



## International Journal of Applied Business and Economic Research

ISSN : 0972-7302

available at <http://www.serialsjournal.com>

© Serials Publications Pvt. Ltd.

Volume 15 • Number 10 • 2017

### India's Export to Saudi Arabia in Post WTO Regime : Some Facts about about Price and Market Accessibility

Shabana Maqsood<sup>1</sup> and Anjali Goswami<sup>2</sup>

<sup>1</sup> College of Administrative and Financial Sciences, Saudi Electronic University, Riyadh, KSA, E-mail: [s.maqsood@seu.edu.sa](mailto:s.maqsood@seu.edu.sa)

<sup>2</sup> College of science and Theoretical Studies (Saudi Electronic University), Saudi Electronic University, Riyadh, KSA  
E-mail: [a.goswami@seu.edu.sa](mailto:a.goswami@seu.edu.sa)

**Abstract:** The Kingdom of Saudi Arabia has the second largest reserve of petroleum products and has proved to be a leading exporter of these items to the world. At the same time India pays highest amount for the import of petroleum products. For the fiscal year 2015-16, import of petroleum products comprises for 22.2 percent of the total import (CMIE, 2015-16). This shows how important the Kingdom of Saudi Arabia is for India. The location of Saudi Arabia also makes it strategic from the view point of India. It is well connected by sea route and distance between these two nations is also very short. This gives an opportunity for both the countries to reduce the cost of transportation as well as a secure transportation. Because of these reasons the roots of India's trade relations with Saudi Arabia has been traced date back to third millennium BC (Heptulla, Nejma, 1991). Since then the trade relations between these two nations improved and by the end of 1000 AD became the backbone of Arabian economy (Rechard, Edmund, 1992).

After getting independence in 1947, India started formal diplomatic relations with the Kingdom of Saudi Arabia. With the passage of time these two countries became closer to each other and strengthen their relations pertaining to regional affairs and the trade relations. In 1955 the Saudi monarch, King Saud visited India and both the countries realised the importance of peaceful coexistence and agreed to work together (Prithvi Ram Mudiam, 1994). After a gap of nearly 51 years, King Abdullah visited India in 2006 (BBC, 25 January, 2006). Both the countries signed the "Delhi Declaration" to forge the strategic energy partnership which advocates for increased and stable supply of crude oil from Saudi Arabia (BBC, 27 January 2006). The visit of Indian Prime Minister, Dr. Manmohan Singh in 2010 further boosted the trade relations between India and Saudi Arabia (The Hindu, 2010). Only after 6 years in 2016 Shri Narendra Modi visited Saudi Arabia to widen and strengthen the economic ties between these two nations (Hindustan Times, 2016).

In 1991 when India moved on the path of economic reforms, it brought both the challenges as well as opportunities. One of the major challenges the India was expecting to face was increased demand for

petroleum products for both personal and industrial uses. The collapse of USSR in 1991 further increased our dependency on Saudi Arabia which was already supplying nearly 1/4<sup>th</sup> of India's total demand (Rechard, Edmund, 1992). At the same time India was also searching for a partner where it can sell the increased output resulted from increased investment because of the policies of globalisation, privatisation and liberalisation. India's expectation for export growth further improved when we became the founder member of World Trade Organisation (WTO) in 1995. Our expectation about export growth further boosted when Saudi Arabia also became a member of the WTO. Since then nearly two decades are passed and it is the time to analyse that whether India has succeeded in achieving the goal of market access? It is also important to now that in which direction prices have moved? The present study therefore tries to analyse the trends in India's export to Saudi Arabia. It also queries about the movement in prices of exportable items which we export to Saudi Arabia.

