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# IMPACT OF WTO ON PRICES OF PEPPER IN INDIA

# DR. RAZIYA M ASSISTANT PROFESSOR GOVT FIRST GRADE COLLEGE MASKI RAICHURU DIST, KARNATAKA

MOB:9945516631

EMAIL:razithecol@gmail.com

# **ABSTRACT:**

Black pepper is one of the earliest known spice crops of India .It is also as "King of Spices", and has an important position in international market. It is cultivated vastly in the Western Ghats of South India especially, Kerala, Karnataka and Tamil Nadu. India was the world's largest producer and exporter of Black pepper. India had dominant position in the pepper production, but its position in recent years declined and at present Indonesia tops in production. This can be significantly affecting the balance of payment problem, employment and national economy in general. It is one of the notable factor is that the establishment of WTO in 1995 in the made remarkable changes have in the field of international trade. Since Prices is the important factor which determines the production of spices an attempt is made to study the impact WTO on Annual prices of Black Pepper in India.

# **KEY WORDS:** *Spices, Pepper, and Domestic Price.* **INTRODUCTION:**

No country in the world grows as many varieties of spices as India. Although different spices are produced in different countries of the world, India has the privilege of producing all types of spices. She has spices like the majestic black pepper, elusive cardamom, refreshing ginger, colourful turmeric, fiery chilli, and a host of other spices like, cumin, coriander, aniseed, nutmeg, mace and saffron. And another notable factor here is spices trade in India is contributing much to the socioeconomic development of the country.

Black pepper is one of the earliest known spice crops of India. During the ancient times it was a prized and used instead of currency hence it is rightly called as "golden vine". It must be noted factor here that more than 95 per cent of the global output of black pepper is confined to six nations viz. India, Indonesia, Brazil, Malaysia, Srilanka and Vietnam. Among them India had dominant position in the pepper production, but its position in recent years declined and at present Indonesia tops in production.

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Among the pepper growing states in India, Kerala is the leading pepper producing state where more than 95 percent of the total area is under the cultivation of pepper as well as output. Karnataka is the second largest state in black pepper production, with the share of more than 2 per cent of the total output in the country.

Black pepper as an internationally traded commodity has always been associated with price fluctuations, which are influenced by several factors like dynamics in domestic and international production as well as consumption, exchange rates, trade agreements and export-import policies (Sabu & Kuruvila 2016). The prices of black pepper move cyclically through time and internationally traded black pepper shows price changes of more than five per cent from one month to another (Chopra & Bessler 2005). Hence, the study was aimed to understand the pattern of annual prices of black pepper in domestic markets during the pre-liberalisation and post-liberalisation periods.

#### **Materials and Methods**

The present study utilized time series data on domestic prices of black pepper from January 1985 to December 2017. To study the influence of trade liberalization on price behavior, the data was divided into three sub-periods viz., pre- WTO (January 1985 to December 1994), post-WTO I (January 1995 to December 2005) And post-WTO II (January 2005 to December 2017).

## **Prices of Spices**

Another important factor which determines the production of spices is price of spices. The price of spices is decided according to the general appearance of the produce, percentage of moisture, presence of light berries, pinheads etc of the concerned spices. The spices usually brought by the growers or village merchants for sales are mostly in the ungraded or semi graded form. In order to ensure quality of the spices exports from India it is subjected to compulsory quality control and inspection. Since 1963 for export the grading of spices under AGMARK, was made compulsory. For the export of spices under different trade descriptions took into consideration different quality factors such as garbled and un garbled berries; moisture content and other aspects such as color, surface shape, freedom from moulds or insect or any other adulterant etc.

# **Marketing of Pepper**

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In India, marketing of pepper is mainly in the hands of a few traders and exporters. In the normal case there is no Government intervention in the marketing procedure or in the maintenance of 'price. Pepper marketing is traditionally a private business. There are a number of intermediaries like itinerant/ village merchants, wholesalers, commission agents and exporters who are responsible for the disparity between the price paid by the consumer and the price received by the producer. The growers in the village get only 60-70 per cent of the retail price in the distributing markets.

