

PERFORMANCE OF AGRICULTURAL SECTOR THROUGH INTERNATIONAL TRADE IN INDIA

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1. Introduction

The purchasing and selling of goods generated by the farming and forestry industries is referred to as agricultural trade. It can increase customer access to a wider range of agricultural products, frequently at cheaper rates. International Agricultural trade is the exchange or import and export of goods and services of agriculture and allied products between countries. Agricultural exporting is the sale of goods and services of agri-allied products from one's own country to another. On the other hand, Agricultural Importing refers to the Purchase of goods and services of agri-allied foreign product and their transportation into one's native nation.

The term "agricultural trade" refers to the commercial activities associated with moving agricultural products (goods and services) such as farm, horticulture, and other allied products from one country to another. Agricultural marketing refers to all actions taken to move agricultural products from producers to consumers through several levels of marketing channels, including time (storage), location (transportation), form (processing), and ownership transfer. The foundation of the Indian economy is agriculture. 170 million out of 320 million workers are employed in agriculture. (Rehman, Selvaraj, & Ibrahim, 2012)

Historical background of Agricultural Trade of India

India is one of the top exporters of agricultural goods worldwide. The nation's overall agricultural exports in 2021-22 totalled US\$ 49.6 billion, a 20% rise from US\$ 41.3 billion in 2020-21. The main exports of India's agriculture industry include agriculture and associated products, marine products, plantation products, and textile and allied products. The greatest agricultural export from India is rice, which accounted for more than 19% of all agricultural exports in the years 2021-2022. The top three agricultural exports in 2021-22 are sugar, spices, and buffalo meat, which account for 9%, 8%, and 7% of total exports, respectively. Following a notable increase from exports of US\$ 568 million in 2021-22, wheat exports were valued at US\$ 2.1 billion in 2021-22. The first-ever crossing of the \$1 billion mark in

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coffee exports has increased profits for coffee growers in Tamil Nadu, Kerala, and Karnataka. Farmers in the coastal states of West Bengal, Andhra Pradesh, Odisha, Tamil Nadu, Kerala, Maharashtra, and Gujarat benefit from increased exports of marine products worth US\$ 7.7 billion. (<https://www.ibef.org>)

REVIEW OF LITERATURE

Nayyar and Sen 1994 have studied the implications and effects of India's trade policy change for the agriculture sector in particular and the economy in general. To draw attention to the international context, it outlines the current state of agricultural trade in the multilateral trading system, highlights the fundamental differences considered in the Uruguay Round, and its impact on India's agricultural sector and economy.

(Bhatnagar, choudhary, & bhardwaj, 2019) in their study have attempted to establish a relationship between the independent and dependent variables of both the export and import functions, as well as to look at the causality and the direction of the relationship between the variables, over the time period of 1990-2015. The goal of the study was to estimate the import and export elasticity of agricultural products in India. According to the findings, the elasticity of import and export prices was lower than that of their income elasticity. The change in India's Gross Domestic Product was a through explanation for imports, which were less vulnerable to exchange rate fluctuations. Therefore, a change in the actual exchange rate will have little effect on India's import and export.

(gaikar, 2019) has studied "An Evaluation of Agricultural Trade in India: A Special Study of Selected Agricultural Commodities". The study looked into the trading of a few different agricultural products in India. It was found that India's agriculture industry has a lot of potential for making money abroad by exporting different agricultural goods. The majority of India's exports, or more than US\$33.87 billion, are agricultural products. They accounted for 10.5% of the total, with the potential to increase employment and lower unemployment.

(gohain & biswas, 2022) have found that rising domestic and global GDP helped India's agricultural imports and exports, respectively. However, it has recorded that whereas agricultural exports are unaffected by exchange rates, agricultural imports are extremely responsive to them. It is discovered that the global tariff rate and the price variations between the country of origin and other countries are statistically significant in influencing the values of agricultural exports. A rise in agricultural products' per-hectare productivity benefits exports as well.

