1991-92	491		279	14.7
1995-96	350	12.5	354	5.5
2000-01	433	6.1	449	6.9
2005-06	391	-2.0	543	3.7
2010-11	736	18.5	638	3.0
2015-16	721	5.7	732	2.2
2016-17	734	1.9	751	2.2

Source: Economic survey, 2017-18.

The above Table No.1.3 displays the Agricultural export earnings, tea and mate export accelerated from US \$491 million dollar in the year 1991-92 to US \$734 million dollar in the year 2016-17. The tea and mate exports share of India in Agricultural exports fell down from 14.7 per cent in 1991-92 to 2.2 per cent in 2016-17.

TABLE NO.1.4, OIL CAKES EXPORTS IN INDIA

Year	Oil cakes	AAGR (%)	Trend	Share
1991-92	374		326	11.2
1995-96	702	22.5	591	11.1
2000-01	448	21.1	923	7.2
2005-06	1101	58.2	1254	10.4
2010-11	2438	47.7	1585	10.0
2015-16	550	-58.6	1916	1.7
2016-17	802	45.8	1982	2.4

**Source:** Economic survey, 2017-18.

The Table No.1.4 highlighted that the Agricultural export earnings, oil cakes exports increased from US \$374 million dollar in the year 1991-92 to US \$802 million dollar in the year

2016-17. The oil cakes exports share of India in Agricultural exports fell down from 11.2 per cent in 1991-92 to 2.4 per cent in 2016-17.

TABLE NO.1.5, TOBACCO EXPORTS IN INDIA

Year	Tobacco	AAGR (%)	Trend	Share
1991-92	153		-51	4.6
1995-96	134	65.4	114	2.1
2000-01	191	-16.6	319	3.1
2005-06	300	8.7	525	2.8
2010-11	875	-4.5	731	3.6
2015-16	986	2.7	937	3.0
2016-17	962	-2.4	978	2.8

Source: Economic survey, 2017-18.

The Table No.1.5 revealed that the Agricultural export earnings, tobacco export grow up from US \$153 million dollar in the year 1991-92 to US \$962 million dollar in the year 2016-17. Tobacco export share of India in Agricultural exports declined from 4.6 percent in 1991-92 to 2.8 per cent in 2016-17.

TABLE NO.1.6, CASHEW KERNELS EXPORTS IN INDIA

Year	Cashew kernels	AAGR (%)	Trend	Share
1991-92	274		240	8.2
1995-96	370	-6.8	335	5.9
2000-01	412	-27.2	454	6.6
2005-06	586	12.0	574	5.6
2010-11	627	5.2	693	2.6
2015-16	777	-15.5	812	2.4
2016-17	797	2.6	836	2.3

**Source:** Economic survey, 2017-18.

From the Table No. 1.6 it was clear that the Agricultural export earnings, Cashew kernels improved from US \$274 million dollar in the year 1991-92 to US \$797 million dollar in the year 2016-17. The Cashew kernels export share of India in Agricultural exports decreased from 8.2 percent in 1991-92 to 2.3 per cent in 2016-17.

TABLE NO.1.7, SPICES EXPORTS IN INDIA

Year	Spices	AAGR (%)	Trend	Share
1991-92	160		-420	4.8
1995-96	237	21.5	44	3.8
2000-01	354	-9.9	624	5.7
2005-06	478	19.5	1203	4.5
2010-11	1768	36.2	1783	7.2
2015-16	2540	4.6	2363	7.7

2016-17	2899	14.1	2479	8.5
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Source: Economic survey, 2017-18.

Table No. 1.7 shows that the agricultural export earnings, spices exports gone up from US \$160 million dollar in the year 1991-92 to US \$2899 million dollar in the year 2016-17. The spices exports share of India in agricultural exports increased from 4.8 percent in 1991-92 to 8.5 per cent in 2016-17.

TABLE NO.1.8, SUGAR AND MOLASSES EXPORTS IN INDIA

Year	Sugar and molasses	AAGR (%)	Trend	Share
1991-92	64		-230	1.9
1995-96	151	655.0	29	2.4
2000-01	112	1144.4	352	1.8
2005-06	135	297.1	675	1.3
2010-11	1246	4514.8	999	5.1
2015-16	1601	77.3	1322	4.8
2016-17	1341	-16.2	1386	3.9

**Source:** Economic survey, 2017-18.

Table No. 1.8 brought out the agricultural export earnings, Sugar and molasses exports increased from US \$64 million dollar in the year 1991-92 to US \$1341 million dollar in the year 2016-17. The Sugar and molasses exports share of India in agricultural exports accelerated from 1.9 percent in 1991-92 to 3.9 per cent in 2016-17.