### **METHODOLOGY**

There are a large number of Indian products which are being exported to Saud Arabia market. Taking each and every item is not possible for the present study. For the sake of simplicity some selected major items are taken into account at 2 digit level HS code category provided by the Ministry of Commerce, Government of India. For the present study 10 major items (according to their values) are selected. These items are Cereals, Meat and Edible Meat Offal, Coffee, Tea, Mate and Spices, Mineral Fuels, Mineral Oils and Products of their Distillation; Bituminous Substances; Mineral Waxes, Organic Chemicals, Electrical Machinery and Equipment and Parts thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts, Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts thereof, Articles of Iron or Steel, Copper and Articles thereof and Iron and Steel. Keeping in mind the nature of the products these 10 exportable items have been categorised into three groups; namely (i) Food items, (ii) minerals and other raw materials and (iii) manufactured items.

The food items are composed of Cereals, Meat and Edible Meat Offal, Coffee, Tea, Mate and Spices. The second group of minerals and other raw materials includes export of Mineral Fuels, Mineral Oils and Products of their Distillation; Bituminous Substances; Mineral Waxes and Organic Chemicals. The third category of manufactured items includes Electrical Machinery and Equipment and Parts thereof; Sound Recorders and Reproducers, Television Image and Sound Recorders and Reproducers, and Parts, Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts thereof, Articles of Iron or Steel, Copper and Articles thereof and Iron and Steel.

Taking all the above items, separate indices are prepared for each category of exportable items to measure the changes in the quantity of the items and the movement in the prices of these products under the WTO regime. For calculation of indices, Fisher's Ideal Index is chosen. To analyse the movement in the volume of exports, Fisher's quantity index is used. The quantity index is calculated with the help of the following formula.

$$Q_0 = \sqrt{\frac{\sum p_0 q_1 \times \sum q_1 p_1}{\sum p_0 q_0 \times \sum q_0 p_1}} \times 100$$

Where  $Q_0$  = Quantity Index,  $p_0$  = Base Year Price,  $q_0$  = Base Year Quantity,  $p_1$  = Current Year Price,  $q_1$  = Current Year Quantity.

To measure the changes in the prices of exportable items, the price index has been constructed on the basis of following formula.

$$P_0 = \sqrt{\frac{\sum q_0 p_1 \times \sum q_1 p_1}{\sum q_0 p_0 \times \sum q_1 p_0}} \times 100$$

Here  $P_0$  denotes the value of price index. The other abbreviations used for the calculation of changes in price are the same as the quantity index. For the calculation of indices, 1996-97 is used as the base year.

## **RESULTS AND DISCUSSION**

For India being a farmer's country, the trade in agricultural commodities assumes a great importance. Since Saudi Arabia has a great potential for export of Indian agricultural commodities we expect to have a great improvement in the agricultural trade between these two countries. It was believed that Saudi Arabia entry among the members of WTO may improve both the process for agricultural commodities as well as the access in the market because of its location and means of transportation (sea routes). Based on the above methodology adopted from the study conducted by Dastgir Alam (2011), price and quantity indices have been prepared to know the improvement in India's exports. Effect of WTO on bilateral trade between India and Saudi Arabia has been analysed here in terms of export of agricultural commodities, minerals and other raw materials and manufactured items.

### **Export of Food Items**

The information about the same is provided in table 1. It can be seen from the below table that overall there is improvement in India's agricultural export to Saudi Arabia. In general during the study period India's has a gain in terms of improvement in prices for agricultural commodities along with a greater market access for its agricultural commodities in Saudi market.

