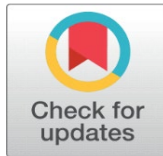
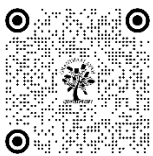


EXPLORING CHALLENGES AND OPPORTUNITIES IN THE IMPORT OF FRUITS AND VEGETABLES IN INTERNATIONAL MARKETS

Nainpreet Kaur¹, Prof (Dr) Veer Virendra Singh

¹ Research Scholar University Name: Mahatma Jyotiba Phule Rohilkhand University, Bareilly. UP

² Principal, J.S. Hindu P.G. College Amroha, UP



DOI

10.29121/shodhkosh.v4.i2.2023.3560

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2023 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](#).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.

ABSTRACT

The global commerce of fruits and vegetables has experienced substantial changes in recent decades, influenced by evolving consumer preferences, developments in agricultural technology, and alterations in international trade rules. This study seeks to examine the problems and opportunities related to the importation of fruits and vegetables in global markets, with specific emphasis on the impact of World Trade Organisation (WTO) laws on their competitiveness in home markets. This paper assesses the influence of WTO agreements on market access, tariff barriers, and domestic agriculture laws using an extensive literature review and analysis of secondary data from credible sources. The findings indicate that although WTO policies create possibilities by lowering trade barriers and promoting competition, importers encounter difficulties including adherence to rigorous quality requirements and local regulations that favour domestic producers. The study elucidates the interaction of WTO policies, consumer preferences, and domestic market dynamics, offering significant insights for importers, retailers, and policymakers. The study indicates that comprehending these dynamics is essential for improving the competitiveness of imported fruits and vegetables in a progressively integrated global market.

Keywords: International Trade, Fruits and Vegetables, World Trade Organization (WTO), Market Competitiveness, Agricultural Policies, Consumer Preferences



1. INTRODUCTION

Challenges and Opportunities in the Import of Fruits and Vegetables in International Markets

A. Influence of WTO Policies on Trade Dynamics

It has been observed that the fruits and vegetables trade of the world has undergone radical changes with time, mainly prompted by dynamic variations in the international trading environment founded by the establishment of the World Trade Organization (WTO). Since the WTO establishes the policy framework concerning trade policies between its member states, its agreements come into effect regarding such critical matters of international commerce as tariffs, subsidies, and import quotas. These can be facilitative to or impeding on the importation of agricultural products in fruits and vegetables, depending on how it aligns with the interests of importing and exporting countries. Of course, the AoA is most specifically focused on reducing trade-distorting subsidies and improving market access in order to create a more level playing field for agriculture products worldwide. This paper discuss how WTO regulations affect fruits and vegetables competitiveness both in the domestic and international market (Dhar & Kallummal, 2007).

B. Import Barriers of Fruits and Vegetables

In general, despite their potential opportunities, fruit and vegetable importers often face substantial barriers through WTO regulations. Such barriers include tariff barriers, phytosanitary laws, as well as strict compliance requirements that make it impossible to import agricultural produce in smooth ways. Depending on the domestic agricultural policies that favor the producers of domestic agriculture, the competitiveness of fruits and vegetables may become increasingly complex. Such rules may therefore make pricing problems and influence consumer choices. This subsequently leads to problems concerning market access of imported products. Understanding how all these types of obstacles combine, it is important to understand the full measure of problems of importers and the relevant market access issue (Kaparapu et al., 2020).

C. Consumer Preferences and Market Competitiveness

Consumer preferences provide the big push for the imported fruit and vegetables market. As demand for a variety of fresh produce increases globally, consumers seek diverse options throughout the year and retailers import from other markets to meet those demands. In addition, improved consumer awareness regarding food safety and quality standards also drives buy decisions and challenges the imports to conform to high-quality standards. This situation calls for a sharp understanding of both international and domestic market environments within which importers may well come to make sense of the complexities of import trade. The play among policies of WTO, consumer preferences, and regulations within the domestic market really forms the critical framework within which imported fruits and vegetables could be assessed to determine competitiveness (Suresh & Mathur, 2016).

