

A Study of Impact of the WTO Regime on Indian Agricultural Commodities

Dr. Shree Bhagwat ¹,

Asst. Prof., Department of Business Management,

Dr. Harisingh Gour Central Vishwavidyalaya Sagar, Madhya Pradesh, India

Angad Singh Maravi ²

Research Scholar, Department of Commerce,

Dr. Harisingh Gour Central Vishwavidyalaya Sagar, Madhya Pradesh, India

Abstract

Agriculture sector of Indian economy is one of the most significant parts of India. Agriculture is the only means of living for almost two-thirds of the employed class in India. Agriculture plays a vital role in India's economy; over 60% of the rural households depend on agriculture as their principal means of livelihood. The agriculture sector of India has occupied almost 43% of India's geographical area. Agriculture also plays a significant role in the growth of socio-economic sector in India. The WTO was established on January 1st, 1995 by replacing General Agreement on Tariffs and Trade (GATT), which was in existence from 1947 to 1994. The WTO Agreement on Agriculture (AoA) came into force on 1 January 1995. The share of Agriculture Sector in the national Gross Domestic Product (GDP) at constant prices decreased from 55.1% 1990-91 to 15.35% in 2015-16, and about 70% people find direct and indirect employment in the agriculture sector in India. India is a founder member of the WTO. The WTO is based on the principles of non-discrimination, free trade, and promotion of fair competition among the member countries. As on 30 November 2015, total 162 countries are the member countries of the WTO. As India prepares to engage itself in negotiations which are deemed to benefit the country, a number of crucial issues have surfaced, which need to be debated within the country and presented to the special session of the WTO committee on Agriculture in Geneva. The main purpose of this paper is to impact of the WTO Regime on Indian agricultural commodities.

Keywords: WTO, Agreement on Agriculture (AoA), Agriculture Sector, Export growth

1. Introduction

WTO is a new international trade organization set up as a permanent body. It is designed to play a vital role in different areas such as trade in goods, services, foreign investment, intellectual property rights, and anti-dumping laws, etc. Its key objective is to encourage free and fair trade. The WTO Agreement on Agriculture (AoA) was one of the many agreements which were negotiated during the Uruguay Round. India will be able to expand its exports of agricultural products in which it has tremendous comparative advantage. The provisions of the WTO offered ample opportunities to India to expand its export market. Contrary to this, the price situation changed dramatically after 1996, which was the first year after implementation of Uruguay Round Agreement and formation of the WTO. International price of agricultural commodities have since then plummeted, because of which domestic price turned higher than international price, which made India an attractive market for import of most agricultural commodities. The impact of the WTO on agriculture was severely felt by India as cheap imports have frequently hit the Indian market, causing shock waves among the agriculture producers. The agricultural products from India can be made competitive in international market and the prices of agricultural goods in the domestic market can be improved by taking serious steps of reform. The implementation of the AoA started with effect from January 1st, 1995. The objective of the Agriculture Agreement is to restructure trade in the sector and to make policies more market-oriented. The Agreement on Agriculture shaped an environment of trade reforms and initiated trade liberalization in agriculture. The WTO Agreement on Agriculture contains provisions in 3 broad areas of agriculture and trade policy; market access, domestic support and export subsidies. As per the provisions of the Agreement, the developed countries would complete their reduction commitments within 6 years, i.e., by the year 2000, whereas the commitments of the developing countries would be completed within 10 years, i.e., by the year 2004. The country is the largest producer, consumer and exporter of spices and spice products. It ranks 3rd in farm and agriculture outputs. Agricultural export constitutes 10% of the country's exports and is the fourth-largest exported principal commodities. During last two decades India's agricultural exports as a part of total merchandise exports have continued to decline from the preponderant position they occupied in the pre-independence.

2. Objectives of the Study

- (i) To study the impact of the WTO Regime on Indian Agricultural Commodities.
- (ii) To analysis the Performance of Export growth of India's agricultural commodities under the WTO Regime.

3. Review of Literature

Kavitha, N. V. and Reddy, N. Suma (2015) in their study *“A Study on the Commodity Derivatives Market and Development in India - Towards Sustainability”* investigated the commodity derivatives trading in India after a phase of long and turbulent historical sojourn witnessed a massive spurt in the recent period. Government has initiated far reaching reforms in the commodities market with regard to price risk management and pricing which is the basis behind stimulating and reassuring future markets for commodities. Though the derivative market is burgeoning with its divergent products there are many issues to resolved. India being a developing country where majority of population is still dependent on the agriculture, modern commodities exchanges can be used as tool to improve the life of such people by making commodities market more efficient.

