

CONTRIBUTION OF AGRICULTURAL SECTOR IN THE ECONOMIC DEVELOPMENT OF THE COUNTRY

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ABSTRACT

Agriculture accounts for about One-quarter of the Gross Domestic Product (GDP) of India and employs about two-thirds of its workforce. Agricultural Performance witnessed a dip in the 1990s partly on account of subdued public investment in agriculture and inadequate diversification. The decline public investment was only partially compensated by the rise in private investment. With the WTO regulations coming into force in phases, it is time that our agricultural sector gears up to face the competition from other emerging and developed economies of the world. The Government has initiated few steps and revitalized policies which should give thrust to agricultural production in the country and induce export competitiveness of our agricultural products. India can continue with all its developmental schemes under the WTO Agreement on Agriculture. These include our subsidies for research, pest and disease control marketing and promotion services, infrastructural services, including capital expenditure for electricity, roads and other means of transport, marketing and port facilities, irrigation facilities, drainage systems and dams etc. For developing countries like India, there are some agricultural subsidies, which are also permissible and need not be reduced. These are investment subsidies that are generally available to low income and resource poor farmers. The types of subsidies mentioned above account for the bulk of the agricultural subsidies provided in India. In this paper Contribution of Agricultural Sector in the Economic Development of the Country is discussed critically.

KEYWORDS: *Gross Domestic Product (GDP), WTO, Infrastructural Services.*

Introduction

After being virtually neglected through decades of rapid trade liberalization, agricultural Policy- market access, domestic support, and export subsidies -- has become the most contentious topic in trade negotiations. In fact, the lack of progress in agriculture reform has led to several missed deadlines in the latest round of negotiations promoted by the World Trade Organization (WTO), putting at risk the Doha Development Agenda (Cline, 2004; WTO, 2004). The controversial, issues often oppose industrial countries, notably the United States and members of the European Union, and developing nations, led by Brazil, India, and China, with the latter group claiming that tariffs, non tariff barriers, and subsidies give an unfair advantage to farmers in industrialized countries.

Scope of the Study

Proposed study will make an attempt to investigate the determinants of agricultural trade of India. There would be an attempt to analyze various agro-trade related negotiations in various summits of WTO and further their implications to the agricultural sector of India. The Government of India had been constantly putting efforts for the agricultural reforms and apart from implementing tariff barriers; it had been offering various subsidies to safeguard its farmers especially in the post WTO period. This study therefore, would also look into the steps taken by the Govt. and would analyze their compatibility to match the global competition. Further, the overall impact of WTO on Indian agriculture would be evaluated by identifying its contribution in the economic development of India, especially in the post WTO period.

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The study will be useful to the following parties:

- Government
- Reserve Bank of India
- All Commercial Banks
- Researchers
- Teachers
- Research Students

Objectives of the Study

Followings are the main objectives of the study:

- To study the role of Indian agriculture in global perspectives.
- To identify the factors of WTO for Indian agriculture Import and Export.
- To study the factors of WTO for Indian agriculture.
- To study the impact of WTO on agriculture Import and Export.
- To study the relationship between WTO and Indian agriculture.

Hypotheses of the Study

The null hypothesis and the alternative hypothesis are chosen before the sample is drawn (the researcher must avoid the error of deriving hypotheses from the data that he collects and then testing the hypotheses from the same data). In the choice of null hypothesis, the following considerations are usually kept in view:

- Alternative hypothesis is usually the one which one wishes to prove and the null hypothesis is the one which one wishes to disprove. Thus, a null hypothesis represents the hypothesis we are trying to reject, and alternative hypothesis represents all other possibilities.
- If the rejection of a certain hypothesis when it is actually true involves great risk, it is taken as null hypothesis because then the probability of rejecting it when it is true is which is chosen very small.
- Null hypothesis should always be specific hypothesis i.e., it should not state about or approximately a certain value.

Thus, following are the main hypotheses of the study:

- H₀₁** There is no impact of WTO on Indian agriculture.
- H₀₂** There is no impact of WTO on Indian Agriculture Export.
- H₀₃** There is no impact of WTO on Indian Agriculture Import.
- H₁₁** There is an impact of WTO on Indian agriculture.
- H₁₂** There is an impact of WTO on Indian agriculture Export.
- H₁₃** There is an impact of WTO on Indian agriculture Import.

Data Collection

The data has been collected as under:

- **Primary Source:** The primary data has been collected through personal contact with heads of certain officers of the agriculture departments.
- **Secondary Source:** The secondary source has been the present annual accounts, administrative reports and articles published in various journals besides this data has been collected from WTO statistical departments and reports prepared by unit of the study for meaningful analysis facts will be collected from the sources other than the above. Apart from this the various reports, magazines, newspapers have been utilized for useful data. Also, various websites of the related authority such as agriculture ministry, commerce ministry and WTO have also been used.

The Comparative Analysis

The comparative analysis has been done on the basis of import and export on the basis of quantity and value. The detail analysis of import and export is explained as follows:

Quantity Wise Rank Analysis of Import

- The quantity wise rank analysis is explained in the following table:

Table 1: Quantity wise Rank Analysis of Import

Factors	Quantity in MT	Weight	Product	Weighted Mean	Rank
Floriculture	18,929	1	18,929	901	VI
Fresh Vegetables	7,80,523	2	15,61,047	74,336	III
Processed Fruits and Vegetables	40,47,963	3	1,21,43,888	5,78,280	I
Animal Products	17,012	4	68,048	3,240	V
Other Processed Foods	5,43,168	5	27,15,841	1,29,326	II
Cereals	54,849	6	3,29,094	15,671	IV
Total	54,62,444	21			

It is clear from the above table that, processed fruits and vegetables are ranked I, other processed foods ranked II, fresh vegetables ranked III; cereals ranked IV; animal products ranked V and floriculture ranked VI in all the products. It shows that processed foods were more imported. Thus, it can be concluded that with the help of WTO, agriculture in India is growing faster.

