

## **IMPACT OF TRADE LIBERALIZATION IN TERMS OF TRADE IN INDIAN AGRICULTURE SECTOR**

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### **ABSTRACT**

*Liberalization refers to a relaxation of previous government restrictions, generally in such areas of social, political and economic policy. Countries can benefit economically through liberalization on the areas of comparative advantage. Because no country has the capacity to produce all the commodities and services by itself that are required by the people of that country. Trade liberalization means reducing the limitations on trade that countries around the world have erected over a large number of years or decline in the trade practices that free flow of goods and services from one nation to another to attain growth and prosperity. It includes dismantling of tariff such as duties, surcharges and export subsidies as well as non-tariff barriers that is licensing regulations, quotas, and arbitrary standards. It has been broadly related to human development. Trade contributes to growth, provides higher incomes and opens up massive employment opportunities. Agriculture helps human and their civilization through providing the basic desires of life like food, clothing, shelters, medicine and recreation. The history of agriculture in India dates back to Indus Valley Civilization Era and even before that in some parts of Southern India. Today, India ranks second worldwide in farm output. In this paper impact of trade liberalization in terms of trade in Indian agriculture sector is discussed.*

**KEYWORDS:** *Liberalization, Social, Political and Economic Policy, Indian Agriculture Sector.*

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### **Introduction**

Liberalization provided the right environment to international trade which leads to greater interdependence among countries there by narrowing economic inequalities. The principle of free trade roots from the 18th and 19th centuries when two economists Adam Smith and then David Ricardo developed the basis for international trade as part of their efforts to make a case study for free trade. Adam Smith analyzed that, "all commerce that is carried on betwixt any two countries must necessarily be advantageous to both", and consequently, "all duties, customs, and excise on imports should be abolished, and free commerce and liberty of exchange should be allowed with all nations". The trade liberalization in India refers to the ongoing economic reforms in India that started on 24 July, 1991. After independence in 1947, India corresponds to socialist policies. Pandit Nehru, Lal Bahadur Shastri, Indira Gandhi, Moraji Desai, Rajiv Gandhi are the five major Prime ministers who followed this socialism policy. Between 1947 and the late 1980s, India followed an inward-oriented development strategy it means Government policy that attempts to achieve development by stimulating domestic industry and import substitution behind trade barriers. A combination of external shocks in the late 1980s and early 1990s led to large macroeconomic

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imbalances, and as a result, India requested a stand-by arrangement from the International Monetary Fund in August of 1991. Among the conditions for the arrangement was that India had to implement major structural reforms, including trade liberalization, financial sector reform and tax reform. The new economic policy introduced changes in various areas. This policy has salient features which are Liberalization that is external and internal, Privatization, and Globalization which are known as LPG model. The principal objective of this model was to make the economy of India the fastest developing economy in the globe with capabilities that help it match up with the biggest economies of the world.

### **Indian Agriculture**

The term agriculture means cultivation of land means the science and art of producing crops and livestock for economic purposes. The Green Revolution in India was a period when agriculture in India increased its yields due to improved utilization of agronomic technology. Green Revolution allowed developing countries, like India, to overcome poor agricultural productivity. It started in India in the early 1960s and led to an increase in food grain production, especially in Punjab, Haryana and Uttar Pradesh during the early phase. The introduction of high-yielding varieties of seeds and the increased use of chemical fertilizers and irrigation led to the increase in production requisite to make the country self-sufficient in food grains which improved agriculture in India. Trade liberalization started to affect Indian agriculture in the early 1990s, with the progressive reduction or removal of trade restrictions of various types. The rupee devaluation of mid 1991 was followed by the removal of export subsidies on agricultural commodities such as tea and coffee. The process accelerated from the late 1990s, in tune with WTO agreements and involved liberalization of export controls, liberalization of quantitative controls on imports and decontrol of domestic trade. The quantitative restrictions on imports and export restrictions on groundnut oil, agricultural seeds, wheat and wheat products, butter, rice and pulses, were all removed from April 2000. This has been associated not only with the removal of quota control on imports, but the reduction of import tariffs, except in certain cases like soya bean where the tariff levels have reached the bound levels. In any case, the optimism surrounding the signing of the Uruguay Round agreement was such that for a range of important agricultural commodities including rice wheat and oil-seeds, the Indian trade negotiators had affirmed zero rates of tariff binding. After world trade prices of various crops started crashing from 1996 onwards, the Government of India was forced to renegotiate the bound tariff levels for as many as 15 agricultural items. After economic liberalization of 1991, major changes have been introduced in foreign trade policy relating to agriculture which includes:

- Channeling in foreign agricultural commodities has been abandoned for large number of commodities except for export of onion and import of cereals, pulses and edible oils.
- Quantitative restrictions on most of the exports and imports of agricultural commodities have been removed, and
- Import tariffs have been reduced.

With implementation of 1991 economic reforms, the Indian agriculture sector came to be seen as an important pillar in international trade. The transformation of Indian agriculture from a deficit sector to the surplus sector made it globally competitive.

### **Objectives of the Study**

- This paper aims to study the concept of trade liberalization in India
- To examine the index of terms of trade in Indian agriculture sector
- To analyze agricultural performance in both the pre and post reform era.

