

Way Forward For Indian Agricultural Exports: Trends, Scope and Concerns

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ABSTRACT

Agriculture, around the globe, is one of the most vital sectors of all the economic boroughs. Providing employment to approximately 60% of Indian population and 10% of urban ones on one hand while having a share in GDP of 15% makes this sector most important of all.

Agrarian distress coupled with rising fragmentation of land and low growth rate requires multifaceted schemes and policies. Multi pronged strategy for agricultural development comprises of not just increasing its growth rate but also enhancing its share in international trade.

This paper basically assesses the growth, changing patterns of agricultural produce and hence its effects on Indian competitiveness in international markets. Due to far reaching effects of agricultural exports viz, foreign exchange earnings and rise in farm incomes etc, this study tries to evaluate rise in agricultural exports over time. Study shows that competitive advantage of Indian agricultural goods has been rising in case of many crops while the composition too has been changing. Moreover, this paper also shows the major causes of concerns for exports in coming times.

KEYWORDS: Agricultural Exports, Growth, Trend, Comparative Advantage

➤ Introduction

India, having approximately 52% of its land as arable stands among the highest agricultural commodities producing nations (by volume).agriculture and the related occupations, e.g. textiles account for 50% of India's labour force. Thus, agriculture sector plays an important role in Indian economics, polity and society.

Agriculture in India is witnessing a shift from traditional farming to more business and export oriented one which includes horticulture, poultry, etc. Thus, with overall rise in living standards globally, "farm to fork" culture shift can be seen.

With the advent of World Trade Organisation (WTO), international trade specifically, agricultural one has changed rapidly. The economic reforms and the ratification of Agreement on agriculture (AOA) with WTO had major impacts and redefined agricultural trade on the international platform. Agricultural export, other than having socio political effects, does affect Indian economy in a great way, being one of the few sectors with a trade surplus.

Hence on the basis of prevailing reality, comparative advantage of a country or region facilitates economic integration in world trade. Consequently, a country should form its policies on the basis of comparative advantage.

Within the domain of international trade, the proliferation of regionalization is getting intensified. Therefore, in the recent past, India has been attempting international trade through regional agreement, which includes Regional Trade agreement (RTA) with ASEAN, phytosanitary certification with Taiwan, Canada, and Chile etc.

➤ MATERIAL AND METHODS

David Ricardo in his classical theory of comparative advantage (1815) seeks to explain how and why countries gain by trading. Ricardo stated a theorem that, other things being equal, a country tends to specialise in and export those commodities in the production of which it has the maximum comparative cost advantage.

The given study has focussed and hence analysed the export performance of a large no of commodity groups based on their contribution to total agricultural export. Except for studying the compositional change, the study inspects the changes in comparative advantage of India. The major crop groups considered are cereals, spices, fruits and nuts, cotton etc.

The study uses data from various published sources. The data on export of selected commodities were taken from export import bank maintained by ministry of commerce and a few from APEDA website. The data on agricultural exports of other countries were extracted from trade Yearbook of Food and Agricultural Organisation (FAOSTAT).

Though there exists a number of measured to analyse the competitiveness and hence comparative advantage of agricultural exports, one of the crude method id to compare the producer price in major exporting countries, expressed in common currency. However these figures may not express competitiveness fully due to the presence of large extent of costs on account of transportation. This issue has been resolved by the concept of competitiveness given by Revealed Comparative Advantage (RCA) (Balassa 1965), based on the concept of comparative advantage given by David Ricardo. The basic idea on which RCA is based is a country's specialization in exports of a commodity with reference to some group of countries or the global trade. The index is based on the fact that countries specialise and export those commodities which they can produce at a lower relative cost. The lower cost of production is basically due to difference in physical and capital endowments. The estimate of RCA was computed by the following formula:

$$RCA_{ij} = \frac{(X_{ij}) / (X_{wj})}{(X_i) / (X_w)}$$

Where RCA_{ij} = Revealed comparative advantage of i_{th} country's j_{th} commodity, x_{ij} = exports of j_{th} commodity by i_{th} country, X_j = total merchandise exports of i_{th} commodity, X_{wj} = world export of j_{th} commodity, X_w = total world merchandise exports.

A movement of the index towards the higher side indicates an improvement in the relative advantage and vice versa.

➤ Results

TABLE: 1

ITEM	2000	2011	GROWTH
AGRICULTURAL EXPORT	4.9	22	16.2
MERCHANDISE EXPORT	38.7	231.3	19.0

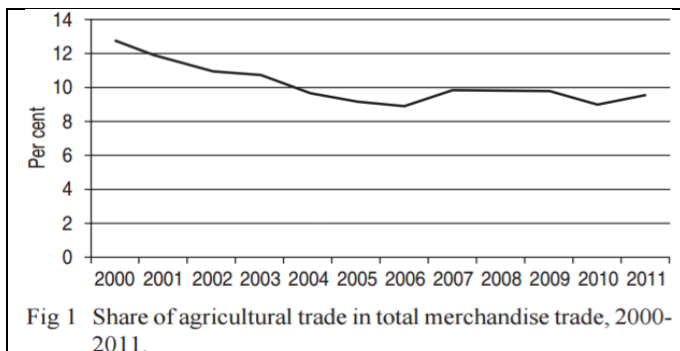
(SOURCE: secondary data)

As on 2011, India’s agricultural exports have reached US \$ 22 billion through an annual growth rate of 16.2% since 2000(table 1). All the values of the table are based on triennial averages. Agricultural exports constitute less than 10% of total merchandise exports from India and a decline trend too has been observed in recent times, specifically in post WTO period. The annual growth of agriculture and allied exports has been less than the growth of merchandise one. But, on the contrary, a rise in share of exports to agricultural GDP has also been witnessed, which rose from 7.1% in 2000 to 14% in 2011. This indicates the growing integration of Indian agriculture with world economy.