TABLE NO.1.9, RAW COTTON EXPORTS IN INDIA

Year	Raw Cotton	AAGR (%)	Trend	Share
1991-92	124		-578	3.7
1995-96	61	35.6	-41	1.0
2000-01	49	157.9	630	0.8
2005-06	656	681.0	1301	6.2
2010-11	2910	44.8	1972	11.9
2015-16	1958	2.8	2643	5.9
2016-17	1637	-16.4	2777	4.8

**Source:** Economic survey, 2017-18.

The Table No.1.9 Clearly shows the agricultural export earnings, raw cotton exports accelerated from US \$124 million dollar in the year 1991-92 to US \$1637 million dollar in the year 2016-17. Raw cotton exports share of India in agricultural exports increased from 3.7 percent in 1991-92 to 4.8 per cent in 2016-17.

TABLE NO.1.10, RICE EXPORTS IN INDIA

Year	Rice	AAGR (%)	Trend	Share
1991-92	306		-859	9.2

1995-96	1366	255.7	196	21.6
2000-01	644	-10.2	1514	10.3
2005-06	1405	-5.7	2833	13.3
2010-11	2545	7.2	4151	10.4
2015-16	5835	-25.7	5470	17.7
2016-17	5778	-1.0	5733	17.0

Source: Economic survey, 2017-18.

Table No. 1.10 shows the agricultural export earnings, rice exports gone up from US \$306 million dollar in the year 1991-92 to US \$5778 million dollar in the year 2016-17. The rice exports share of India in agricultural exports increased from 9.2 percent in 1991-92 to 17 per cent in 2016-17.

TABLE NO.1.11, FISH AND FISH PREPARATIONS EXPORTS IN INDIA

Year	Fish and fish preparations	AAGR (%)	Trend	Share
1991-92	585		-99	17.5
1995-96	1011	-10.2	609	16.0
2000-01	1394	18.1	1494	22.3
2005-06	1589	15.2	2379	15.1
2010-11	2623	25.7	3264	10.7
2015-16	4769	-13.5	4149	14.4
2016-17	5920	24.2	4326	17.4

**Source:** Economic survey, 2017-18.

Table No.1.11 gave an insight of the agricultural export earnings, fish & fish preparations exports accelerated from US \$585 million dollar in the year 1991-92 to US \$5920 million dollar in the year 2016-17. The fish & fish preparations exports share of India in agricultural exports decelerated from 17.5 percent in 1991-92 to 17.4 per cent in 2016-17.

TABLE NO.1.12, MEAT AND MEAT PREPARATIONS EXPORTS IN INDIA

Year	Meat and meat preparations	AAGR (%)	Trend	Share
1991-92	94		-946	2.8
1995-96	187	46.1	-229	3.0
2000-01	322	78.9	666	5.1
2005-06	621	55.6	1562	5.9
2010-11	1971	48.8	2457	8.1
2015-16	4205	-14.7	3353	12.7
2016-17	4055	-3.6	3532	11.9

**Source:** Economic survey, 2017-18.

Table No.1.12 revealed the agricultural export earnings, Meat & meat preparations exports incessantly gone up from US \$94 million dollar in the year 1991-92 to US \$4055 million dollar in

the year 2016-17. The Meat & meat preparations exports share of India in agricultural exports gone up from 2.8 percent in 1991-92 to 11.9 per cent in 2016-17.

TABLE NO.1.13, FRUITS, VEG & PULSES EXPORTS IN INDIA

Year	Fruits Vegetables and pulses	AAGR (%)	Trend	Share
1991-92	143		-179	4.3
1995-96	240	24.4	137	3.8
2000-01	352	25.7	532	5.6
2005-06	824	45.3	926	7.8
2010-11	1397	4.0	1321	5.7
2015-16	1693	14.4	1716	5.1
2016-17	2066	22.0	1794	6.1

Source: Economic survey, 2017-18.

Table No.1.13 shows the agricultural export earnings, export of fruits, vegetables and pulses exports raised from US \$143 million dollar in the year 1991-92 to US \$2066 million dollar in the year 2016-17. The fruits, vegetables and pulses exports share of India in agricultural exports improved from 4.3 percent in 1991-92 to 6.1 per cent in 2016-17.