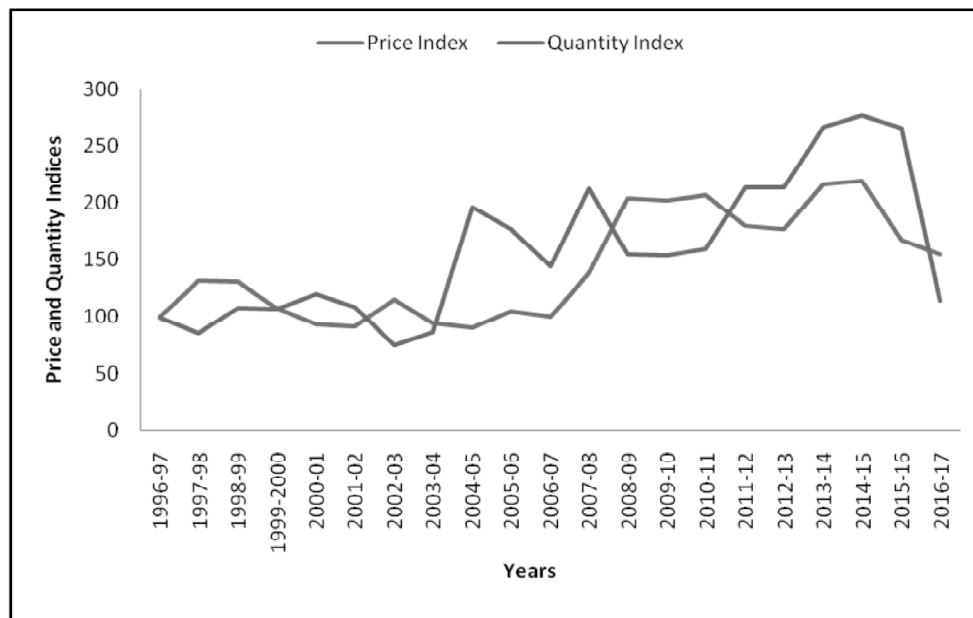
To investigate the performance of WTO in improving agricultural trade between these two nations when we look at the trend it is found that in pre WTO regime (when India was already entered in the WTO regime) improvement in price is registered but very soon it started declining and in fact it goes below the base year prices. But in the post reform period (when Saudi Arabia entered in WTO regime) India started receiving the benefits of WTO and manage to have an improvement in the prices of agricultural exports. Only in a period of only 5 years the prices of Indian agricultural exports became double than the base price though after that it has gone down. In the pre reform period the average price index for agricultural export have been 106 which is showing merely any increase in the prices of India's agricultural exports to Saudi Arabia. But when Saudi entered in WTO regime India received its benefit and average price index for agricultural exports jumped to 172.88 point during the study period.

The values of quantity index for India's agricultural exports to Saudi Arabia show a very erratic trend in the period before Saudi Arabia accepts the WTO membership. With all ups and down the average quantity index has hardly improved to 110 points. After accepting the WTO membership Saudi Arabia whole heartedly welcome India agricultural products and India's access in Saudi economy improved. In the post WTO regime average quantity index for India's agricultural exports reached to 196.69 points. The trend is also much more consistent than the pre WTO regime. It may be therefore pointed out that acceptance

**Table 1**  
**Price and Quantity Indices of Exported Food Items**

<i>Year</i>	<i>Price Index</i>	<i>Quantity Index</i>
1996-97	100	100
1997-98	131.91	86.02
1998-99	131.17	107.95
1999-2000	107.45	107.51
2000-01	92.99	120.75
2001-02	91.49	109.37
2002-03	115.24	75.45
2003-04	93.85	86.86
2004-05	90.30	196.41
Average from 1996-97 to 2004-05	106.04	110.04
2005-06	104.70	177.91
2006-07	100.19	144.94
2007-08	138.26	212.75
2008-09	203.93	155.49
2009-10	202.64	154.31
2010-11	207.18	160.53
2011-12	179.85	214.18
2012-13	177.61	214.18
2013-14	217.10	266.91
2014-15	219.80	277.63
2015-16	167.92	266.10
2016-17	155.42	115.33
<b>Average from 2005-06 to 2016-17</b>	<b>172.88</b>	<b>196.69</b>

Source: Calculated from the data available with Ministry of Commerce, Government of India



**Figure 1: Trends in Price and Quantity Indices of Exported Food Items**

Source: Based on table 1

of WTO membership by Saudi Arabia has proved to be very fruitful for India. The umbrella of WTO has provided a very conducive environment for growth of India's agricultural exports to Saudi Arabia. India has registered an improvement both in terms of prices and market access for agricultural exports.