### **Collection or Source of Data**

The present study is based on secondary data. The secondary data is collected from Central Budget, Government Of India, New Delhi, Economic Survey, Ministry of Finance, Government Of India, New Delhi, Annual Report Ministry of Agriculture Government Of India, New Delhi, Agriculture Cost and Prices Commission, Directorate Of Economics & Statistics, Government Of India, New Delhi, Reports published by various Ministries, WTO publications, IMF publications. Apart from this the information also collected from the various websites.

### **Selection of the Study Period**

The present study is confined to Indian agriculture sector by undertaking the time duration from 1980-81 to 2015-2016. In the present study focus will be put on trade liberalization, Indian agriculture sector and terms of trade in agriculture sector.

### Terms of Trade in Agriculture Sector

The terms of international trade are concerned with the way in which the different countries exchange their respective goods. Right since the times of David Ricardo and J.S. Mill, the economists have paid considerable attention to the determination of the terms of trade among the countries. The terms of trade determine how the gains from trade are allocated among the trading countries. There is a widespread and genuine feeling among the less developed countries or poor countries that they have been exploited by the developed countries. This feeling has arisen and got confirmed on account of secular deterioration in their terms of trade. The terms of trade can be calculated with the following formula:

$$\frac{\text{Prices Received}}{\text{Prices Paid}} \times 100$$

Or the terms of trade is equal to exports that is prices received divide by prices paid that is imports multiply by hundred. It is also called Barter Terms of Trade. The Input Output Price Ratio can be calculated with the following formula:

$$\frac{\text{Index of Prices Paid}}{\text{Index of Prices Received}}$$

Or the Input Output Price Ratio is the ratio of 'prices paid out' to 'prices received'. The impacts of trade liberalization on Indian agricultural terms of trade and input output price ratio from 1981-82 to 2004-05 can be described with the help of the following table 1:

**Table 1: Terms of Trade in Agriculture and Input Output Price Ratio in Pre and Post Liberalization Period in India**

Base TE 1990-91 =100

Year	Index of Prices Paid	Index of Prices Received	Input-output Price Ratio	Agriculture's Terms of Trade
<b>Pre Liberalization Period</b>				
1981-82	61.9	54.9	1.13	88.7
1982-83	66.0	60.3	1.09	91.4
1983-84	70.1	64.2	1.09	91.6
1984-85	72.4	68.0	1.06	93.9
1985-86	75.2	70.4	1.07	93.6
1986-87	80.2	76.7	1.05	95.7
1987-88	88.3	86.0	1.03	97.4
1988-89	91.8	90.3	1.02	98.3
1989-90	98.1	97.5	1.01	99.4
<b>Post Liberalization Period</b>				
1990-91	110.2	112.3	0.98	101.9
1991-92	123.8	130.6	0.95	105.6
1992-93	133.5	138.7	0.96	103.9
1993-94	146.1	151.4	0.96	103.6
1994-95	160.5	171.1	0.94	106.6
1995-96	173.7	182.9	0.95	105.3
1996-97	184.8	190.6	0.97	103.1
1997-98	194.9	205.9	0.95	105.6
1998-99	209.9	220.8	0.95	105.2
1999-00	214.0	219.8	0.97	102.7
2000-01	218.9	225.0	0.97	100.9
2001-02	224.3	235.3	0.95	102.6
2002-03	239.3	247.9	0.97	103.6
2003-04	248.7	251.2	0.99	101.0
2004-05	258.3	260.1	0.99	100.7

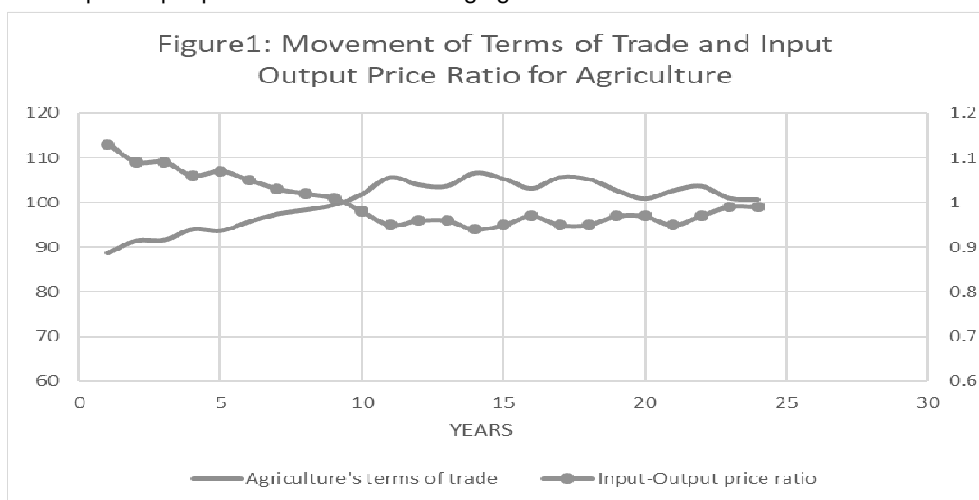
Source: Report of the Commission for Agricultural Costs and Prices, April 2007.  
Notes: 'Prices paid' are for intermediate purchases which may be treated as variable inputs other than labour; index numbers are based on the triennium ending 1990-91= 100.

