

## SIGNIFICANCE OF BRICS IN THE GLOBAL TOBACCO SECTOR- A CRITICAL ANALYSIS

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**The present paper is an attempt to evaluate the importance of BRICS countries (Brazil, Russia, India, China and South Africa) in global tobacco and to assess the impact of WHO-FCTC implementation in these countries. The study was primarily based on the time series secondary data on area, production and trade. The BRICS countries include three of the five top tobacco producers, two of the five top tobacco consumers, three of five top tobacco leaf exporters and two of the top five tobacco importers in the world. The findings from the present study revealed that WHO-FCTC has not made significant dent on reduction of global tobacco production and trade during first decade of its implementation. Besides, the comparison among BRICS countries and other major tobacco producing countries revealed an increasing trend in tobacco production in BRICS countries and contributing to one third share of global tobacco exports during the past 16 years. As the BRICS countries account for lion share in global tobacco area (55%), production (64%) and exports (35%) during past 16 years, the measures taken by these countries will contour the global tobacco sector. The future tobacco related policies in BRICS countries will have huge ramifications on the prospects of global tobacco sector.**

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**Key words-** BRICS, Exports, FCTC, Trade, Tobacco and World

### INTRODUCTION

Tobacco, one of the world's most important non-food commercial crops has great economic and social significance. It not only plays a prominent role in agriculture and industrial sectors, but also has vital importance to the world economy. Globally, tobacco farming fetches high net returns to the farmers, as it is a commercial crop. According to Euro monitor International estimates (2017), the value of global cigarette market was worth of U.S. \$ 683.4 billion. BRICS, a new cooperation mechanism established by Brazil, Russia, India, China and South Africa, the five emerging

economies, to strengthen cooperation and enhance their international influence. As the world's important bases of agricultural production, BRICS countries own 1/3<sup>rd</sup> of the world's farmland (BRICS, 2017). With large-scale agricultural production, the five countries are critical to guaranteeing world food security. Agriculture is top on the agenda of respective governments. On the global landscape, "BRICS" (Brazil, Russia, India, China and South Africa), countries have made great headway in agriculture. As far as tobacco is concerned, the importance of BRICS countries is not an exception. But the rising excise taxes along with the anti-tobacco awareness measures taken by the public health bodies leading to uncertainty in the future of global tobacco sector. After the introduction of anti-tobacco measures of WHO Framework Convention on Tobacco Control (WHO-FCTC), the impact of FCTC is also majorly evident in BRICS countries as they are the crucial players on the global stage. Taking into account, the BRICS countries role in world tobacco sector, the present study aims to evaluate the importance of BRICS countries in global tobacco and to assess the impact of WHO-FCTC implementation in these countries.

### MATERIALS AND METHODS

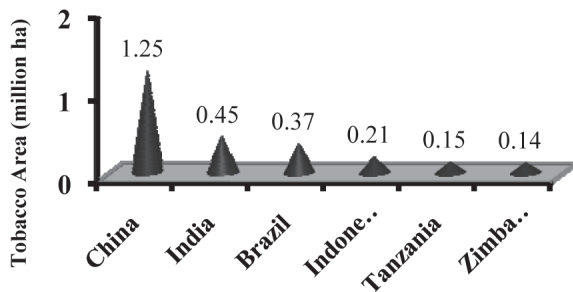
The study was primarily based on the time series secondary data obtained from various authentic sources and records. Data on area, production, consumption, exports and imports were collected from Food and Agricultural Organization (FAO) statistics; reports of WHO (World Health Organization) and World Bank; portals of Euro monitor International, World Economic Forum, Tobacco Atlas and Statista (The Statistics portal). For analyzing the current tobacco trends in area, production, consumption, exports and imports, tabular and graphical analysis was carried out to analyze the percent share of tobacco

in BRICS countries *vis-a-vis* world. For identifying the trends in tobacco area, production, exports and imports and to assess the impact of WHO-FCTC in BRICS countries and world, the time series data is divided into pre-FCTC period (2001-05) and post-FCTC period (2006-16) for impact analysis and interpreted accordingly. In addition the growth rates were calculated to analyze the change in pre and post FCTC periods.

**RESULTS AND DISCUSSION**

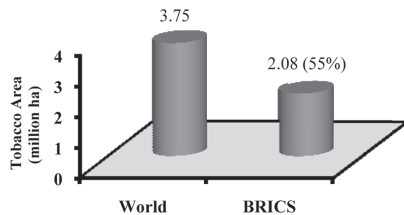
**Current trends in tobacco area, production, consumption and trade**

According to FAOSTAT (2017), tobacco farming takes place on approximately 3.75 million ha of land around 124 countries across the world. China, the largest producer allocated 1.25 million ha for tobacco cultivation followed by India and Brazil (fig. 1).



**Fig. 1: World's top tobacco cultivated countries**

As BRICS countries are the largest producers of tobacco in the world, the BRICS countries share in world tobacco cultivated area is 55 per cent (fig. 2). It can be inferred that more than half of the world tobacco cultivated area is occupied by BRICS countries.