Rani, Pooja (2015) in his paper *“A Study of WTO and Agriculture Sector in India”* investigated the international trade is refers to trade of goods and services of nation with rest of the world. They found that after the WTO, the agriculture sector playing a significant role in employment generation. After the WTO export rate and production rate of agriculture sector are also increasing in India. The agriculture sector in India is expected to generate better momentum in the next few years due to raised investments in agricultural infrastructure such as irrigation facilities, warehousing and cold storage.

Bansal, Y., Kumar S. and Verma, P. (2014) in their work *“Commodity Futures in Portfolio Diversification: Impact on Investor’s Utility”* empirically examined the proposition that whether commodity futures can be treated as an alternative asset for risk-averse investor by including it to a traditional portfolio mix of equity and bond by using the data across 2005-2011. The results showed that the commodity futures have higher returns and low risk as compared to equity. Therefore, the investor is better off by holding a composite index, MCX COMDEX in the portfolio of equity and bond.

Singh, S. (2014) in his paper *“Analysis of Trade before and after the WTO: A Case Study of India”* investigated the Indian economy has experienced a major transformation in trade after the implication of the WTO. 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 the WTO. 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. India's GDP is also significant t-value but the coefficient is negative which would indicate that the negative effect. There is pragmatic change in India's GDP during post the WTO and positively affect the trade of India.

Ranga, M. and Sharma, D. (2014) in their paper *"WTO and Indian Agriculture"* concluded that the WTO provisions pose no real threat to Indian agriculture though aspects related to IPR, removal of tariff and non-tariff barriers and market access need to be dealt with constant vigil and suitable know-how. The need of the time is to make it more efficient, modern diversified and competitive. The reduction in agricultural subsidies and barriers to export of agricultural products, agricultural exports from India will increase. The multilateral rules and disciplines relating to anti-dumping, subsidies and countervailing measures, safeguards and disputes settlement machinery will ensure greater security and predictability of international trade.

Laha, A. and Sinha S. (2013) in their paper *"Future Market and Price Risk Management: Evidence from Raw Jute and Sacking Markets in India"* examined the risk management is considered as one of the crucial economic function performed by the future market. Efficient risk management through hedging primarily conditioned upon the movement of spot and future markets together, so that losses in one market can be compensated by gains in other market. The empirical evidence suggests a wide variation in spot and future prices of raw jute in comparison to sacking. In fact, the extent of fluctuations in both spot and future markets are found to be the same. The results showed that supported by the ratio of standard deviation of future price to that of spot price, indicating an efficient utilization of information by the future market.

Nabi, T. and Dhami J. Kaur (2013) in their paper *"Analysis of India's Agriculture Export Performance in Pre and Post WTO Regime"* they conclude that the developing countries have no alternative but to agree with this arrangement of trade. Though the WTO has given special status to the developing countries by given concessions and extra times to full fill their commitments yet the global economic scenario is not in favour of them. Most of the developing countries are not keen on fresh negotiations as they feel that the WTO agreement has not given them the benefits that were promised to them. The use of collective bargaining power by the developing countries is the only way out to protect their interest at the WTO.

Aloysius, Edward J, and Narasimha, Rao T.V. (2013) in their study *“Price Discovery Process and Volatility Spillover of Chilli spot and Futures Prices Evidence from National Commodity and Derivative Exchange Ltd (NCDEX)”* examined the price discovery mechanism and causality between chilli spot and futures markets using Co-integration and Vector Error Correction Model for the period from 1st April 2006 to 31st March 2013 for the NCDEX Andhra Pradesh has highest area of 26% of the total area which provided 55% of the total production followed by Karnataka which provided 10% of the total production. There was steady growth in exports of chilli in terms value from 2006-07 to 2011-12 except in 2008-09. There was remarkable growth of chilli exports in 2009-10 and 2010-11. The findings suggest that there is only one co-integration relationship that exists between futures and spot chilli prices in long run and the causality exists. The results indicate that futures chilli price leads the spot price.

Kour, S. and Bhau, P. (2013) in their study *“Impact of WTO on Indian Agriculture during 1990-2004”* investigated the growth of India’s agricultural imports was more than exports during post WTO period. In recent development, India’ and other developing countries which have formed a group of 20 called G-20, demanded substantial reduction in tariffs, elimination of trade-distorting domestic support and export subsidies to agriculture by developed countries. Developed countries must look beyond their own interests and bring in agreement that is just and fair to the developing countries and ensure empowerment, efficiency and equity in the agriculture sector of the world. They suggest that the public investment in agriculture has to be raised, and economy in general and agricultural in particular should be geared up to face the challenges from climate change, drought conditions etc.