The reason might have been the changing composition due to rising diversification of Indian agriculture.

During the periods under consideration, exports have been more than imports, both at levels and in terms of growth rates. As a result of it, India's share in world agricultural trade has been rising.

Table: 2



year	world	India	Indians share in world agricultur e exports
2000	552250	6401	1.15
2005	851847	10134	1.18
2011	1659524	34323	1.6
2015	1568337	34503	1.75

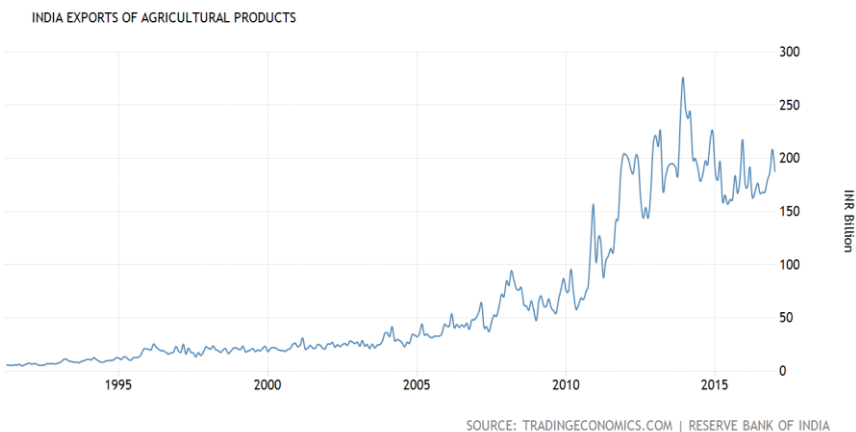


Table 2 tries to show the picture of India's exports globally. There has been absolute growth in value of India's agricultural exports and hence India's average share in world agriculture exports has risen to a level of 1.7-8 % from meagre 1% in 1995. The largest jump in share worldwide was seen by India in 2011 with a growth rate of 24%. This increase in share has enabled India to fall among the leading exporters and also signifies that the agreement in agriculture has proved beneficial to India in capturing global market share.

➤ **trends in agricultural export of selected commodities**

Table 3 shows the average percentage share of selected agricultural commodities in India's total exports. The average percentage share in exports of tea, coffee, oil meals, and marine products have reduced from 2.12, 0.88, 0.72, 1.46, 2.48, 3.48% to 0.63, 0.54, 0.65, 0.63, 0.61, 0.76 % respectively. And the average percentage share of rice, wheat, spices, fruits, vegetables have increased from 1.64, 0.1, 0.74, 0.64% to 2.03, 0.2, 1.21, 1.86% respectively. This implies that WTO and hence AOA has had negative impact on tea coffee, cashew etc while impacted positively rice, wheat, spices, fruits, vegetables. The graph also shows a declining trend in agricultural exports of India to total exports from India. Thus, despite the fact that exports have increased absolutely, we find that its share has declined. This might have been possible due to the rise in exports of non agriculture sector in a larger way.

