Trends inExport of Major Agricultural Commodities and Products from India

Abstract

India's agricultural products export touched $ 50 billion for the financial year FY22, the highest level ever achieved.Basmati and Non-basmati rice are major exports and doubled during 2010-20 compared to 2000-2010. Export value of basmati and non-basmati rice were about Rs. 32,000 crores and Rs. 23,000 crores respectively during 2019-20. Exports of processed vegetables, fruits, nuts and fresh grapes are growing nearly 3 times during 2010-2020 (Rs.500 crores each) compared to 2000-2010 (around Rs. 3,000 crores each). Exports of cucumbers, gherkins, jaggery and confectionary items are growing at a faster rate in the recent decade (Rs.400 crores during 2005-06 to Rs. 1600 crores during 2019-20). Export basket of agricultural commodities is highly diversified (Herfindahl Index: 0.09 – 0.26) and non-conventional exports like processed vegetables, fruits and vegetables are increasing in faster rate. Hence, policy support to the non-conventional and high value exports as well as small and new exporters has to be continued. Aggregation of small exports and Farmers Producers Companies will directly benefit the farmers.

Keywords: Agricultural Trade, Exports from India, Herfindahl Index

Introduction:

Total agricultural export basket accounts for about 2.5 percent of world agricultural trade.Despite COVID-19, balance of trade in agriculture has improved by 42.16per cent from USD 14.51 billion to USD 20.58 billion.In India, agriculture accounts for about 12per cent of total exports earnings which implies that uncertainty in the world agriculture market will have a great impact on the whole economy. IFC (2021) reported that India continued to supply its rice during the pandemic, thus having the largest share in the global rice trade. In 2020-21, India's rice exports (Basmati and Non-Basmati) rose by a massive 87 per cent to 17.72 Million Tonnes (MT) from 9.49 MT achieved in 2019-20.Several studies have compared the trend of India's agricultural export in the pre-and post WTO period and reported the impact during different time periods.

Objectives:

The present paper attempts to the study the following objectives:

1. To study the trends in export of select agricultural commodities from India
2. To quantify the growth and variability in value of exports from India
3. To analyze the diversification of the agricultural export basket and
4. To prepare SWOC of India's export sector

Review of Past Studies

Datta (2000) opined that India's competitiveness in rice during WTO era and finds that Indian rice was fairly price-competitive and had the potential to improve its competitive strength. India need not worry on the price front nor change her position about imposition of zero import duty on rice. The only consideration India must have during WTO renegotiations is that her rice exports do not become a victim of manipulation.

Selvaraj (2007) reported that Commodities namely orchids and cut flowers, medicinal plants-processed form, jasmine extracts, banana, grapes, fresh mangos, fresh vegetables (lettuce, cabbage, asparagus, garlic, green soyas) mango pulp, cashew, processed foods and vegetables, groundnut, non-basmati rice grown in Tamil Nadu have high export potential.

Shinoj and Mathur (2008) examined the comparative advantage of India in agricultural export in comparison with Asia in the post reform period from 1991 to 2004. India has been able to maintain comparative advantage in commodities like cashew and oil meals, but tea, coffee, spices, marine products have been negatively affected.

Niranjan (2016) analysed the pattern of exports and imports of agricultural commodities of India since 1995. He found that the international prices of agriculture commodities are low due to heavy subsidies provided to the farmers of developed countries which negatively affects the agriculture export of India. In the last, author concluded that India is not getting benefit of trade liberalization in agriculture sector.

Ranjith (2016) in his study examined the impact of world trade organization (WTO) on Indian agriculture sector and also analyses the agriculture export performance of India in Pre and Post WTO Regime. He found that the export performance of Indian agriculture sector was not satisfactory in post-WTO period while in pre-WTO era performance of this sector was more than satisfactory.

Shabana and Arifa (2017) measured the convergence or divergence of agricultural exports over the years through Simpson Index. The study found that in pre-WTO period, an attempt was made to achieve specialization in agricultural exports whereas no such attempt was made in post WTO period. The study concluded that WTO has mixed impact on India's agricultural exports. It has helped India to improve its position in global agricultural exports but it did not allow her to gain expertise in the exports of agricultural products and specialize in the commodity of its comparative advantage.