M. Anoop kumar (2012) in his work *“Commodity Price Instability under Globalization: A Study of India’s Plantation Crops”* the study was an attempt to understand the dynamics of inter-year and intra-year price instability of plantation crops specifically looking at the case of five major crops; Natural Rubber, Tea, Coffee, Black Pepper and Small Cardamom. The study also made an attempt to locate the factors involved in price instability of the selected crops. The analysis of the price instability of plantation crops has come out with the following findings. They found that the price instability of plantation crops is quite high and the instability has increased in the open trade regime for many of the crops.

Agrawal, A. and Basak, S. (2012) in their paper *“WTO & Indian Agriculture”* examined the WTO is an organization that intends to supervise and liberalize international trade. The WTO protects food and livelihood security concerns and also protects all domestic policy measures taken for

poverty alleviation, rural development and rural employment. It also creates opportunities for expansion of agricultural export by securing meaningful market access in developed countries.

B. Sheshagiri, G. G. Honkan, and Vaikunthe, L. D. (2011) in their study *“Impact of W.T.O on Indian Agriculture: Performance and Prospects”* investigated the Indian agricultural products by seeking a reduction in the high tariffs and subsidies prevent in developed countries. A higher growth in agriculture, thus, needs a comprehensive revamp of agricultural policy with reorientation towards rapid diversification of this sector. A progressive correction is required in the incentive structure for agriculture so that the excessively high minimum supports prices do not continue to distort resource allocation in agriculture. The findings suggest that there exists some scope for raising agricultural output through improvements in technical efficiency, without resort to new improved technologies.

Sen, S. and Pual, M. (2010) in their paper *“Trading in India’s Commodity Future Markets”* examined the whole future trading in agricultural goods, and especially in food items have neither resulted in price discovery nor less of volatility in food prices. Future markets in commodities in India seem to have provided new avenues of speculation to traders in equity markets, as has happened elsewhere. They have noticed a pattern where investments in stock markets have links with those in the commodity market via portfolio adjustments. While a boom in stock prices was matched by parallel increases in commodity prices, possibly with future prices pushing up the spot prices, the slump, as came by the fall of 2008 in the stock market initiated a portfolio adjustment by moving funds to the commodity market.

4. Research Methodology

The present study is based on secondary data. The secondary has been collected and compiled from books related topics, magazines, reputed journals, research paper, news paper, internet sources like www.wto.org, www.unionbudget.nic.in and the Handbook on Indian Statistics published by sources Economic Survey of India. Data are obtained from the WTO, RBI, Ministry of Agriculture (GOI), Ministry of Finance (GOI), and Agricultural & Processed Food Products Export Development Authority (APEDA), Govt. of India.

5. Impact of the WTO Regime on Indian Agricultural Commodities

The establishment of the WTO is an important landmark in the history of international trade. When developing countries were liberalizing their economies, they felt the need for better export opportunities. The WTO provides opportunities for countries to grow and realize their export

potentials, with appropriate domestic policies in place. As Mandated under the General Agreement on Tariffs and Trade (GATT), signed in April 1994 at Marrakesh, the developed countries are to implement the terms of the Agreement on Agriculture (AoA) by end 2000 and negotiations between all member countries to further the cause of trade reforms are to be carried out during the current year. The WTO Agreement on Agriculture came into force on 1st January 1995. The preamble to the Agreement recognizes that the agreed long-term objective of the reform process initiated by the Uruguay Round reform programme is to establish a fair and market-oriented agricultural trading system.

Agriculture sector is a backbone of India's economy as it covers nearly 70% of available land of agricultural activities, provides employment for about 60% of working population of country and contributes about 22% of national Gross Domestic Products (GDP). India ranks second largest rice producer, largest milk producer, major country in wheat production, largest cattle and live-stock holder country of the world thanks to its green revolution programme. Agriculture now in the purview of the WTO, accounts for nearly 75% of the Indian rural population. Agriculture is a way of life, in most developing agrarian economies. Rapid growth of agriculture is essential for ensuring household food security and alleviation of poverty. In developing countries agriculture still contributes significantly to their overall GDP, employs a large proportion of the work force, despite having uneconomical very small, unirrigated land holdings dependent on the vagaries of nature. As most farmers in countries like India are engaged in subsistence land farming, their participation in international trade is very marginal. India being a signatory to the WTO may open up the agricultural products and commodity markets more to the global competition. India's uniqueness as a major consumption market is an invitation to the world to explore the Indian market. Indian producers and traders too would have the opportunity to explore the global markets.