### **Export of Minerals and Other Raw Materials**

It can be seen from the below table that overall there is improvements in India's minerals and other raw materials export to Saudi Arabia. In general during the study period India's has a gain in terms of improvements in prices of minerals and other raw materials along with greater market access in Saudi Market.

**Table 2**  
**Price and Quantity Index of Exported Minerals and Other Raw Materials**

<i>Year</i>	<i>Price Index</i>	<i>Quantity Index</i>
1996-97	100	100
1997-98	71.1709353	189.1046587
1998-99	61.4474689	216.2024621
1999-2000	75.8357367	332.2360953
2000-01	85.6224719	285.1341752
2001-02	85.9843457	329.7137038
2002-03	306.037443	219.840111
2003-04	786.309488	122.6856437
2004-05	119.59544	404.7654688
Average from 1996-97 to 2004-05	188.00037	244.4091465
2005-06	331.949493	386.8302469
2006-07	716.297195	400.0716324
2007-08	1121.26216	965.7557838
2008-09	551.811554	4127.885229
2009-10	1438.02015	1230.647635
2010-11	347.155776	3915.84053
2011-12	887.185292	2948.462007
2012-13	4897.73295	1611.51673
2013-14	2345.57792	4402.656044
2014-15	2478.07892	3410.974022
2015-16	405.695473	6601.516851
2016-17	238.7101	3667.201243
<b>Average from 2005-06 to 2016-17</b>	<b>1313.28975</b>	<b>2805.779829</b>

*Source:* calculated from the data available with Ministry of Commerce, Government of India



Figure 2: Trends in Price and Quantity Indices of Exported Minerals and Other Raw Materials

Source: Based on table 2

To investigate the performance of WTO in improving minerals and other raw materials trade between two nations when we look at the trend it is found that in pre WTO regime (when India was already in WTO regime) regular fluctuation in the price is noticed. Sometimes it was greater than base year price and sometimes it is less than base year price. The average price index for this period is 188.00 points. After the entry of Saudi Arabia into WTO regime in 2005, India started receiving the benefits of WTO and manages to have regular improvement in the prices of minerals and other raw materials exports. After 2005 India's exports prices for minerals and other raw materials has increased many fold. It jumped to 4897.73 in 2012-13. This monumental rise in the prices of exports of minerals and other raw materials might have been caused by increased demand for raw materials and related items for the diversification of the Saudi economy. Thereafter it has a declining trend. Financial meltdown and global recession may have been a cause for this. The average prices index after the WTO regime is 1313.28 which is much greater than the base year prices.

The values of quantity index for India's minerals and other raw materials show regular improvements in the period before Saudi Arabia accepts the WTO membership. According to the table 2 the export of minerals and other raw materials has improved over the period of time. The data shows that in pre WTO regime (when India was already entered in WTO regime) improvement in market access for Indian exported minerals and other raw materials registered a continuous growth till 2001-02 and reached to 329.71 points but after that it declines in consecutive two year however it remains higher than base year. Before the entry of Saudi Arabia into WTO regime the average quantity index for India's minerals and other raw materials was 244.40 points. After accepting the membership of WTO, Saudi Arabia opens the market for India's minerals and other raw material products and India's access in Saudi economy has increased. In the post WTO regime average quantity index for India's minerals and other raw materials exports reached to 2805.77 points. This massive increase in the quantity of minerals and other raw materials export show the combined effect of both, the policies of WTO and the rapid diversification of Saudi economy.

## Export of Manufactured Items

The trade of the manufactured items are largely dominated by the developed nations. India entered in this market more strongly only after the economic reforms when we started looking for export led growth. After accepting the membership of WTO in 1995, India's expectations further improved for the export of its manufactured items. The performance of export for this sector may be well understood with the help of the following table. Table 3 shows that the prices of India's exports of manufactured items were declining continuously from 1996-97 to 2001-02, after that it shows some improvement. In 2001-02 the price index of manufactured items reached to the minimum level of 63.92 points. In the post reform periods the prices were not favourable for India's export of manufactured item in Saudi Arabia. After 2004-05 the export prices of manufactured items to Saudi Arabia starts rising. The average price index for export of manufactured items to Saudi Arabia (before accepting the WTO regime of Saudi Arabia) was 82.83 points during 1996-97 to 2004-05. After this the Indian exports of manufactured items gained momentum and show the regular growth in terms of prices. The average price index for the period of 2005-06 to 2016-17 has been 166.38 points.