Normally, the farmers dispose pepper either locally to a village merchant or shop, a cooperative or even to a terminal market. The choice depends on a number of factors such as loyalty or financial obligations to particular traders, the distance from terminal markets, the prevailing market price etc. Selling the standing crop to pre-harvest contractors is also in-vogue in some areas in which case the contractors make advance payment to the farmers. Collection centres operate within short distances and also in every town. Here the merchants purchase the produce and after accumulating sufficient stock or when the terminal market price is sufficiently attractive, the commodity is bagged for transport to the terminal markets. The main terminal or wholesale marketing centres for pepper in India are Calicut, Tellichery, Cochin and Allepey. In Kerala, Sirsi and Mangalore in Karnataka, Mumbai in Maharashtra, Chennai in Tamil Nadu and Delhi. Cochin is the main market centre from where the exports are taking place in large volume.

In these terminal markets pepper brought from merchants are received by commission agents and it is then traded between brokers or dealers. Exporters purchase from the commission agents or dealers. The exporters store the pepper in their godowns until an export order is received. Then he grades it, obtains the grade certificate and finally consigns the product to the shipping agents.

Garbling and grading is normally resorted to either the wholesalers level or at the exporters level. A few merchants in the assembling markets, however, resort to garbling and grading before disposing it off to the wholesalers or exporters. The wholesalers or exporters dry the produce again after washing, winnow it to remove chaffs, light berries and pinheads and sieve it with sieves of different mesh sizes to get berries of different grades. Specifications have been made separately for different ty'pe's of spices such as "Malabar garbled I ungarbled", "Tellichery Garbled", "Garbled Light", "Pinheads" etc. On the whole, there are about nineteen special grades of black spices grading under Agmark for export which is mostly done in the wholesale marketing centres. Among the different grades of spices that are exported, Malabar Garbled black spices (MG I) is the most popular grade which accounts for about 80-85 per cent of the overall exports. Besides, spices in the whole form, spices powder is also graded under Agmark for export. However, black spices is not graded under Agmark for the internal market.

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There are a few regulated markets for pepper in. Karnataka, while in Kerala, pepper has not been brought under regulation so far. Although there are a few co-operative marketing societies in Kerala handling pepper, but they are not effective because of poor financial resources. Apart from these, there is an Apex body of primary co-operative marketing societies "Kerala State Co-operative Marketing Federation", both of these are transacting in spices, in particular pepper. This Federation is not only processing pepper through co-operatives but also exports it.

Table: 1.1.Annual wholesale prices of pepper

	F
Year	Price
1984-85	25.78
1985-86	41.03
1986-87	54.29
1987-88	52.82
1988-89	38.4
1989-90	42.03
1990-91	33.37
1991-92	33.72
1992-93	28.58
1993-94	37.69
1994-95	62.81
1995-96	77.08
1996-97	83.75
1997-98	173.42
1998-99	206.03
1999-00	215.02
2000-01	174.24
2001-02	80.39
2002-03	88.32
2003-04	74.11
2004-05	69.08
2005-06	66.44
2006-07	100.5
2007-08	140.16
2008-09	129.3
2009-10	136.42
2010-11	197.05
2011-12	318.77
2012-13	398.18
2013-14	448.29
2014-15	686.64
2015-16	655.22

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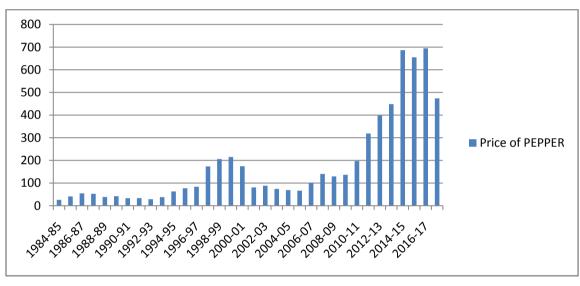
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2016-17	694.77
2017-18	473.73

Source: Price: Pepper: IPSTA Kochi

With references to the table 1.1, it is clear that pepper price was minimum in 1984-85 by 25 RS and it reached its maximum by 694.77 RS in 2016-17. Another notable factor here is in the year 2011-12 pepper price shows a maximum hike from 197.05 RS to 318.77RS. But in the year 2017-18 pepper price falls sharply from 694.77RS to 473.73RS. This data is depicted in the following figure 1.A.

FIGURE 1.A: TRENDS IN THE PRICE OF PEPPER FROM 1984-85 TO 2017-18



Source: Table 1.1

# Regression Analysis of prices of pepper in India.

To analyze the impact WTO, the available data is divided into three stages before the agreement of WTO (pre reforms), WTO (reforms), and post WTO (post reforms) periods

 $Y=a+bX_1*X_2*X_3+e$ 

Here

A= constant

 $bX_1$ = coefficient of part I

 $bX_2$ = coefficient of part II represents the rate of change on an average.