5.1. WTO Agreement on Agriculture (AoA)

- The WTO Agreement on Agriculture (AoA) was signed as part of the Uruguay Round Agreement in April 1994. The Uruguay Round of Multilateral Trade Negotiations took place during the period 1986 to 1993.
- The WTO Agreement on Agriculture came into force with effect from 1st January, 1995. It has a 10 year implementation period from 1995 to 2004, for developing countries.
- The WTO Agreement on Agriculture covers three broad areas of agriculture and trade policy: market access, domestic support and export subsidies.

- India is under no obligation to reduce domestic support or subsidies currently extended to agriculture as the support being given is well below the permissible level of 10% of the value of its agricultural output.
- Under the Agreement on Agriculture, there can be no restrictions on farm trade except through tariffs - i.e., non-tariff barriers such as quantitative restrictions on imports through quotas, import licensing etc., are to be replaced by tariffs or duties on imports to provide the same level of protection to domestic agriculture and thereafter, tariff levels are to be progressively reduced. However, some developing countries like India were permitted to offer ceiling bindings instead of tariffication on account of the fact that India was maintaining QRs on Balance of Payment grounds.
- Implementation of the WTO AoA since 1995 has brought out the inadequacies inherent in the Agreement. The ongoing negotiations in the WTO on the Agreement on Agriculture present an opportunity for us to rectify these inadequacies and inequalities.
- Government have taken a series of measures to safeguard our agriculture sector in the context of phase-out of QRs - i.e., import duties on a large number of agro and other items have been substantially increased and import of 131 products have been made subject to compliance of Indian quality standards as applicable to domestic goods.
- India has submitted its proposals to the WTO for the current negotiations on the AoA in the areas of market access, domestic support, export competition and food security.
- Food & livelihood security of our people, protection of the interest of domestic farmers and maximizing export opportunities for Indian agricultural products are the guiding principles of India's proposals at the WTO negotiations on agriculture.

The WTO is the only international organization dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible. The WTO Agreement on Agriculture (AoA) was the one of the main agreements which was negotiated the Uruguay Round. Generally there are three main pillars of AoA:

I. Market Access: Market access is the extent to which a country allows the importation of foreign products. Countries have traditionally used both tariffs and non-tariff measures to regulate imports of agricultural goods. The market access provisions aim to regulate and lower protectionist barriers to trade. The provisions relating to market access have to do with; (a) tariffs, and (b) minimum and current access volumes/quotas. The most important commitments are that developed and developing countries to convert all non-tariff barriers into simple tariffs (a process known as

tariffication), all tariffs to be bound (i.e. cannot be increased above a certain limit). Developed countries to reduce import tariffs by 36% (across the board) over a six year period with a minimum 15% tariff reduction for any one product and developing countries to reduce import tariffs by 24% (across the board) over a ten year period with a minimum 10% tariff reduction for any one product. As India was maintaining Quarantine Restrictions due to balance of payments a reason (which is a GATT consistent measure), it did not have to undertake any commitments in regard to market access. The only commitment India has undertaken is to bind its primary agricultural products at 100%; processed foods at 150% and edible oil at 300%.

II. Domestic Support: Domestic support is the annual monetary support given by the government to agricultural producers either for the production of specific agricultural products, or in more general forms such as in infrastructure and research. All forms of domestic support are subject to rules. The WTO classifies domestic subsidies into three categories known as the Amber, Blue and Green Boxes. Only the Amber Box is subject to reduction commitments as for developed countries, a 20% reduction in Total AMS (Amber Box) over six years commencing 1995 from a base period 1986-1988 and for developing countries, a 13% reduction in Total AMS (Amber Box) over ten years commencing 1995 from a base period 1986-1988. India does not provide any product specific support other than market price support. During the reference period (1986-88), India had market price support programmes for 22 products, out of which 19 are included in our list of commitments filed under GATT. The products are; rice, wheat, bajra, jawar, maize, barley, gram, groundnut, rapeseed, toria, cotton, soyabean (yellow), soyabean (black), urad, moong, tur, tobacco, jute and sugarcane. The total product specific Aggregate Measure of Support (AMS) was (-) Rs. 24,442 crores during the base period. Non-product specific subsidy is calculated by taking into account subsidies given for fertilizers, water, seeds, credit and electricity. During the reference period the total non-product specific AMS was Rs. 4581 crores. Taking both product specific and non-product specific AMS into account, the total AMS was (-) Rs.19, 869 crores i.e., about (-) 18% of the value of total agricultural output.