TABLE NO.1.14, MISCELLANEOUS PROCESSED FOODS EXPORTS IN INDIA

Year	Miscellaneous processed foods	AAGR (%)	Trend	Share
1991-92	124		-292	3.7
1995-96	223	147.8	8	3.5
2000-01	239	36.6	382	3.8
2005-06	359	32.5	757	3.4
2010-11	806	17.5	1132	3.3
2015-16	2154	1.0	1507	6.5
2016-17	1856	-13.8	1582	5.5

**Source:** Economic survey, 2017-18.

Table No.1.14 shows that the agricultural export earnings, Export of miscellaneous processed foods exports increased from US \$124 million dollar in the year 1991-92 to US \$1856 million dollar in the year 2016-17. The Miscellaneous processed foods exports share of India in agricultural exports increased from 3.7 percent in 1991-92 to 5.5 per cent in 2016-17.

### FIGURE NO.1.2. INDIA'S AGRICULTURAL EXPORTS

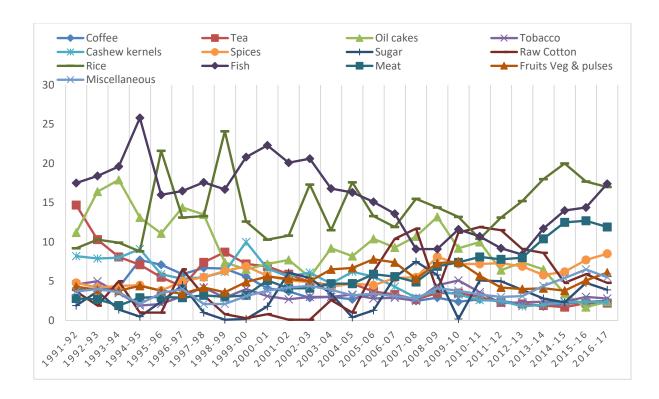


TABLE NO.3.13 TREND AND GROWTH RATE OF AGRICULTURAL AND ALLIED PRODUCTSEXPORT IN INDIAFROM 1991-92 TO 2016-17

Variable	Semi log Model	CCD			
Variable	a	b	t	$\mathbb{R}^2$	CGR
Coffee	5.147	0.061	6.550	0.641	6.3
Conee	(0.144)	(0.009)	0.550	0.041	0.3
Tea and mate	5.707	0.036	6.484	0.637	3.6
Tea and mate	(0.085)	(0.005)	0.464	0.037	3.0
Oil cakes	6.077	0.055	3.923	0.391	5.7
Off Cakes	(0.218)	(0.014)	3.923	0.391	3.7
Tobacco.	4.543	0.097	12.478	0.866	10.1
Tobacco.	(0.120)	(0.008)	12.470	0.800	10.1
Cashew kernels	5.612	0.045	12.240	0.862	4.6
Cashew Kerners	(0.057)	(0.004)	12.240	0.802	4.0
Spices	4.727	0.128	16.498	0.919	13.6
Spices	(0.120)	(0.008)	10.496	0.919	13.0
Sugar and	3.307	0.154	4.603	0.469	16.7
molasses	(0.518)	(0.034)	4.003	0.407	10.7
Raw Cotton	3.224	0.187	5.274	0.537	20.6
Naw Colloii	(0.547)	(0.035)	3.414	0.337	20.0
Rice	5.704	0.121	12.659	0.870	12.9
NICE	(0.148)	(0.010)	12.039	0.670	14.9

Fish and fish	6.349	0.081	14.446	0.897	8.4
preparations	(0.086)	(0.006)	14.440	0.897	8.4
Meat and meat	3.990	0.174	23.858	0.960	19.0
preparations	(0.113)	(0.007)	23.030	0.900	19.0
Fruits Vegetables	4.728	0.119	24.930	0.963	12.6
and pulses	(0.073)	(0.005)	24.930	0.903	12.0
Miscellaneous	4.338	0.123	15.638	0.911	13.0
processed foods	(0.121)	(0.008)	13.036	0.911	13.0
Agricultural and	7.895	0.106	16.755	0.921	11.2
allied Products	(0.098)	(0.006)	10.733	0.921	11.4

**Source:** Calculated by the researcher

(Figures in bracket indicate Standard Error)

From the above Table No.3.13 it could be known that the t values of the trend co-efficient were found to be statistically significant at one per cent level. The R<sup>2</sup> values were also found to be satisfactory. As far as growth rate of the exports of agricultural and allied exporting products were concerned, raw cotton had the top most growth rate of 18.7 per cent per year, meat had the second largest export growth rate of 17.4 per cent, sugar had the third place in export growth rate with 15.4 per cent per year followed by spices (12.8 per cent), miscellaneous (12.3 per cent), rice (12.1 per cent), fruit (11.9 per cent), tobacco (9.7 per cent) ,fish (8.1 per cent), coffee (6.1 per cent), oil (5.5 per cent) and cashew (4.5 per cent) per year. The lowest export growth rate was witnessed in tea, which had 3.6 per cent per annum. Regarding the compound growth rate of exports was concerned, raw cotton had the highest compound growth rate of 20.6 per cent per annum and tea had the lowest compound growth rate of 3.6 per cent per annum.