Ministry of Trade and Commerce, GOI (2020) reported that the agricultural commodities/commodity groups which have recorded positive growth during November 2020 vis-à-vis November 2019 are Other cereals (171.63%), Oil meals (72.09%), Rice (25.88%), Cereal preparations & miscellaneous processed items (17.04%), Spices (12.37%), Tobacco (8.64%), Cotton yarn/fabs./made-ups, handloom products etc. (8.54%), Fruits & vegetables (6.08%), Tea (5.02%) and Meat, dairy and poultry products (1.35%). The commodities/commodity groups which have recorded negative growth during November 2020 vis-à-vis November 2019 are Cashew (-24.53%), Oil seeds (-15.2%) and Coffee (-1.27%).

IFC (2021) reported that even though studies have focused explicitly on exports at the national level, not much has been written regarding the export performance at the subnational level. But, with the existing regional disparity in India, it becomes essential to understand the export landscape at the state level and the factors influencing the export performance. Over the years, it has been noticed that the coastal states, namely Gujarat, Maharashtra and Tamil Nadu, are the significant exporters in the country. In the year 2020- 2021, the combined share of the three states constituted around 60 per cent of the total countries exports. Relative to the coastal and landlocked areas, states in the hilly terrains are still struggling to make a mark at the global export network. Such contrast depicts how the diverse locations impact the state's export dimensions.

Methodology

Secondary data on quantity and value of major exports were collected from various secondary sources (FAO, WTO and APEDA) for the period 1990-2020. Variability in export value was examined by Coefficient of Variation (CV) and the growth in exports was estimated in Compound Annual Growth Rate (CAGR). Graphical trends were also presented in this paper.

Coefficient of variation = (Standard Deviation / Mean) x 100

Compound Growth Rate:
$Y = a X^b$
CGR = (Antilog(b)-1)*100

Herfindahl Index was employed to assess the level of export diversification in India.

$$HI = \sum_{i=1}^{i=N} p_i^2$$

p = export / total export
Low HI, higher the diversification

Results and Discussion

Basmati and Non-basmati rice are major exports and doubled during 2010-20 compared to 2000-2010. Export value of basmati and non-basmati rice were about Rs. 32,000 crores and Rs. 23,000 crores respectively during 2019-20. Exports of processed vegetables, fruits, nuts and fresh grapes are growing nearly 3 times during 2010-2020 (Rs.500 crores each) compared to 2000-2010 (around Rs. 3,000 crores each).

Exports of cucumbers, gherkins, jaggery and confectionary items are growing at a faster rate in the recent decade (Rs.400 crores during 2005-06 to Rs. 1600 crores during 2019-20). Export basket of agricultural commodities is highly diversified (Herfindahl Index: 0.09 – 0.26) and non-conventional exports like processed vegetables, fruits and vegetables are increasing in faster rate.

Table 1. Variability in Value of Exports of Agricultural Commodities from India

(CV in %)

	1990s	2000s	2010s	Overall
Basmati Rice	50.44	72.19	34.28	111.16
Non Basmati Rice	123.26	61.88	53.06	110.34
Wheat	152.85	119.40	151.39	201.45
Groundnuts	108.28	65.93	37.17	110.92
Maize	146.79	156.86	71.29	137.57
Guargum	79.48	38.46	94.86	168.19
Processed Fruits, Juices & Nuts	55.77	63.63	44.33	120.97
Processed Vegetables	46.78	58.11	34.35	103.68
Fresh Grapes	52.14	73.22	59.18	131.29
Jaggery & Confectionery	129.71	82.25	38.55	99.79
Cucumber and Gherkins	112.07	83.82	27.47	96.46

Table 1 and 2 show the variations and growth in the value of export of agricultural commodities from India. Basmati exports have been consistent and growing positively over the period of three decades. However, export of non-basmati recorded high variations and exports grew faster after WTP period. Wheat is not a regular exported commodity which could be observed from declining growth during 1990s and 2000s which improved in recent decade.

Groundnuts, Maize and Guargum exports were showing a high level variability and a declining growth in the recent times.

On the other hand, export of processed fruits, vegetables, confectionary, cucumber and Gherkins showed positive growth in value of exports in the recent decade. The rate of growth of these group of commodities are faster than the conventional exports like basmati and non-basmati rice.