III. Export Subsidies: The draft modalities propose that all export subsidies in the developed world should be phased out over a period of nine years, with some being cut within five years. Developing countries are given a slightly longer implementation period of twelve years. The commitments are that for developed countries, the value and volume of export subsidies to be reduced by 36% and 24% respectively from the base period 1986-1990 over a six year period and for developing countries, the value and volume of export subsidies to be reduced by 24% and 10% respectively from the base period 1986-1990 over a ten year period. In India, exporters of

agricultural commodities do not get any direct subsidy. The only subsidies available to them are in the form of (a) exemption of export profit from income tax under section 80-HHC of the Income Tax Act and this is also not one of the listed subsidies as the entire income from Agriculture is exempt from Income Tax per se. (b) subsidies on cost of freight on export shipments of certain products like fruits, vegetables and floricultural products.

5.2. The Major Provisions of the WTO in Connection With India

- (i) **The WTO Agreement and Agricultural Sector:** The major fear was found among India farmers who thought that they would be only on the mercy of multinational corporations who control the distribution of vital agricultural inputs, such as seeds, fertilizers, pesticides and insecticides. Only a few farmers will benefit from the improved inputs of the multinationals. Small farmers will become land less laborer in the course of time and agriculture in India will no longer remain a source of livelihood for two-thirds of India's population. The agreement proposes that developing countries should slash direct subsidies on agricultural products as well as subsidies on inputs like electricity, water, credit and fertilizers to less than 10% of the product value. Developed countries, on the other hand, should slash these subsidies over a period of time to 5%. Small and poor farmers are however exempted from this clause. At present, India's total farm subsidies are below 6% and therefore, this provision of the AoA will not adversely affect in India.
- (ii) **Slashing Subsidies:** On the whole, Indian Agriculture sector a non-commercial activity will not attract Agreement rule which are relevant for commercial production and trading activities. As India is not an agricultural exporter, the controversy on its impact on India's agriculture will only be marginal.
- (iii) **Increase in Exports of Food Grains:** The prices of agricultural products in the developed countries would go up as a result of slashing subsidies. As a result, our farmers will be benefited as getting higher price of their product in the international market. This will stimulate India's exports particularly for rice to countries like Japan and South Korea.
- (iv) **Increase in Production:** It is felt that the prices of certain products in India would also go up due to import of certain agricultural commodities to meet domestic shortage like oilseeds.
- (v) **Public Distribution Systems:** The agreement does not interfere with the Public Distribution System (PDS). India will continue to offer essential food supplies to the weaker sections of the society at subsidized rates.
- (vi) **No Increase in Imports of Food Grains:** As per Agreement on Agriculture (AoA), it is not expected to raise India's imports of food grains. It is stated in the treaty that the poor

countries facing balance of payments problems may continue to impose Tariff on the import of food grains. India can avail of this provision and avoid imports of foodstuffs, thereby stay off easy imports of food grains. It is doubtful that with nearly 100% tariff duty on imports of food grains, 150% on processed foods and 300% on edible oils, imports can hardly stain in the domestic markets.

- (vii) Patents and Sui-Generis: The government of India has clarified that the present policy of not patenting, the seeds would continue. As regards Sui Generis system, it is expected that the protection of the rights of breeders should ensure improved varieties of plant breeds. The system is the basic research in seed and breed technology India. A critical analysis of patents and Sui-generis shows that seed production, i.e., development of new varieties, their multiplication and marketing which were largely under Government sector in the past years are moving into the hands of private sector. Latest bio-technological tools are now being deployed by the corporate in the development of hybrid and synthetic seed and planting materials. India has the potential to emerge as a major exporter of seeds in the world market.
- (viii) Freedom to Use Seeds: It is doubtful that only rich and big farmers would afford the use of 'brand seeds'. This, in turn will obviously widen the gap between the rich and the poor farmers. Under the WTO Agreement the farmers are free to exchange their seeds with the other. They, therefore, need not necessarily buy seeds from the open market.
- (ix) Market Access: Dunkel Draft will in no way injure the interest of Indian farming community. Rather, it will stimulate India's exports of food grains and encourage research in the field of crop farming. The Draft does not interfere with any of our plans of rural upliftment. The Government is not contemplating any cut in subsidy offered to the framers. Farmers have the full freedom of using a part of their output as seeds for the next crop. They can also exchange their surplus produce mutually. The treaty proposes guaranteed access to importers of at least 3% of the market for each agricultural item. This has been termed as Minimum Compulsory Access (MCA) in agricultural trade.