Part I = 1 for the duration 1996-2005

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= 0 for all the other year

Part II = 1 for the duration 2006-2018(till date or available)

= 0 for all the other year

Pre WTO = base.

Table 1.2: Hypothesis testing of Prices of pepper

Annual	Period			Standardized				
average		Unstandardized Coefficients		Coefficients				
prices							Adjusted R	
		В	Std error	Beta	Т	P	Square	ANOVA p
Pepper	(Constant)	227.221	55.67		4.080	0.000		
	Period- Part I	203.631	80.713	0.358	2.523	0.017	0.507	0.000
	Period- Part II	451.574	75.667	0.847	5.967	0.000	_	

Source: Table 1.1

$$Y=227.221+203.631+451.574...(1)$$

The regression equation (1) of price of pepper showed that, the price of pepper was significantly increased by 203.631 RS (p=0.017 $\langle$ 0.05) in part I of WTO and in part II of WTO the prices of pepper significantly by 451.574RS (p=0.00 $\langle$ 0.01), Further R<sup>2</sup> value shows that pepper price is positively impacted by 50.7 percent of the prices of pepper.

So it is clear from above equations that the prices of pepper are significantly impacted from WTO.

#### Conclusion

Unlike other agricultural commodities the production of pepper is seasonal and its price is largely influenced by the external demand from other countries. Vagaries in supply and elements of speculation are the twin problems connected with the price of pepper. In the markets, the producers are paid more than the economic price when the supply is low and it reverses when the supply is supposed to be slightly higher than the demand, resulting in a greater instability in price. Generally, the prices of pepper in the market are depressed in the months of Jan.-Feb. mainly due to fresh arrivals in the market and it registers an increase from July-Aug. Following a fall in arrivals and later it goes on increasing and stay at a higher level with frequent fluctuations depending on foreign demand till the arrival of the next season. Again, the price of pepper varies from one market to another depending upon the demand and supply and also costs involved in its marketing activities.

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Though India declined its position in Global market in recent years in terms of its production but because of premium quality of Indian black pepper it is still highly demanded in international market. The erratic trend in the production of pepper in India is mainly due to the incidence of Kattee and Azhukal diseases. And the cultivation is fully climate dependant and favourable tropical condition with warm humid weather favours most of the disease and pest development. In many cases, effective control measures are available. But timely plant protection measure is very crucial which seems to be hindered by non-availability of plant protection chemicals, non-availability of credit and all the more influenced by the highly fluctuating market price of the produce is also one of the reason for it. In certain areas, strengthening of extension system also deserves immediate attention

#### REFERENCES

- Gopal N. and Chadurvedi T (2002). Challenges to Indian argriculture in the WTO era.
- Hirashima, S (2002). Role of agriculture in Indian development A medium terms perspective. Proceedings of Tenth Annual Conferences of AERA, Marathwada agricultural university, Parbhani, Maharastra.
- Jayashree E. (2005). Value addition of major spices at farm level, spice India, August.
- John Zacharia, T. (2005). Value added products from black pepper, spice India, January.
- John K C(2003). Spices export from India )- A Stock Talking, Economic and political weekly, Vol.XXXVIII,No.19.
- Joseph George (2000). A study on export performances of spices with special references to pepper, project report, Mahathma Ghandhi University, kottayam.
- Kannan S. (2005). Marketing of cardamom, spice India, July.
- Swaminathan Commission Report (2002). WTO concerns for Kerala, Kerala State Planning Board, Trivandrum.
- Madan Lal (2004). Impact of SPS measures on agro-products, Spice India, November.
- Manoj Shanker Guptha (2007). WTO and Indian Economy, Serial Publication, New Delhi.
- Milind Chaudari (2000) seed spices a prespective, Indian Spices, October. Vol 37, No 4.
- Nalin Kumar C. and Muraleedaran, V.R(2007). SPS Regulations and Competitiveness: An Analysis of Indian Spice Exports, South Asia Economic journal, Vol 8, No 2.
- Parthasarathy V.A and Madan M.S (2008) India is fast becoming a hub for value addition in spices. The Hindu Survey of Agriculture.

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• Punam (2007) WTO: some opportunities and challenges to Indian Agriculture, WTO and Indian Economy, Serial Publication, New Delhi..