RESEARCH METHODOLOGY

Objectives - There are 3 objectives in this Research paper, which are as follows-

1. To study the overall performance of international agricultural trade during 2011-12 to 2020-21,
2. To find out the growth of top five export and import product of India.
3. To identify the role of rice production in International Agricultural Trade.
 - (i) Contributions of rice production Export in Total Agricultural Exports
 - (ii) Contributions of rice production Import in Total Agricultural Imports

This research study is based on secondary source of published data which has been collected from magazine, research articles, agricultural annual reports & government website like Directorate of Economics and Statistics and Department of Commerce, Government of India. The data has been covered and taken 10 financial years from 2011-12 to 2020-21 for Research study.

The data has been presented is the form of tables and graphs. The data has been analysed by using various statistical tools like percentage, proportion, annual growth rates with the help of MS excel software. Analytical type of research design has been used in this research work.

DATA ANALYSIS AND INTERPRETATION

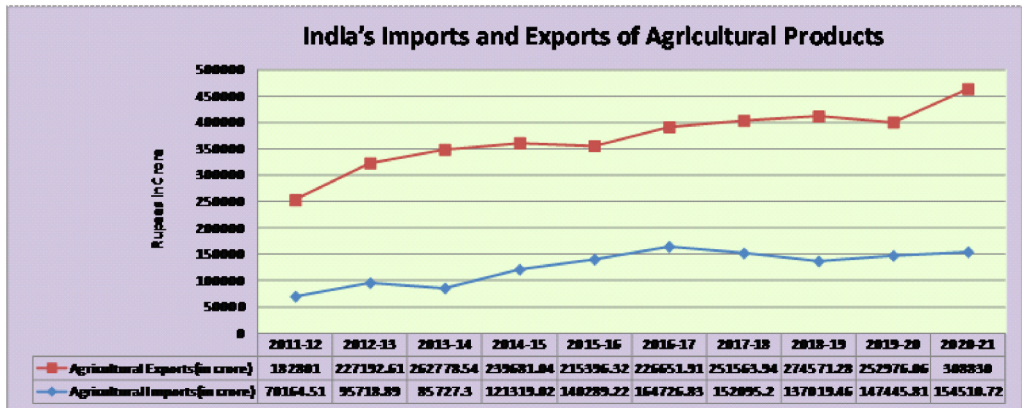
Table No.01 (i). India's Imports and Exports of Agricultural Products

(Value in Rs. crores)

Year	Agricultural Imports	Total National Imports	Proportion in Total (%)	Agricultural Exports	Total National Exports	Proportion in Total (%)
2011-12	70164.51	2345463.23	2.99	182801	1465959.39	12.47
2012-13	95718.89	2669161.95	3.59	227192.61	1634318.28	13.9
2013-14	85727.3	2715420.78	3.16	262778.54	1905011.08	13.79
2014-15	121319.02	2736676.99	4.43	239681.04	1896348.42	12.64
2015-16	140289.22	2490303.76	5.63	215396.32	1716384.39	12.55
2016-17	164726.83	2577671.14	6.39	226651.91	1849433.55	12.26
2017-18	152095.2	3001033	5.07	251563.94	1956514.52	12.86
2018-19	137019.46	3594674.22	3.81	274571.28	2307726.19	11.9
2019-20	147445.81	3360954.45	4.39	252976.06	2219854.17	11.4
2020-21	154510.72	2915958	5.3	308830	2159043	14.3

Source: Directorate of Economics and Statistics (www.eands.dacnet.nic.in)

Chart No.01. India's Imports and Exports of Agricultural Products



Above table and graph have shown the value of agricultural export and import of India and proportion of agriculture export-import in total national EXIM of India during last 10 sessions from 2011-12 to 2020-21. Comparison of export and import in proportion category, the export is more valuable than the import of agriculture products, that means trade has shown a surplus. In session 2020-21 export agricultural trade is maximums that was Rs.308830.00 crores.(14.30% in total national Export) during this 10 session but in case of import agriculture trade was maximum in session 2016-17 that was Rs.164726.83 crores.(6.39% in total national import) as compare to all last 10 session