**Table 3**  
**Price and Quantity Index of Exported Manufactured Items**

<i>Year</i>	<i>Price Index</i>	<i>Quantity Index</i>
1996-97	100	100
1997-98	90.0500141	154.6111254
1998-99	83.9229912	185.7288926
1999-2000	73.4018702	183.0847131
2000-01	69.4016979	284.7518022
2001-02	63.9244274	435.5998041
2002-03	65.6791478	530.8736934
2003-04	91.2484757	410.3783845
2004-05	107.904648	452.6508746
Average from 1996-97 to 2004-05	82.8370302	304.1865878
2005-06	134.891436	682.451689
2006-07	140.572611	1544.445745
2007-08	168.689259	1478.315398
2008-09	217.184745	1367.922559
2009-10	171.199705	855.4759344
2010-11	203.063779	1532.196038
2011-12	161.60494	1412.833985
2012-13	162.052983	1808.151505
2013-14	167.902671	1639.933307
2014-15	153.340217	2118.632569
2015-16	177.215373	1258.268403
2016-17	138.94181	721.1924055
<b>Average from 2005-06 to 2016-17</b>	<b>166.388294</b>	<b>1368.318295</b>

*Source:* calculated from the data available with Ministry of Commerce, Government of India



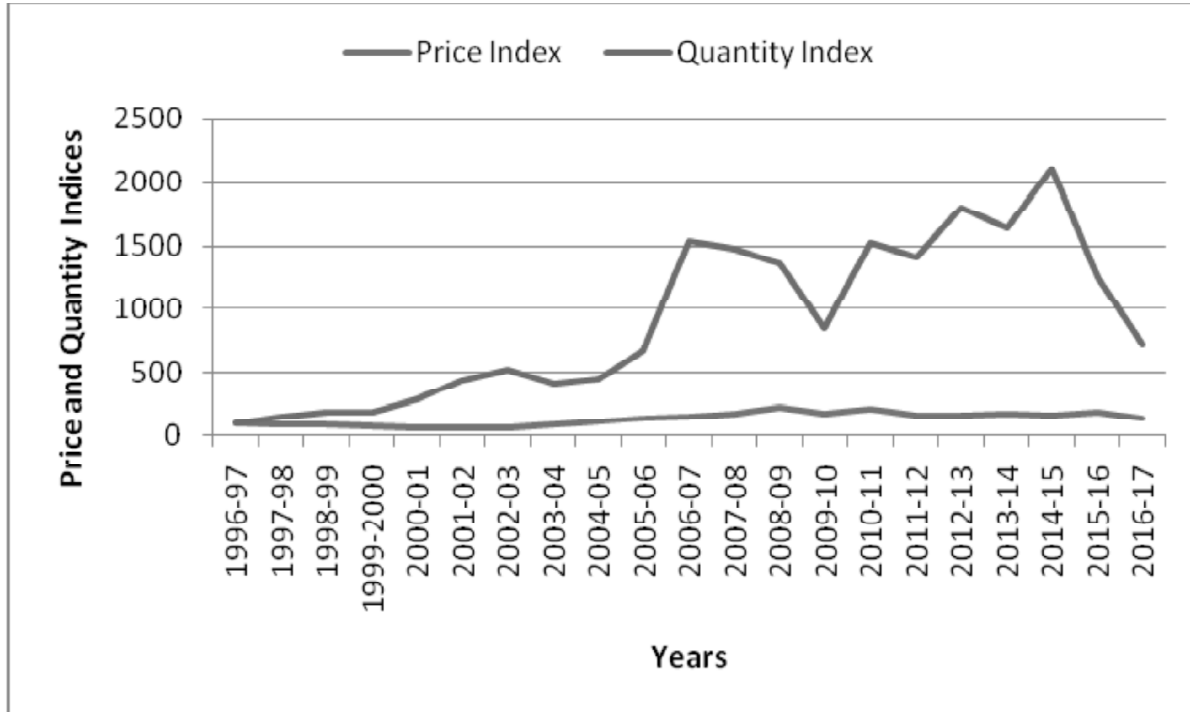


Figure 3: Trends in Price and Quantity Index of Exported Manufactured Items

Source: Based on table 3

The value of quantity index for India’s manufactured items exports to Saudi Arabia shows regular improvement during the whole study period with some ups and down. The average quantity index before the WTO regime was 304.16 points. In the post WTO regime average quantity index for India’s export of manufacture items reached to 1368.13 points in 2016-17. Here it is important to note that the improvement in prices for the exports of manufactured items has not been very impressive. A very little improvement has been registered in the post reform period. In contrast to this increase in export of quantity for manufactured items is very high.

### CONCLUSION

This is very much clear from the above discussion that India has moved on the path of greater integration with Saudi Arabia. India’s export to Saudi Arabia has increased over the study period from 1996-97 to 2016-17. Initially when Saudi Arabia had not joined the WTO the progress was slow but after joining the WTO, Saudi economy has provided a safe home to Indian exports. Saudi economy has given good prices for Indian exports along with greater market access. When we look individually the three identified segments of exports, though the results are positive however they have behaved differently. The growth in the export prices and quantity is lowest in case of food items followed by manufactured and minerals and other related items. This