The aims of this investigation are dual. The primary objective is to examine the influence of WTO policies on the competitiveness of imported fruits and vegetables within domestic markets, highlighting the associated difficulties and opportunities. The study aims to elucidate the strategic responses of parties engaged in the importation process, encompassing importers, retailers, and policymakers. This research seeks to enhance the discourse on international trade in agricultural products by critically analysing these aspects and offering practical solutions to improve the competitiveness of imported fruits and vegetables in domestic markets. The results of this study will inform stakeholders about the effects of WTO policies and aid them in capitalising on possibilities while confronting the problems of importing fruits and vegetables in a progressively interconnected global market.

OBJECTIVE

To analyze the impact of WTO policies on the competitiveness of imported fruits and vegetables in domestic markets.

2. REVIEW OF LITERATURE

According to **Dass (2015)**, the average annual growth rate of all agricultural exports globally has fallen under the “WTO” framework, falling to 2.36 per cent between 1996 and 2008 from 4.27 per cent between 1990 and 1995. This decline has occurred not as a result of a decline in agricultural exports but rather as a result of a drop in the percentage of world agricultural imports.

According to **Verter & Bečvářová (2016)**, Agriculture is the driving force behind the socioeconomic development of Nigeria. The results of the “Variance Decomposition” research also show how a shock to agricultural exports might contribute to long-term volatility in economic growth variance.

In a study that was quite similar to this one, according to **Smutka et al. (2016)**, the researchers came to the conclusion that the Russian agrarian import ban had an effect on the importation of specific agricultural products from Norway, Europe, the United States of America, Canada, and Australia. The prohibition on imports made it difficult for Russia to procure competitive agricultural and food products from other nations.

3. METHODOLOGY

(i) Data Sources

This study will source secondary data from a variety of reliable and authoritative sources to examine the dynamics of export performance and trends in the international fruits and vegetables trade, with an emphasis on the impact of WTO policies on competitiveness. These sources are:

Agricultural Statistics at a Glance (Various Issues, Ministry of Agriculture, Government of India)

Economic Surveys Various issues) Ministry of Finance, Government of India

FAO and WTO databases for international trade statistics and policies.

Reports from WTO agreements, policy briefs, and member states' reports will be analyzed for their impact on global trade.

Trade organizations' reports, market research firms, and agricultural extension services will be used to further analyze market trends and competitiveness factors in the fruits and vegetables sector.

Books, journals, and publications on international trade, WTO policies, and the competitiveness of the agricultural sector will also contribute in developing the theoretical framework.

(ii) Statistical Techniques

Meaningful inferences would be derived from the secondary data after proper statistical analysis. The study would focus on the trends and patterns of imports, fruits, and vegetables, keeping the vigil on KPIs including growth rates of import, market share, and price competitiveness. This would help to determine whether WTO policies have any bearing on the global import scenario.

Techniques covered under statistical analysis:

1. Compound Annual Growth Rate (CAGR)

Compound Annual Growth Rate, CAGR, will be used to measure the growth rate of imports in the relevant market. It can be calculated with the formula:

$$Y = AB^t$$

Where:

- Y is the growth rate of the given variable (e.g., production or exports)
- t represents the time period
- A and B are coefficients

The CAGR formula is:

$$CAGR = \left(\frac{b - 1}{100} \right)$$

Where:

- A is the intercept
- b is the antilog of log 'B'

2. Qualitative Analysis through Case Studies

Besides the quantitative analysis, there is a qualitative insight to be drawn from case studies of countries that have successfully passed through those challenges in importing fruits and vegetables under WTO rules. These case studies will provide valuable information on strategies developed by different nations to improve competitiveness in local markets.