Table 2. Growth in Value of Exports of Agricultural Commodities from India

(CAGR in %)

	1990s	2000s	2010s	Overall
Basmati Rice	21.30	20.53	5.27	16.52
Non Basmati Rice	61.11	-0.03	24.65	16.51
Wheat	-38.90	-67.49	13.41	15.41
Groundnuts	53.00	23.41	-1.35	19.68
Maize	52.38	66.64	-16.23	38.46
Guargum	35.26	13.63	-16.65	15.39
Processed Fruits, Juices & Nuts	24.84	19.38	11.15	19.39
Processed Vegetables	17.32	18.74	8.48	16.18
Fresh Grapes	17.91	24.83	8.22	18.08
Jaggery & Confectionery	30.43	7.61	11.32	19.96
Cucumber and Gherkins	78.35	27.41	5.83	23.36

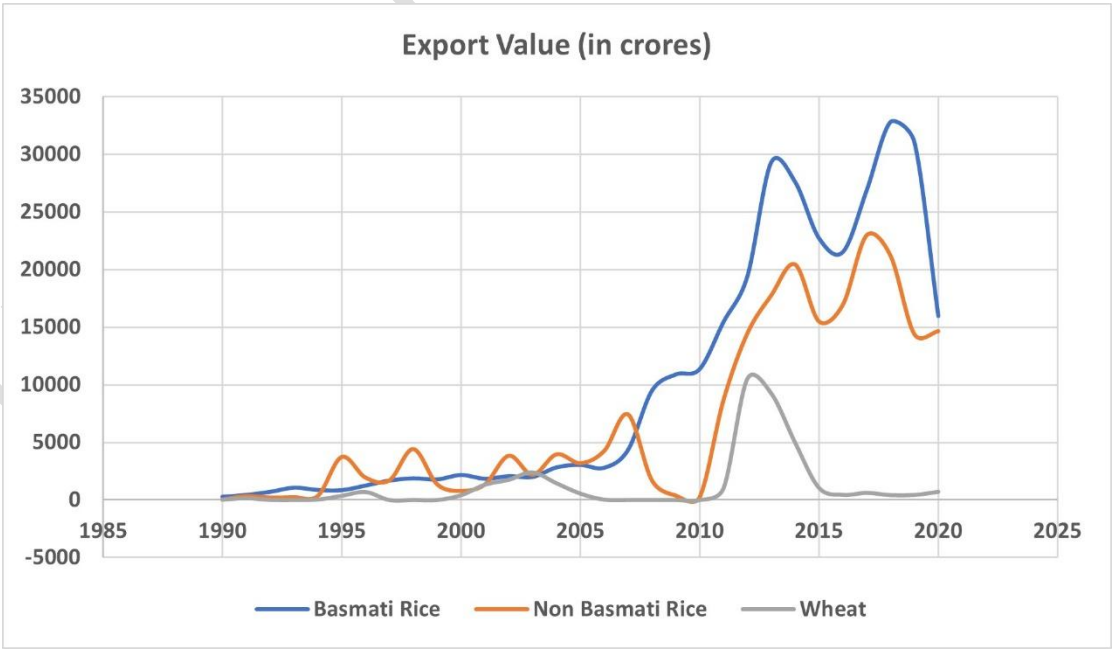

Fig 1. Export Trend of Basmati, Non-Basmati and Wheat from India

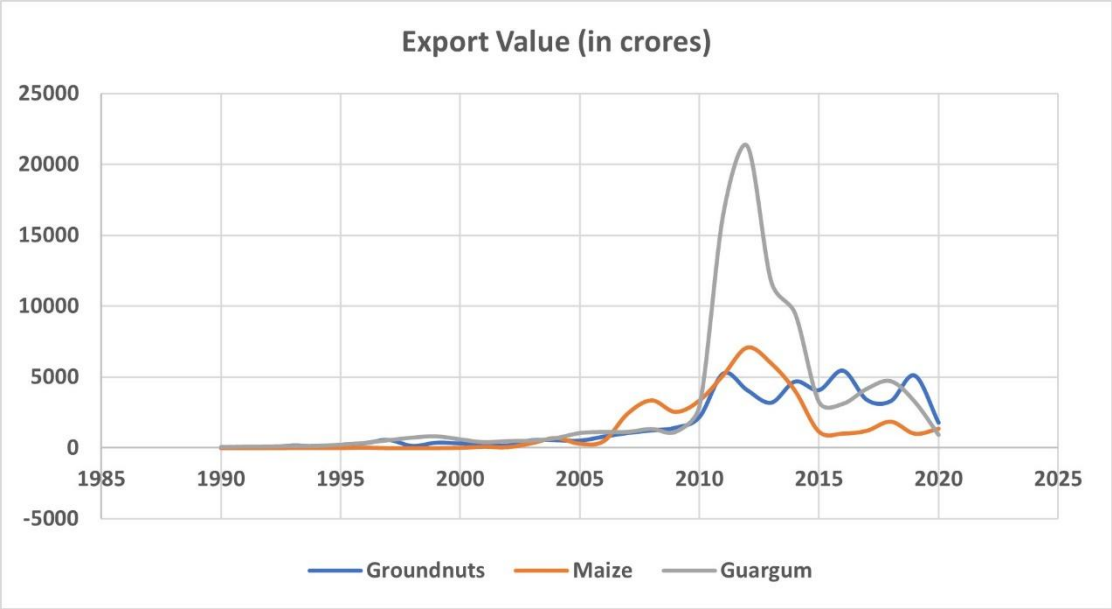

Fig 2. Export Trend of Groundnuts, Maize and Guargum from India

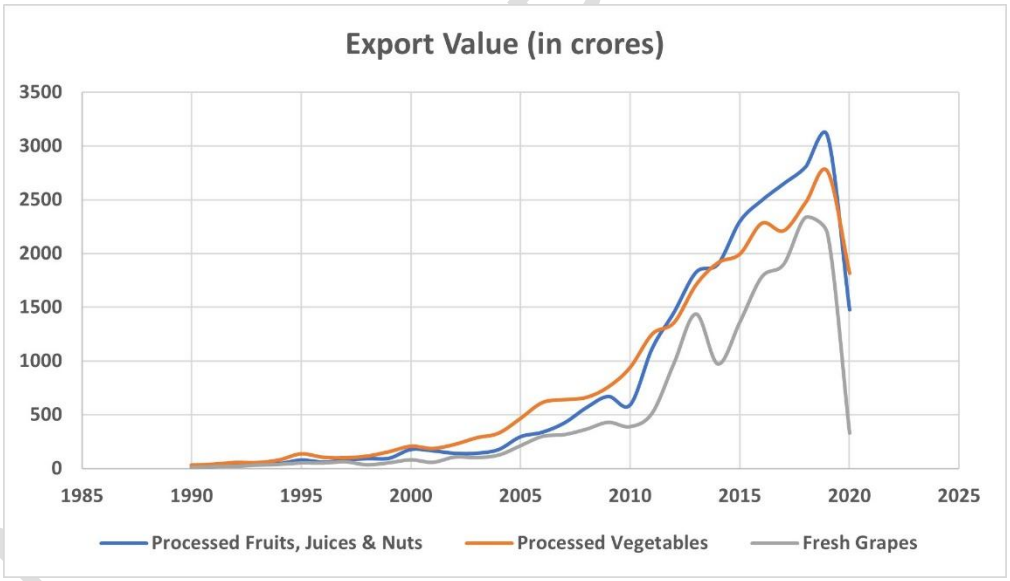

Fig 3. Export Trend of Processed fruits, vegetables and Fresh Grapes from India

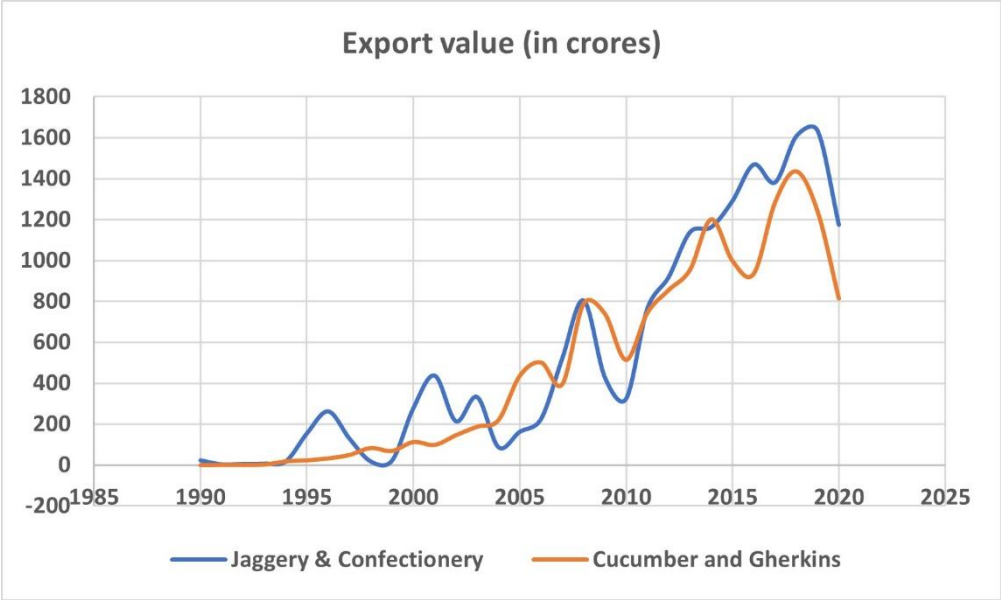