gives a very important signal that the Saudi economy has moved on the path of industrialisation and there is good scope for the export of Mineral Fuels, Mineral Oils and Products of their Distillation; Bituminous Substances; Mineral Waxes and Organic Chemicals. Since we have good market for these exports which is expanding (indicated by quantity index) also, production of these items



should get priority. The food items export has comparatively grown more consistently especially in the post WTO period, benefit can be enhanced by improving the quality of the products. This will benefit the farmer's class and will be capable to generate employment opportunities in agro based industries. The export of manufactured items has not received much benefit in terms of price improvement but increase in quantity is encouraging and it may be beneficial to increase the production of the items covered under this category. The price rise is more consistent in case of manufactured item followed by agriculture. The price rise in case of minerals and other raw materials is inconsistent. This group is also suffered from inconstant rise in quantity. This category is largest gainer but inconsistent. We need to identify the factors affecting the export of these items to make suitable policies for the promotion of trade between these two very old trade partners.

### REFERENCES

- Heptulla, Nejma (1991), *Indo-West Asian relations: the Nehru era*, Allied Publishers, New Delhi.
- Richard, Edmund (1992), *India's pro-Arab policy: a study in continuity*, Greenwood Publishing Group.
- Prithvi Ram Mudiam (1994), *India and the Middle East*, British Academic Press. pp. 88–94.
- BBC News (2006), "*Saudi king on rare visit to India*", 25 January. *New Delhi Edition*. Retrieved, 4 June, 2008.
- BBC News (2006), "*New era*" for Saudi-Indian ties". 27 January. *New Delhi Edition*. Retrieved, 4 June, 2008. *The Hindu* (2010); "*Saudis roll out red carpet to Manmohan*". . 28 February, *New Delhi Edition*.
- Dastgir Alam (2011), *The World Trade Organisation and India's Agricultural Exports* GRIN Verlag, Germany at <http://www.grin.com/en/e-book/177691/the-world-trade-organisation-and-india-s-agricultural-exports>
- Hindustan times (2016), "*Modi conferred highest Saudi civilian honour*". Retrieved 2016-04-03.
- CMIE Report (2015-16), *Annual Report on Trade, 2015-16*. Mumbai.
- Fisher, Irving (1922), *The Making of Index Numbers; A Study of Their Varieties, Tests, and Reliability*. Reprint of 3rd revised edition 1927, New York: Kelley.