The table 1 depicts the index of prices received and prices paid out by farmers, agricultural terms of trade and input output price ratio from 1981-82 to 2004-05. Above table is divided into two parts pre liberalization period that is from 1980-81 to 1989-90 and post liberalization period that is from 1990-91 to 2004-05.

**Pre liberalization period:** the input output price ratio has fallen continuously from 1.13 in 1980-81 to 1.01 in 1989-90 except in one year that is 1985-86; there was a little increase in this year whereas the agricultural terms of trade has increased throughout the years in the pre reform period from 88.7 in 1980-81 to 99.4 in 1989-90. It is observed from the data that the input output prices ratio and agricultural terms of trade are moving in opposite direction in the pre liberalization period.

**Post liberalization period:** in post liberalization period the input output price ratio has mixed trend indicating no clear trend, began to rise since 1998-99 denoting a move against agriculture. but overall it has increased from 0.98 in 1990-91 to 0.99 in 2004-05 similarly the agricultural terms of trade has mixed trend but the immediate effect of liberalization can be seen after 90's as it has increased from 101.9 in 1990-91 to 105.2 in 1998-99 after that it declined slightly to 100.7 in 2004-05.

From the above analysis concluded that the pattern of movement of the agricultural terms of trade and the input-output price ratio clearly indicates a favorable movement for agriculture during 1980s or in pre liberalization period. However, during 1990s, although barter terms of trade showed trends that were favourable for agriculture up to mid-1990s. The terms of trade and the input-output price ratio show dissimilar movement over the fifteen years since 1990. The movements are clearly favourable to agriculture till around the mid-nineties and a reversal after that. The rise in the 1990's was because of the falling levels of industrial protection and because of the rising administered (procurement) prices of food grains, particularly rice and wheat. On the other hand, the input-output price ratio has moved to agriculture's disadvantage which can be easily seen in the graphical representation of agricultural terms of trade and input output price ratio in the following figure 1:



Above figure 1 is based on the data of table 1 and shows the movements of agricultural terms of trade and input output ratio. In 1980's the agricultural terms of trade is rising but the input output price ratio is falling it means there is inverse relationship between these two lines which clearly indicates favorable movements in terms of trade and input-output price ratios. Even after the worsening since 2000 the input-output price ratio has improved by over 35 per cent in the last quarter century. During the initial years of economic reforms terms of trade was moving in favour of agriculture. But during the post-WTO period, both terms of trade and input-output price ratios showed a shift against agriculture. The terms of trade show only a humble improvement but are decidedly more favorable to agriculture in post liberalization period than pre liberalization period. An increase in the terms of trade in favour of agriculture may promote rural household savings and investment.

As per the revised methodology, with base year 2011-12, during 2004-05 to 2015-16, Terms of Trade have become favorable for farmers and agriculture. The index of Terms of Trade in agriculture and input output price ratio during the last 10 years is shown in Table 2.

**Table 2: Index of Terms of Trade in Agriculture Sector and Input Output Price Ratio in India**

(Base: Triennium Ending 2011-12=100)

Year	Index of Prices Received	Index of Prices Paid	Input Output Price Ratio	Index of Terms of Trade (ITT)
2004-05	61.56	75.48	1.23	81.56
2005-06	61.03	76.46	1.25	79.82
2006-07	63.63	76.82	1.2	82.82
2007-08	71.45	82.37	1.15	86.74
2008-09	81.72	87.06	1.06	93.86
2009-10	90.57	92.1	1.01	98.35
2010-11	101.1	98.26	0.97	102.89
2011-12	108.32	109.64	1.01	98.79
2012-13	120.34	119.26	0.99	100.91
2013-14	132.85	127.51	0.96	104.19
2014-15	140.66	131.51	0.93	106.96
2015-16(P)	145.41	136.1	0.93	106.84

Source: Pocket book of Agricultural Statistics 2016, Government of India Ministry of Agriculture & Farmers Welfare, Department of Agriculture, Cooperation & Farmers Welfare Directorate of Economics & Statistics New Delhi.

**(P): Provisional**

Analyzing the data collected from pocket book of agricultural statistics for the period 2004-04 to 2015-16, it can be observed from the above table that the index of terms of trade for agriculture increased significantly over the period 2004-05 to 2015-16. It increased from 87.82 in 2004-05 to 102.95 in 2010-11. In other words, the index increased by 17 percentage points over this period. It shows that agriculture have benefited a lot during this period by the increase in terms of trade. After reaching the highest level in 2010-11, declined by 4 percent in 2011-12. again it takes a high speed straight to 106.84 in 2015-16. the input output price ratio has mix trends throughout the years but overall it has declined from 1.23 in 2004-05 to 0.93 in 2015-16. It clearly reflects that input output price ratio and index of terms of trade move in opposite directions. The factors behind the increase in terms of trade in Indian agriculture sector are significant increase in minimum support prices and rise in global agricultural prices.

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