6. Performance Analysis of the Exported agricultural commodities in India

Table: 1. Performance of Agricultural Export during 2010-11 to 2014-15

Years	Commodities	Quantity (Qty in MT)	Value (Rs Crore)
2010-11	All Agri-Commodities	1,15,67,563.11	42,437.45
2011-12	All Agri-Commodities	1,98,10,216.80	83,485.29
2012-13	All Agri-Commodities	3,01,72,968.00	1,18,254.78
2013-14	All Agri-Commodities	3,00,01,358.04	1,36,920.07
2014-15	All Agri-Commodities	2,71,32,966.78	1,31,333.48

Source: www.apeda.gov.in, Ministry of Commerce & Industry, Government of India

The above table showed that Export in agricultural commodities in India during the year 2010-11 to 2014-15.) The agricultural commodities exports of India were increased from Rs. 42,437.45 to Rs 1, 36,920.07 in the year 2010-11 to 2013-14 respectively. This table showed that before 2012-13 Export Growth rate (Value Rs. Crore) of agriculture is slow, but after 2012-13 Export Growth rates of agricultural commodities is high in India. At present, India is a net food grain exporter. India's agricultural exports have continuously grown since 2010-11, while agricultural commodities exports have decline was Rs 1, 31,333.48 in 2014-15, this is not significant for Indian agriculture sector.

6.1 Export Performance of Agricultural products of Top 5 Countries in 2014-15

Table: 6.1.1. Fruits & Vegetables Seeds

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Pakistan Ir	4777.91	75.38
Bangladesh Pr	7363.43	69.60
USA	107.55	62.81
Netherland	101.71	49.54
Japan	216.42	25.60
Top 5 Total	12567.02	282.93
Other Countries	3356.01	235.02
Total	15923.03	517.95
% Share of Top 5 Countries	78.92	54.63

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.2. Pulses

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Pakistan Ir	95630.75	432.30
Algeria	34608.30	216.34
Sri Lanka Dsr	39432.45	193.94
U Arab Emts	15094.14	82.84
U S A	8690.89	68.74
Top 5 Total	193456.53	994.16
Other Countries	104888.71	625.81
Total	298345.24	1619.97
% Share of Top 5 Countries	64.84	61.36

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.3. Groundnuts

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Indonesia	250667.08	1564.17
Vietnam Soc Rep	199355.09	1344.82
Malaysia	87449.53	572.14
Philippines	84258.98	571.11
Thailand	40261.80	279.89
Top 5 Total	661992.48	4332.13
Other Countries	661992.48	4332.13
Total	200148.72	1262.63
% Share of Top 5 Countries	76.78	77.43

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.4. Guar gum

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
U S A	481488.97	8672.26
China P Rp	49773.15	671.49
Canada	21144.10	383.02
Germany	23270.56	334.53
Russia	19636.13	325.60
Top 5 Total	595312.91	10386.90
Other Countries	248052.31	1424.16
Total	843365.22	11811.06
% Share of Top 5 Countries	70.59	87.94

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.5. Jaggery & Confectionery

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Nepal	17209.62	121.00
Nigeria	37376.91	119.99
U Arab Emts	15887.28	93.00
Kenya	25192.91	77.70
Sudan	21160.05	58.49
Top 5 Total	116826.77	470.18
Other Countries	207531.27	977.89
Total	324358.04	1448.07
% Share of Top 5 Countries	36.02	32.46

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.6. Wheat

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Bangladesh Pr	1611416.03	2697.12
Indonesia	692843.46	1164.33
U Arab Emts	649090.61	1117.46
Turkey	296304.00	562.45
Yemen Republic	208522.00	347.96
Top 5 Total	3458176.10	5889.32
Other Countries	1308444.31	2206.67
Total	4766620.41	8095.99
% Share of Top 5 Countries	72.55	72.74

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.7. Maize

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Indonesia	1655269.05	2279.84
Malaysia	752227.67	1055.25
Vietnam Soc Rep	587082.83	817.87
Bangladesh Pr	401222.13	590.18
Nepal	327426.03	399.93
Top 5 Total	3723227.71	5143.07
Other Countries	636680.07	1044.65
Total	4359907.78	6187.72
% Share of Top 5 Countries	85.40	83.11

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.8. Basmati Rice

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Saudi Arab	1235914.86	9586.15
Iran	1217661.94	9158.69
U Arab Emts	323144.21	2292.45
Iraq	284737.90	1978.95
Kuwait	205228.32	1900.41
Top 5 Total	3266687.23	24916.65
Other Countries	1422364.76	11081.58
Total	4689051.99	35998.23
% Share of Top 5 Countries	69.67	69.22

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

Table: 6.1.9. Non-Basmati Rice

Importing Countries	Quantity (Qty in MT)	Value (Rs Crore)
Bangladesh Pr	1380496.22	3023.82
Sri Lanka Dsr	741330.87	2004.02
Benin	674020.43	1688.46
Senegal	940541.40	1686.87
Nepal	729910.82	1553.74
Top 5 Total	4466299.74	9956.91
Other Countries	5133248.97	13838.17
Total	9599548.71	23795.08
% Share of Top 5 Countries	46.53	41.84