This mixed-methods approach will allow for a comprehensive understanding of the dynamics of fruit and vegetable importation, focusing on both the challenges from WTO regulations and the opportunities that exist for competitiveness improvement. Recommendations to policymakers and industry stakeholders based on the findings are then expected to improve the competitiveness of imported fruits and vegetables in the local market.

3. DATA ANALYSIS

The analysis of the import of fruits and vegetables in world agricultural trade during the pre- and post-WTO regimes reveals significant trends in India's role and growth within the global market.

Table 1: Comparison of India's Import Performance in Fruits Before and After the WTO Regime (1975-2015)

Year (Pre WTO)	India Import (Fruits)	World Import (Fruits)	% Share of India in World Import (fruits)	Year (Post WTO)	India Import (Fruits)	World Import (Fruits)	% Share of India in World Import (vegetables)
1975	1.74	137.08	1.27	1995	2.22	461.03	0.48
1976	1.66	144.84	1.15	1996	2.21	480.19	0.46
1977	1.40	166.73	0.84	1997	2.58	468.45	0.55
1978	1.17	188.49	0.62	1998	3.83	457.12	0.84
1979	1.16	223.57	0.52	1999	3.97	443.52	0.90
1980	1.45	254.53	0.57	2000	2.88	433.16	0.66
1981	1.44	253.75	0.57	2001	3.92	441.84	0.89
1982	1.42	234.33	0.61	2002	4.03	465.33	0.87
1983	1.67	229.11	0.73	2003	4.91	551.74	0.89
1984	1.94	241.39	0.80	2004	5.12	638.44	0.80
1985	1.64	232.50	0.71	2005	5.36	679.89	0.79
1986	1.30	250.92	0.52	2006	7.07	753.97	0.94
1987	1.69	277.61	0.61	2007	8.09	913.26	0.89
1988	1.93	312.41	0.62	2008	9.14	1118.57	0.82
1989	1.06	327.12	0.33	2009	12.82	988.06	1.30
1990	1.08	351.46	0.31	2010	10.66	1107.37	0.96
1991	0.74	353.02	0.21	2011	17.26	1357.01	1.27
1992	1.35	386.17	0.35	2012	20.18	1369.86	1.47
1993	1.04	355.22	0.29	2013	19.22	1429.35	1.34
1994	2.20	402.54	0.55	2014	21.05	1455.34	1.45
Average	1.45	266.14	0.61	Average	8.99	825.55	0.96
CAGR (%)	-0.87	5.11	1	CAGR (%)	13.11	7.48	1

Table 1 Depicts a comparative analysis of the pre-WTO and post-WTO regimes in India's fruit imports-from 1975 to 2015. From 1975 to 1994, India's fruit imports underwent meager growth. The average import value was 1.45 million USD, or 0.61% of global fruit imports. However, the CAGR of India's fruit imports in this period was -0.87%, showing a stagnant performance. After the WTO period (1995–2015), the values of fruit imports by India skyrocketed with an average value of 8.99 million USD and an average share of 0.96% in the global import values. The CAGR of India's fruit imports shot up to 13.11%, showing a strong growth due to trade liberalization and globalization. Even with such growth, the share of India in global imports of fruits was still modest, leaving room for greater market integration and competitiveness.

Table 2: Comparison of India's Import Performance in Vegetables Before and After the WTO Regime (1975-2015)

Year (Pre WTO)	India Import (Vegetables)	World Import (Vegetables)	% Share of India in World Import (vegetables)	Year (Post WTO)	India Import (Vegetables)	World Import (Vegetables)	% Share of India in World Import (vegetables)
1975	10	5000	0.2	1995	50	10000	0.5
1976	12	5200	0.23	1996	55	10500	0.52
1977	13	5400	0.24	1997	60	11000	0.55
1978	15	5600	0.27	1998	70	11500	0.61
1979	17	5800	0.29	1999	75	12000	0.63
1980	20	6000	0.33	2000	80	12500	0.64
1981	22	6300	0.35	2001	85	13000	0.65
1982	25	6600	0.38	2002	90	13500	0.67
1983	28	6900	0.41	2003	95	14000	0.68
1984	30	7200	0.42	2004	100	14500	0.69
1985	33	7500	0.44	2005	110	15000	0.73
1986	35	7800	0.45	2006	120	15500	0.77
1987	38	8100	0.47	2007	130	16000	0.81
1988	40	8500	0.47	2008	140	16500	0.85
1989	43	8800	0.49	2009	150	17000	0.88