### **DETERMINANTS OF AGRICULTURAL EXPORTS**

The multiple regression result for determinants of major commodity items of agricultural export was shown. With demand factors Table No.1.15.

TABLE NO.1.15, DETERMINANTS OF INDIA'S AGRICULTURAL EXPORTS WITH DEMAND FACTORS

Constant	REER	World Demand	Openness	Tariff rate	R-Square
-13.372 (-5.191)	-0.448 (2.609) *	0.142 (6.669) *	0.429 (2.646) *	-0.092 (0.596)	0.974

**Source:** Calculated by the researcher

**Note:** Figures in bracket indicate t-value.

It could be seen from the table.1.15 that the relationship between India's exports of agricultural exports and influencing variables in demand side. The estimated R<sup>2</sup> value of this model indicates that 97 per cent of variation in agricultural exports is explained by the independent variables namely REER, World demand, Openness and Tariff rate. Except Tariff Rate, all other

<sup>\*</sup>Indicates that the t-values are statistically significant at 5 per cent level.

variables were statistically significant at the 5 per cent level. The World demand and openness had positive sign and significant Impact on this commodity. It indicates the one per cent increase in World demand and openness would lead to increase the agricultural export 0.142 per cent and 0.429 per cent respectively. Whereas, The REER and Tariff rate had negatively related with agricultural exports, that is one per cent decrease in Tariff rate would increase the agricultural export by 0.448 per cent and 0.092 per cent respectively.

TABLE NO.1.16, DETERMINANTS OF INDIA'S AGRICULTURAL EXPORTS WITH SUPPLY FACTORS

Intercept	Relative Price	GDP	FDI	<b>Domestic Demand</b>	Openness	Tariff rate	R-square
-2.186	-0.495	0.249	0.073	-0.180	0.454	-0.109	0.979
(-1.533)	(2.818) *	(3.608) *	(1.984)	(2.992) *	(2.642) *	(1.996)	0.777

**Source:** Calculated by the researcher

**Note:** Figures in bracket indicate t-value.

Table No. 1.16 shows that the all explanatory variables were jointly responsible for 95 per cent variation in the agricultural exports. Further R-square value considered to be satisfactory. The variables Relative prices, Capability to export, Domestic demand, Openness were statistically significant at the 5 per cent level. The explanatory variables capability to export (measured in terms by GDP), Foreign Direct Investment (FDI) and Openness had positively related with agricultural exports. It indicated that one per cent increase in capability to export, Foreign Direct Investment and Openness would increase the agricultural exports by 0.249 per cent, 0.073 per cent and 0.454 per cent respectively. The Relative price, Domestic demand and Tariff rate had negative relation with dependent variable that is one per cent decrease in Relative price, Domestic demand and Tariff rate would result in increased the agricultural exports by 0.495 per cent, 0.180 per cent and 0.109 per cent respectively.

### **CONCLUSION**

India is one of the huge populations consist country in the world with more than 58 percent of the people involved in agriculture. Agriculture is an income generator of the society. It will give more employment opportunity to educated and uneducated peoples and many businesses are depending on agriculture (Paramasivan and Pasupathi, 2017). The study finding the agricultural and allied products, Fish and fish preparations exports had the highest share value of 17.5 per cent to 17.4 per cent. Rice exports had the second largest share value of 9.2 per cent to 17.0 per cent. The third place secured by Meat and meat preparations exports, which had the share value of 2.8 per cent to 11.9 per cent followed by raw cotton (US \$1,34.17 million), spices (US \$1,15.94 million), fruit (US \$78.92 million), miscellaneous (US \$74.88 million), oil (US \$66.23 million), sugar (US \$64.63 million), tobacco (US \$41.18 million) and coffee (US \$26.5 million) per annum. Tea had the lowest annual average export value of US \$ 18.89 million per year. Spices exports

<sup>\*</sup>Indicates that the t-values are statistically significant at 5 per cent level.