Source: www.apeda.gov.in, Ministry of Commerce & Industry, (GOI)

The above tables (1 to 9) showed that export of agricultural products in 2014-15. It is clear that the impact of WTO on India's agricultural products export performance was positive. There are certain ample opportunities of the WTO for the ambitious young exporters, entrepreneurs, industrialist etc. In the year 2014-15, exports of agricultural products; included Fruits & Vegetables Seeds (Pakistan Ir), Pulses (Pakistan Ir), Groundnuts (Indonesia), Guar gum (USA), Jaggery & Confectionery (Nepal), Wheat (Bangladesh Pr), Maize (Indonesia), Basmati Rice (Saudi Arab), and Non-Basmati Rice (Bangladesh Pr). India's agricultural exports were Maize 1655269.05 (Qty in MT), followed by Wheat 1611416.03 (Qty in MT), and Non-Basmati Rice 1380496.22 03 (Qty in MT), and whereas;

Basmati Rice, Guar gum, Groundnuts, Pulses, Jaggery & Confectionery, and Fruits & Vegetables Seeds show slow progress in 2014-15.

7. Conclusion

We have analyzed the impact of the WTO regime on Indian agricultural commodities. Agricultural sector is a backbone of India's economy as it covers 70% of available land of agricultural activities, provides employment for about 60% of working population of country and contributes about 22% of national GDP. The WTO Agreement on Agriculture (AoA) came into force on 1st January 1995. The WTO AoA was one of the many agreements which were negotiated during the Uruguay Round. India is a reasonably efficient producer of agricultural products (commodities). Agricultural export constitutes 10% of the country's exports and is the 4th largest exported principal commodities. India's agricultural exports were Maize, followed by Wheat, and Non-Basmati Rice in 2014-15. The agriculture sector in India is expected to generate better momentum in the next few years due to raised investments in agricultural infrastructure such as irrigation facilities, warehousing and cold storage. The agricultural product in India is expected to generate better momentum in the next few years due to raised investments in agricultural infrastructure such as irrigation facilities, warehousing and cold storage.

References

1. Kavitha, N. V. and Reddy, N. Suma (2015), "A Study on the Commodity Derivatives Market and Development in India-Towards Sustainability", RESEARCH HUB - International Multidisciplinary Research Journal, ISSN: 2349-7637, Volume 2, Issue 8, pp. 1-8.
2. Bansal, Y., Kumar S. and Verma, P. (2014), "Commodity Futures in Portfolio Diversification: Impact on Investor's Utility", Global Business and Management Research: An International Journal Volume 6, No. 2, pp. 112-121.
3. Laha, A. and Sinha, S. (2013), "Future Market and Price Risk Management: Evidence from Raw Jute and Sacking Markets in India", ELK Asia Pacific Journal of Finance and Risk Management, ISSN: 0976-7185, Volume 4, Issue 1.
4. Aloysius, Edward J. and Narasimha, Rao T.V. (2013), "Price Discovery Process and Volatility Spillover of Chilli spot and Futures Prices Evidence from National Commodity and Derivative Exchange Ltd (NCDEX)", IJEMR - December 2013, Volume 3, Issue 12, ISSN: 2249-8672, pp. 1-23.
5. M. Anoopkumar (2012) ,"Commodity Price Instability under Globalization: A Study of India's Plantation Crops", NRPPD Discussion Paper 13, pp. 1-56.