Fig 4. Export Trend of Jaggery & Confectionery, Cucumber and Gherkins from India

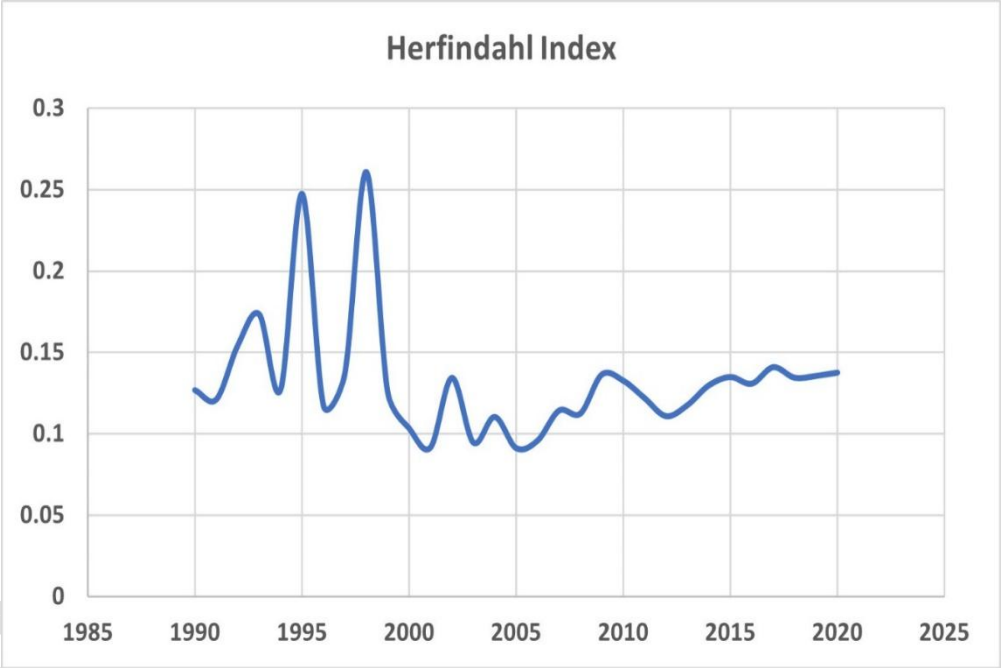

Fig 5. Diversification of Export of Agricultural commodities from India

Export of agricultural commodities for the past three decades were collected and analyzed for their share in total agricultural exports. The Herfindahl Index (in Fig 5) shows that the agricultural commodity export basket is highly diversified hence risk free in export earnings.

Based on the existing literature and discussion with the exporters, SWOC analysis was performed and the points are given in Table 3. Though the perspectives and problems differ from the exporter to exports, points are generalized and presented.

Table 3. SWOC analysis of India's Export Sector

Strength • Foreign Trade Policy • Agricultural Export Policy • Export support programmes • Diversified export basket • Net Exporter of Agriculture	Weakness • Assembling and quality variations • Involves high cost of machinery • Accredited Laboratories • Infrastructure: Pack house • New exporters: Markets & incoterms
Opportunities • Creation of infrastructure facilities • Potential for fruit and vegetables (fresh & processed) and oil meals • Honey, Mushrooms, Moringa and Herbs (post COVID) • Potential of Information Technology	Challenges • Quality Standards • Cost of certification: small exporters • Infrastructure facilities • COVID • Political factors

Conclusion

Conventional exports like basmati and non-basmati continued to perform better in exports which groundnut, wheat and maize shows decline in growth of exports. The new export commodities like processed fruits, vegetables and gherkins continue to growth in value term. Hence, policy support to such new exports and the small export firms are to be continued. The new and small exporters are in need of training in identification of export markets and export terms.

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