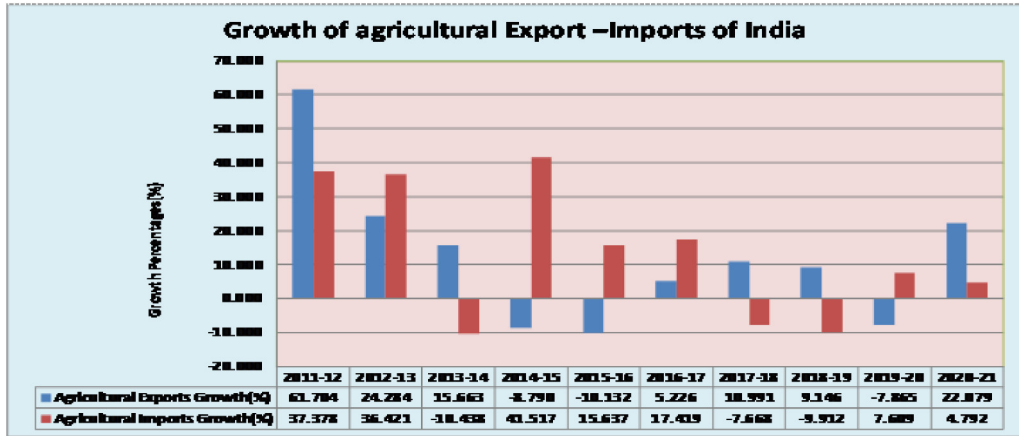
Table No. 01 (ii). Growth of agricultural Export -Imports of India

(Value in Rs. crores)

Year	Agricultural Exports	Growth(%)	Agricultural Imports	Growth (%)	Difference (Export-Import)
2011-12	182801	61.704	70164.51	37.378	112636.49
2012-13	227192.61	24.284	95718.89	36.421	131473.72
2013-14	262778.54	15.663	85727.3	-10.438	177051.24
2014-15	239681.04	-8.790	121319.02	41.517	118362.02
2015-16	215396.32	-10.132	140289.22	15.637	75107.1
2016-17	226651.91	5.226	164726.83	17.419	61925.08
2017-18	251563.94	10.991	152095.2	-7.668	99468.74
2018-19	274571.28	9.146	137019.46	-9.912	137551.82
2019-20	252976.06	-7.865	147445.81	7.609	105530.25
2020-21	308830	22.079	154510.72	4.792	154319.28

Source: Directorate of Economics and Statistics (www.eands.dacnet.nic.in)

Chart No.01(ii). Growth of agricultural Export -Imports of India



Above table and graph have shown the per year growth of agricultural export and import of India and Difference in agriculture export-import trade of India during last 10 sessions from 2011-12 to 2020-21. Comparison of export and import in differentiate category, the export trade value is more than the import of agriculture products, that means agro-export trade sign has shown always surplus in this 10 session. In session 2011-12, growth of export agricultural trade was positive at 61.704 % on higher side but in session 2015-16 it was shown negative growth -10.132% and in case of growth of import agriculture trade was positive in session 2014-15 that was 41.517% but in session 2013-14 it was shown negative growth -10.438% as compare to all the last 10 session.

Table No. 02(i). India's Exports of Top-5 Agricultural products
(During 2016-17 to 2020-21)

		[Value in Rs. Crores, Quantity in '000' Tonnes]									
S.No.	Commodities	2016-17		2017-18		2018-19		2019-20		2020-21	
		Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
1	Marine products	1185	39594	1432	47646	1672	47665	1329	47618	1168	44176
2	Rice(other than Basmati)	6771	16930	8819	23437	7648	21171	5056	14400	13149	35557
3	Rice-basmati	3985	21513	4057	26871	4415	32804	4455	31026	4630	29848
4	Spices	1014	19111	1096	20085	1134	23218	1193	25642	1607	29529
5	Buffalo Meat	1324	26161	1350	26035	1233	25091	1152	22661	1086	23460

Source: Department of Commerce, Government of India (<https://commerce.gov.in>)

Table no.2 (i) is showing the top 5 India's exports of agricultural product during 2016-17 to 2020-21. Under session 2020-21 top 5 most export agricultural products are as follows; marine products, rice (other than basmati), rice-basmati, spices and buffalo meat. The quantity of top 5 most export agricultural products (in '000' tonnes) 1168, 13149, 4630, 1607, & 1086 respectively and the value of top 5 most export agricultural products (in Rs. Crore) 44176, 35557, 29848, 29529, & 23460 respectively.