Value Wise Rank Analysis of Import

- The value wise rank analysis is explained in the following table:

Table 2: Value Wise Rank Analysis of Import

Factors	Value in Crores	Weight	Product	Weighted Mean	Rank
Floriculture	72,474	1	72,474	3,451	VI
Fresh Vegetables	5,41,464	2	10,82,928	51,568	III
Processed Fruits and Vegetables	15,00,848	3	45,02,544	2,14,407	I
Animal Products	54,443	4	2,17,772	10,370	IV
Other Processed Foods	6,83,442	5	34,17,209	1,62,724	II
Cereals	13,396	6	80,378	3,828	V
Total	28,66,067	21			

It is clear from the above table that, processed fruits and vegetables are ranked I, other processed foods ranked II, fresh vegetables ranked III; animal products ranked IV; cereals ranked V and floriculture ranked VI in all the products. It shows that more amount was spent in processed foods.

Quantity Wise Rank Analysis of Export

- The quantity wise rank analysis is explained in the following table:

Table 3: Quantity wise Rank Analysis of Export

Factors	Quantity in MT	Weight	Product	Weighted Mean	Rank
Floriculture	12,499	1	12,499	347	VIII
Fresh Vegetables	20,19,342	2	40,38,684	1,12,186	IV
Fresh Fruits	4,84,373	3	14,53,119	40,364	V
Pulses	2,22,104	4	8,88,416	24,678	VII
Processed Fruits and Vegetables	2,22,104	5	11,10,520	30,848	VI
Animal Products	15,00,067	6	90,00,403	2,50,011	III
Other Processed Foods	21,16,357	7	1,48,14,501	4,11,514	II
Cereals	1,83,53,145	8	14,68,25,160	40,78,477	I
Total	2,49,29,992	36			

It is clear from the above table that, cereals are ranked I, other processed foods ranked II, animal products ranked III; fresh vegetables ranked IV; processed fruits and vegetables ranked V; fresh fruits ranked VI; pulses ranked VII and floriculture ranked VIII in all the products. It shows that more quantity of cereals and animal products were exported from India. Thus, it can be concluded that with the help of WTO, agriculture in India is growing faster.

Correlation Analysis of Import and Export

- The correlation analysis of import and export is shown in the following table:

Table 4 : Correlation Analysis of Import and Export

		Year	Import	Export	Variables
Year	Pearson Correlation	1	.082	.089	0.000
	Sig. (2-tailed)		.640	.611	1.000
	N	35	35	35	35
Import	Pearson Correlation	.082	1	.663**	.456**
	Sig. (2-tailed)	.640		.000	.006
	N	35	35	35	35
Export	Pearson Correlation	.089	.663**	1	.846**
	Sig. (2-tailed)	.611	.000		.000
	N	35	35	35	35
Variables	Pearson Correlation	0.000	.456**	.846**	1
	Sig. (2-tailed)	1.000	.006	.000	
	N	35	35	35	35

**** Correlation is significant at the 0.01 level (2-tailed).**

Hypotheses Testing

- H₀₁** There is no impact of WTO on Indian agriculture.
H₀₂ There is no impact of WTO on Indian Agriculture Export.
H₀₃ There is no impact of WTO on Indian Agriculture Import.
H₁₁ There is an impact of WTO on Indian agriculture.
H₁₂ There is an impact of WTO on Indian agriculture Export.
H₁₃ There is an impact of WTO on Indian agriculture Import.

Table 5: Chi-square Test

Chi-square Test			
Factor	Value	d.f.	Asymp. Sig.
Pearson Chi-Square	140.000 ^a	136	.390
Likelihood Ratio	112.661	136	.928
Linear-by-Linear Association	.229	1	.633
N of Valid Cases	35		
175 cells (100.0%) have expected count less than 5. The minimum expected count is .20.			

Interpretation

It is clear from the above table that the value of Pearson Chi-square is 140.00; p value is 0.390 which indicated that the null hypothesis is rejected hence there is an impact of WTO on Indian agriculture in India.

Conclusion

On the basis of econometric and non-econometric analysis of the study shows the impact of the WTO on agriculture of India. The India has mixed results. The WTO has affected the agriculture trade slightly positively, but not as expected. The conclusion of the study is summarized below:

- The trade volume of India was increasing after the WTO implementation, though not at so good rate as compared to world trade. This is due to the new challenges faced by Indian economy imposed by WTO.
- The trade volume of India was rising before the WTO. The country has not only maintained the trend but rate of growth in also increased. India is the only country in the current analysis, who has gained advantage of the WTO in the perspectives of international trade.
- The ratio of industrial sector in GDP is not significant but has positive impact on international trade of India. The industrial sector in GDP after WTO have predicted positive value, but not significant.

- The rate of increase in imports of India is less than rate of increase in exports even after the WTO, which shows that India still face the deficits in their balance of trades.
- The effect of agriculture sector is negatively affecting the international trade of India because the WTO caused serious concern to the performance of agriculture sector and food security. The negative effect of agriculture sector remained continue even after WTO.
- It is evident that within ten years after the WTO, there remained higher growth rate of imports as compared to exports.
- India's GDP is also significant t-value but the coefficient is negative which would indicate that the negative effect.
- For India, both the growth rate of exports and imports has risen after the WTO. The contribution of industrial sector to the nation's international trade has been increased after the WTO.

Thus, WTO has been playing a very important role in India's foreign trade. It needs further research to see why India has not benefited from the WTO as per expectation while the major speculated beneficiaries of the WTO were the developing countries.

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