Year	tea	coffee	Rice	wheat	tobacco	cashew	spices	oilmeals	fruits & vegetables	marine products	total agriculture & allied products	simpson index
1996-97	292.1	401.9	893.6	196.7	213.2	362.9	338.6	984.6	163	1128.9	6862.7	0.923
1997-98	504.9	456.4	907	0.1	288	378.6	379.3	924.3	158.7	1207.3	6626.2	0.909
1998-99	538.4	410.7	1492.9	0.3	181.1	387.8	388	461.5	128.4	1038.4	6034.5	0.881
1999-2000	411.9	331.1	721.4	0	232.8	567.9	407.9	378	148.4	1182.6	5608	0.908
2000-01	391.5	259.4	641.8	90.9	189.8	449.5	354.1	447.6	184.6	1393.8	5973.2	0.911
2001-02	360.5	229.6	665.6	278.9	169.4	376.2	313.9	474.5	221.1	1236.8	5901.2	0.92
2002-03	341.4	205.4	1204.9	363.6	211.4	426	342.1	307.3	245.5	1431.6	6710	0.905
2003-04	365.3	236.3	907	520.4	138.6	371	336	728.7	389.9	1328.7	7533.1	0.930
2004-05	409.6	237.9	1506.5	324.9	279.2	554	419.1	707.2	398.9	1328.7	7533.1	0.918
2005-06	390.9	358.8	1405.2	125.9	300.6	585.8	477.9	1101	481.9	1589.2	10213.8	0.934
2006-07	435.3	435	1554.9	7.8	372.4	553.9	697.9	1216.4	681	1768.2	122683.4	0.948
2007-08	505.3	465	2919.6	0.1	479.8	555.1	1071.7	2022	761.6	1720.5	18432.1	0.946
2008-09	584.6	490.4	2427.2	0.3	752.5	637.2	1378.1	2232.8	982.6	1536.4	17534.9	0.942
2009-10	620.4	428.3	2372.3	0	915.7	590.5	1253.9	1650.8	1514.6	2086.7	17734.1	0.942
2010-11	736.2	660.6	2542.9	0.2	874.7	618.8	1730.9	2429.5	1445	2615.6	24207.6	0.957
2011-12	851.1	946.2	5030.7	213.5	836	916.1	2734.1	2461.1	1728	3460.7	37473.3	0.959
2012-13	867.3	865.9	6222.8	1935.1	924.5	747.5	2789.3	3036.1	1796.3	3462.8	40937.7	0.957
2013-14	805.5	793.2	7782.7	1530.1	1013.9	842.2	2503.5	2821.4	2256.3	5062.2	42570.4	0.941
2014-15	682.2	813.4	7855	1668.9	959.8	910.3	2428.3	1329.5	2154.8	5509.7	44363.7	0.930
2015-16	720.7	782.5	5773.8	1874.9	984.8	910.3	428.3	1329.5	2154.8	5509.7	44363.7	0.948

➤ India's agricultural exports and competitiveness

The export competitiveness analyzed by comparing the producer prices of various countries and by estimating the RCA. The analysis of producer price indicated that even after liberalisation, India continues to be low cost producer.

The RCA is influenced by individual country's internal as well as external policies. The trend has been shown in table 4. It indicated that in2011; India had comparative advantage in case of cashew, coconut, coffee, mango, maize, ginger, onion pepper, rice, sugar and tea. Compared to 2011, India's comparative advantage improved in case of cotton, maize, mangoes, grapes, banana onion, and

potato. While on the contrary, weakening of RCA has been seen in case of coffee, ginger, sugar, wheat, tea, rice. While gains in RCA were noted in case of fruits and vegetables, erosion of comparative advantage is noted in plantation crops.

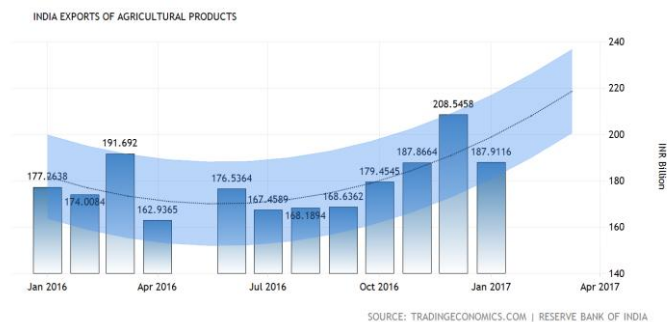
Crop	Year		Crop	Year	
	2001	2011		2001	2011
Cashew nuts	76.51	18.85	Onions	10.37	11.52
Coconuts	0.62	7.93	Oranges	0.50	0.10
Coffee	3.64	1.44	Papayas	4.33	1.44
Cotton	0.24	13.43	Pepper	14.30	4.94
Eggs	1.89	0.91	Potatoes	0.26	0.48
Bananas	0.12	0.19	Rice	14.09	9.24
Maize	0.14	1.85	Sugar	2.85	2.50
Mangoes	6.56	12.71	Tea	20.38	7.81
Ginger	6.78	3.48	Rubber	0.09	0.19
Grapes	0.88	0.99	Wheat	1.24	0.06

Source: Computed by the authors using data from FAOSTAT.

➤ prospects and way forward

One notable feature is that the Asian countries are emerging as a major competitor for Indian exports, notable in plantation crops. For example, in terms of producer prices, Sri Lanka is a competitor in case of tea; Thailand in case of sugarcane; mylasia, Sri Lanka, and Thailand in case of natural rubber and Vietnam in case of black pepper. This is on account of stagnation in productivity of crops. Another contributing factor might be lack of private capital formation.

Agri exports had declined to \$33.87 billion in 2016-17 from \$42.23 billion in 2013-14. Though the authorities believe that export and import of agricultural products depend on various factors such as availability, international and domestic demand and supply situation and quality concerns, agri experts believe that the agricultural policy is responsible for the decline.



➤ results and conclusions

The present study has analysed the trend in agri exports from India and hence the future prospects of boosting it. The study done via secondary data sources imply that there has been a significant improvement in export of agricultural commodities, but with this, commodity composition too has taken place. This does have far reaching implications on farm incomes, and thus diversification. Commodities like guar gum, cotton, spices etc have seen a significant rise in exports; while on the contrary, fish and marine products, fruits and nuts etc have declined.

Comparative advantage has improved in a number of commodities, like maize and vegetables etc. But the issue of concern is the case of plantation based commodities like spices where India is losing its comparative edge, mainly to Asian countries.

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