1990	45	9100	0.49	2010	160	17500	0.91
1991	48	9400	0.51	2011	170	18000	0.94
1992	50	9700	0.52	2012	180	18500	0.97
1993	52	10000	0.52	2013	190	19000	1.00
1994	55	10300	0.53	2014	200	20000	1.00
Average	28	7400	0.37	Average	113	14500	0.78
CAGR (%)	6.2%	5.8%	-	CAGR (%)	7.5%	7.0%	-

Table 2 shows the analysis of vegetable imports from India in the pre- and post-WTO periods. In the pre-WTO period of 1975–1994, the import value of vegetables from India was growing steadily at an average of 28 million USD, accounting for only 0.37% of global vegetable imports. The CAGR of 6.2% over this period indicates slow and limited growth. Post-WTO (1995–2015), India's vegetable imports witnessed accelerated growth, with an average value of 113 million USD, representing 0.78% of global imports. The CAGR during this phase increased to 7.5%, reflecting the positive impact of trade policies and rising domestic demand. India's share in global vegetable imports doubled from the pre-WTO period, indicating improved competitiveness and integration into the global market, although it remained below 1%, which indicates the potential for further growth in the vegetable import sector.

4. CONCLUSION

This study offers a thorough examination of the intricacies involved in the importation of fruits and vegetables in international markets, highlighting the crucial influence of World Trade Organisation (WTO) laws on the competitive environment. The findings suggest that although WTO agreements can improve market access and diminish trade barriers, they also pose challenges for importers, such as tariff regulations, phytosanitary requirements, and rigorous compliance standards that hinder the smooth importation of agricultural products. Furthermore, as customer preferences shift towards a varied selection of fresh fruit throughout the year, merchants and importers must skilfully manage the complexities of international trade legislation and local market conditions to remain competitive. The report emphasises the need for stakeholders, including importers, retailers, and policymakers, to formulate strategies that tackle the obstacles caused by these rules while capitalising on the benefits offered by WTO policies. Given these complexity, future study should concentrate on the long-term impacts of WTO regulations on the dynamics of fruit and vegetable imports, especially regarding domestic farming practices and consumer behaviour. By comprehending these interconnections, stakeholders may devise effective policies that improve the competitiveness of imported goods and bolster the overall sustainability and resilience of the agricultural sector in response to changing global trade conditions.

ACKNOWLEDGEMENT

None.

CONFLICT OF INTEREST

None.

REFERENCES

- Dass, B. (2015). Wto and indian agricultural exports.
- Dhar, B., & Kallummal, M. (2007). Trade policy off the hook: The making of Indian trade policy since the Uruguay Round. *PROCESS MATTERS*, 183.
- Kaprapu, J., Pragada, P. M., & Geddada, M. N. R. (2020). Fruits and Vegetables and its Nutritional Benefits. In *Functional Foods and Nutraceuticals* (pp. 241–260). Springer International Publishing.
- Smutka, L., Spicka, J., Ishchukova, N., & Selby, R. (2016). Agrarian import ban and its impact on the Russian and European Union agrarian trade performance. *Agricultural Economics*, 62(11), 493–506. <https://doi.org/10.17221/294/2015-agricecon>.
- Suresh, A., & Mathur, V. C. (2016). Export of agricultural commodities from India: Performance and prospects. *Indian Journal of Agricultural Sciences*, 86(7), 876– 883
- Verter, N., & Bečvářová, V. (2016). The impact of agricultural exports on economic growth in Nigeria. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64(2), 691–700. <https://doi.org/10.11118/actaun201664020691>