Table No. 02 (ii). India's Imports of Top-5 Agricultural products

(During 2016-17 to 2020-21)

(Value in Rs. crores, Quantity in '000' tonnes)

S.No.	Commodities	2016-17		2017-18		2018-19		2019-20		2020-21	
		Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
1	Vegetable oils	14010	73048	15361	74996	15019	69024	14722	68558	13540	82123
2	Fresh fruits	1040	11241	995	12525	1124	13932	994	14137	1212	15765
3	Pulses	6609	28524	5608	18749	2528	8035	2898	10221	2466	11938
4	Spices	240	5758	222	6385	241	7933	321	10187	344	8071
5	Cashew	774	9027	654	9134	840	11162	941	9026	834	7491

Source: Department of Commerce, Government of India (<https://commerce.gov.in>)

Table no.2 (ii) is showing the top 5 India's imports of agricultural product during 2016-17 to 2020-21. Under session 2020-21 top 5 most import agricultural product are as follows; Vegetable oils, fresh fruits, pulses, spices & cashew. The quantity of top 5 most import agricultural products (in '000' tonnes) 13540, 1212, 2466, 344, & 834 respectively and the value of top 5 most import agricultural products (in Rs. Crore) 82123, 15765, 11938, 8071, & 7491 respectively.

Table No.03 (i) Role of rice in Total Agricultural Exports

(Value in Rs. crores)

PARTICULARS	SESSIONS									
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total Agricultural exports	182801	227192.6	262778.5	239681	215396.3	226651.9	251563.9	274571.3	252976.1	308830
Rice export (Basmati + other rice)	24108.73	33858.2	47087.03	48028.26	38201.99	38442.79	50307.9	53975.47	45426.65	65404.73
% Share in Total Agricultural Exports	13.18851	14.90286	17.9189	20.03841	17.73567	16.96116	19.99806	19.65809	17.9569	21.17823

Table no 3(i) has shown the contribution of rice production export in total agricultural exports during session from 2011-12 to 2020-21. Rice includes basmati + other than basmati rice. In session 2020-21, the percentage share of rice export in total agriculture export is maximum that is 21.178%. But in 2011-12, the percentage share of rice export in total agriculture export is minimum that is 13.188 between this study period from 2011-12 to 2020-21.

Table No.03 (ii) Role of rice in Total Agricultural Imports

(Value in Rs. crores)

PARTICULARS	SESSIONS									
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total Agricultural Imports	70164.51	95718.89	85727.3	121319	140289.2	164726.8	152095.2	137019.5	147445.8	154510.7
Rice Import (Basmati + other rice)	5.47	3.96	8.29	10.83	5.91	7.25	12.18	32.14	78.75	24.67
% Share in Total Agricultural Imports	0.007796	0.004137	0.00967	0.008927	0.004213	0.004401	0.008008	0.023457	0.053409	0.015967

Table no 3(i) has shown the contribution of rice production import in total agricultural imports during session from 2011-12 to 2020-21. Rice includes basmati + other than basmati rice. In session 2019-20, the percentage share of rice export in total agriculture export is maximum that is 0.0534%. But in 2012-13, the percentage share of rice export in total agriculture export is minimum that is 0.004137 between this study period from 2011-12 to 2020-21.

FINDINGS

(I.) Comparison of export and import in proportion category, the export is more valuable than the import of agriculture products, which means trade sign has shown surplus during 2011-12 to 2020-21.

(II.) When we talk about top 5 most export -import agricultural product of India, marine product is much more tradable product under agriculture export category that is Rs.44176 crores and vegetables oils is much more tradable product under agriculture import category that is Rs.88123 crores during 2016-17 to 2020-21.

(III.) As compared to the role of export-import of rice production in total agricultural EXIM, Contribution of Rice Export trade in total agricultural exports is a more than the Contribution of Rice import trade in total agricultural imports.

CONCLUSION

The present research study concludes that, Agriculture is the backbone of Indian economy. Indian Agriculture has a huge contribution in international agricultural trade. Agriculture has continued to provide a living for the majority of Indians, either directly or indirectly. India is also known for the specialty of its agricultural sector, due to the majority of the agricultural products produced in India, they are sold in foreign countries and the agricultural products that India short of are also brought out in the study. The study shows India gains through modern agriculture and export of the same and will further its economic surplus from trade.

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