(4.8 per cent to 8.5 per cent), Fruits, Vegetables and pulses exports (4.3 per cent to 6.1 per cent)Miscellaneous processed foods exports (3.7 per cent to 5.5 per cent),Raw Cotton exports (3.7 per cent to 4.8 per cent), Sugar and molasses exports (1.9 per cent to 3.9 per cent), Tobacco exports (4.6 per cent to 2.8 per cent), Coffee exports (4.0 per cent to 2.5 per cent), Oil cakes exports (11.2 per cent to 2.4 per cent), Cashew kernels exports (8.2 per cent to 2.3 per cent), Tea & mate exports (14.7 per cent to 2.2 per cent). The study finding the agricultural and allied products, Raw cotton had the top most growth rate of 20.6 per cent per annum, followed by meat (19.0 per cent), sugar (16.7per cent), spices (13.6 per cent), miscellaneous (13.0per cent), rice (12.9 per cent), fruit (12.6per cent), tobacco (10.1per cent), fish (8.4 per cent), coffee (6.3per cent), Oil cakes (5.7per cent), Cashew kernels (4.6per cent) and tea had the lowest compound growth rate of 3.6 per cent per annum. In demand side, the variables World demand and openness had positive sign and significant impact on this commodity. It indicates that one per cent increase in World demand and openness would lead to increase the agricultural exports by 0.142 per cent and 0.429 per cent respectively. Whereas, The Real Effective Exchange Rate (REER) and Tariff rate had negatively related with agricultural exports, that is one per cent decrease in Real Effective Exchange Rate (REER) and Tariff rate would increase the agricultural exports by 0.448 per cent and 0.092 per cent. In supply side, the explanatory variables capability to export (measured in terms by GDP), Foreign Direct Investment (FDI) and Openness had positively related with agricultural exports. It indicated that one per cent increase in capability to export, Foreign Direct Investment and Openness would increase the agricultural exports by 0.249 per cent, 0.073 per cent and 0.454 per cent respectively. The Relative price, Domestic demand and Tariff rate had negative relation with dependent variable that is one per cent decrease in Relative price, Domestic demand and Tariff rate would result in increased the agricultural exports by 0.495 per cent, 0.180 per cent and 0.109 per cent respectively. Finally, Exporters should take the advantage of "Make in India" scheme started by Indian government by Prime Minister. Research and development need to be emphasized upon. Optimum utilization of schemes and resources is required to minimize the trade deficit and make India a productive and prosperous nation. Thus, in order to improve the performance of export sector, policies must be introduced so that the performance of agriculture sector is improved and strengthened in future.

#### **REFERENCE**

- ♣ P. Hari Babu (2017) "Export Performance of Spices in India: An Empirical Study" parikalpana KIIT Journal of Management Page No. 66-74.
- ♣ Agarwal, A.N. (1975), Indian Economy: Problems of Development and Planning, Vikas Publishing House Pvt. Ltd., New Delhi. p. 577.
- → Dr.Raj Kumar and Varsha Dadhich (2013) "Growth and Performance of India's Agriculture Export" International Journal of 360o Management Review, Vol. 01, Issue 01, April 2013 ISSN: 2320-7132. IJ360MR, www.ij360mr.com.
- ♣ Prakash Brahm, Sushila Shrivastava and S Lal, (1995), Impact of New Economic Policy on Export of Agricultural Commodities from India, *Indian Journal of Agricultural Economics*, Vol50(3), July-Sept.
- ♣ Suresh And Mathur (2016) "Export of Agricultural Commodities from India: Performance and Prospects" Indian Journal of Agricultural Sciences 86 (7): 876–83, July 2016/Article.

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- ♣ Mathanraj.T, (2019), "Impact of trade liberalization on India's manufactured exports" Think India, ISSN: 0971-1260, UGC Approved CARE journal, Volume-22 Issue-4, Impact factor-6.2, October- December 2019.
- ♣ Nageshwara M R and S Srinivas Rao, (2009), Direction of Trade in Indian Agricultural Commodity Exports, Southern Economist, Vol47 (19) pp-23.
- → Dr. C Paramasivan, 2 R Pasupathi (2017) "Study on growth and performance of Indian agro based exports", International Journal of Humanities and Social Science Research Volume 3; Issue 9; September 2017; Page No. 01-05ISSN: 2455-2070, Impact Factor: RJIF 5.22 www.socialsciencejournal.in
- ♣ Directorate General of Commercial Intelligence and Statistics (DGCI&S) (Economic survey, 2017),
- World Trade Organization Trade Statistics 2017,
- Hand Book of statistics on Indian Economy, Reserve Bank of India (RBI),
- ♣ World Bank, United Nations Trade Data, Commodity Trade Statistics.
- United Nations Trade Data,
- Commodity Trade Statistics,
- World Bank database.