6. P. Vinod Kumar (2012), *"Futures Trade, Price Discovery and Risk Mitigation in Plantation Crops: Some First Order Lessons from natural Rubber and Black Pepper"*, NRPPD Discussion Paper 18, available at; <http://cds.edu/wp-content/uploads/2013/04/nrppd-18-final.pdf> pp. 1-35, (accessed on 31/05/2016).
7. Agrawal, A. and Basak , S. (2012), *"WTO & Indian Agriculture"*, International Journal of Innovative Research & Studies, ISSN: 2319-9725, Volume 1, Issue 1, pp. 1-13.
8. Sen, S. and Pual, M. (2010), *"Trading in India's Commodity Future Markets"*, Working Paper No: 2010/03, (ISID) February 2010, available at; <http://isidev.nic.in/pdf/WP1003.PDF>, pp. 1-21, (accessed on 31/05/2016).
9. Ranga, M. and Sharma, D. (2014), *"WTO and Indian Agriculture"*, Indian Journal of Applied Research, ISSN: 2249-555X, Volume 4, Issue 6, pp. 80-82.
10. Dr. Shree Bhagwat, Ritesh Omre, Deepak Chand (2012) *"Development of Financial Derivatives Market in India and its Position in Global Financial Crisis"* International Journal of Scientific & Engineering Research, ISSN: 2229-5518, Volume 3, Issue 12.
11. Dr. Shree Bhagwat, Ritesh Omre, Deepak Chand (2012) *"An Analysis of Indian Financial Derivatives Market and its Position in Global Financial Derivatives Market"* Journal of Business Management & Social Sciences Research ISSN: 2319-5614, 1(2); pp 45-59.
12. Rani, Pooja (2015), *"A Study of WTO and Agriculture Sector in India"*, International Journal of Multidisciplinary Research and Development, ISSN: 2349-5979, 2(9); pp. 456-459.
13. Kour, S. and Bhau, P. (2013), *"Impact of WTO on Indian Agriculture during 1990-2004"*, Journal of Economic & Social Development, ISSN: 0973 - 886X, Vol. 9, No. 1, pp. 139-145.
14. B. Sheshagiri, G. G. Honkan, and Vaikunthe, L. D. (2011), *"Impact of W.T.O on Indian Agriculture: Performance and Prospects"* International Journal of Current Research, ISSN: 0975-833X, Volume 3, Issue 10, pp.66-70.
15. Nabi, T. and Dhama, J. Kaur (2013), *"Analysis of India's Agriculture Export Performance in Pre and Post WTO Regime"* International Journal of Enhanced Research in Management & Computer Applications, ISSN: 2319-7471, Volume 2, Issue 4, pp. 1-5.
16. Dr. Shree Bhagwat, Ankur Goutam (2013), *"Development of Social Networking Sites and Their Role in Business with Special Reference to Facebook"* IOSR Journal of Business and Management (IOSR-JBM), ISSN: 2278-487X, Volume 6, Issue 5, pp. 15-28.
17. Dr. Shree Bhagwat, Ritesh Omre, Deepak Chand, (2013), *"Development of Social Networking Sites And Their Role In Online Share Trading & Business With Special Reference To Facebook"*

- International Journal of Business Management & Research (IJBMR), ISSN: 2249-6920, Volume 3, Issue 1, pp. 31-52.
18. Singh, S. (2014), *"Analysis of Trade before and after the WTO: A Case Study of India"* Global Journal of Finance and Management, ISSN: 0975-6477; 6(8), pp. 801-808.
 19. Dr. Shree Bhagwat, Angad Maravi, Ritesh Omre, and Deepak Chand (2015), *"Commodity Futures Market in India: Development, Regulation and Current Scenario"*, Journal of Business Management & Social Sciences Research (JBM&SSR), Volume 4, Issue No. 2.
 20. Dr. Shree Bhagwat, Angad Maravi, Ritesh Omre, and Deepak Chand (2015), *"A Study of Historical Background of Indian Commodity Market"*, EPRA International Journal of Economic and Business Review, Volume 3, Issue 3.
 21. Dr. Shree Bhagwat and Angad Singh Maravi (2015), *"The Role of Forward Markets Commission in Indian Commodity Markets"*, International Journal of Research-GRANTHAALAYAH, ISSN-2350-0530, (O) ISSN-2394-3629 (P), Volume 3, Issue 11.
 22. Dr. Shree Bhagwat and Angad Singh Maravi (2015), *"Commodity Exchanges in Commodity Markets of India: An Analytical Study of National Commodity Exchanges"*, International Journal of Management and Social Sciences Research, ISSN: 2319-4421; 4912); pp. 1-13.
 23. Rao, C. H. Hanumantha (2001), *"WTO and Viability of Indian Agriculture"*, Economic and Political Weekly September 8, 2001, pp. 3453-3457, (accessed on 31/05/2016).
 24. Singh, J. P. (2014), *"Developing countries, Agriculture and the World Trade Organization"* YOJANA, ISSN: 0971-8400, Volume 58, June 2014, pp. 24-28.
 25. Dr. Shree Bhagwat and Angad Singh Maravi (2016), *"An Analysis of Past and Present Status of Commodity Derivatives Market in India"* International Journal of Advanced Research in Management and Social Sciences (IJARMSS), ISSN: 2278-6236, Vol. 5, No. 2, pp. 163-184.
 26. Dr. Shree Bhagwat and Angad Singh Maravi (2016), *"A Study of Commodity Market V/S Multi Commodity Exchange of India Limited (MCX)"*, International Journal of Research in Management, Economics and Commerce, ISSN: 2250-057X, Volume 6, Issue 04, pp. 27-41.