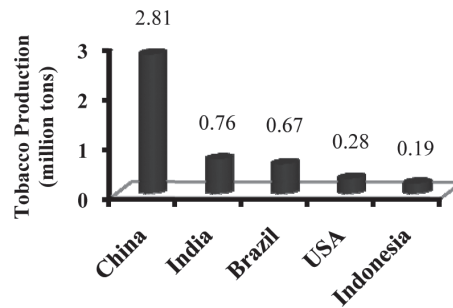


**Fig. 2: World vs BRICS tobacco cultivated area**

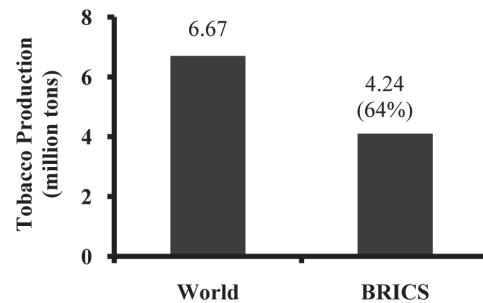
Source: FAOSTAT accessed on 10.12.2017

China is the world's largest producer, growing more than 40 per cent of the world's

tobacco (WHO and NCI 2017, Tobacco Atlas 2017). According to FAOSTAT (2017) estimates, present world tobacco production is nearly 6.67 million tons of tobacco leaf and the top tobacco producing countries in the world is given in fig.3. China followed by India and Brazil are the leading tobacco producers. BRICS countries are the largest producers of tobacco in the world (4.24 million tons), with a share of 64 per cent of global tobacco production (fig. 4).



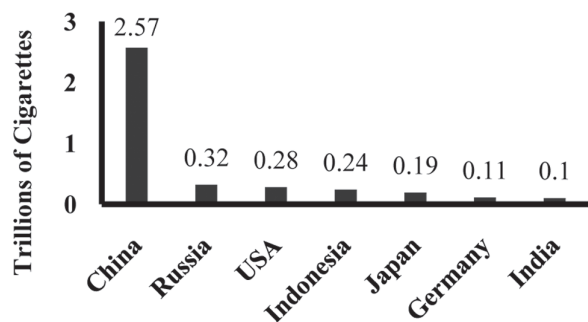
**Fig. 3: World's top tobacco growing countries**



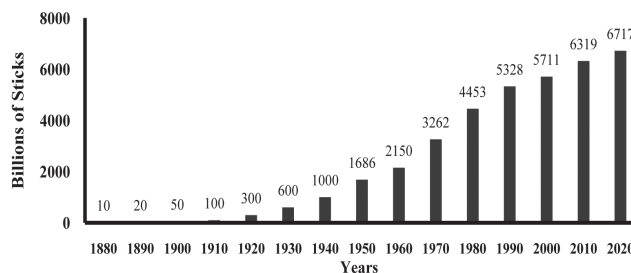
Source: FAOSTAT accessed on 10.12.2017

**Fig. 4: World vs BRICS tobacco production**

According to World Health Organization (WHO) report on the Global Tobacco Epidemic, 21 per cent of world's population smokes cigarettes and total number of smokers is approximately 1.1 billion globally (World Bank, 2017). Nearly 80 per cent of the world's more than 1 billion smokers live in low and middle-income countries (WHO 2017). According to Euro monitor International estimates (2017) and Tobacco Atlas (2017), 5.5 Trillion cigarettes smoked worldwide in 2016. Among which, China followed by Russia are the largest consumers and the top cigarette consuming countries is given in fig. 5. In consumption also, BRICS countries are the largest consumers of tobacco (3 Trillion cigarettes) with a share of 54 per cent in the world cigarette consumption (fig. 6).

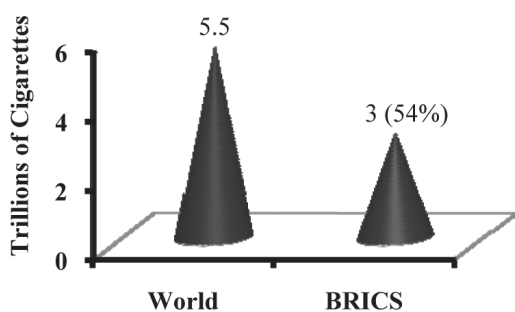


**Fig. 5: World's top cigarette consuming Countries**



Source: IDRC accessed on 10.12.2017

**Fig. 7: Estimated evolution of global cigarette consumption to 2020**



Source: WEF and Statista accessed on 15.12.2017

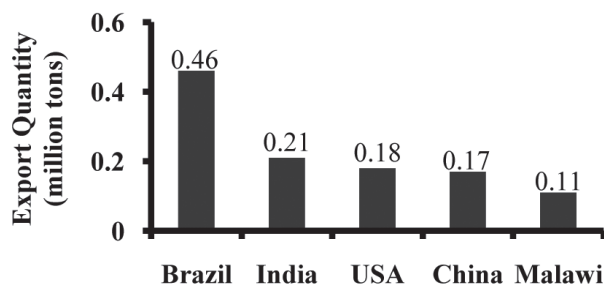
**Fig. 6: World vs BRICS cigarette consumption**

According to International Development Research Centre reports (2017), there is a great demand for tobacco in the world market, figure 7 shows the evolution of global cigarette consumption in billions of sticks since manufactured cigarettes were introduced in the late nineteenth century, forecast through to 2020.

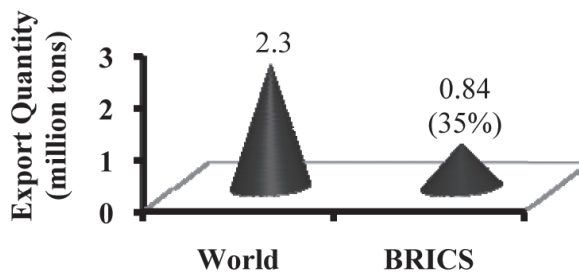
There is a huge demand for tobacco in world exports. According to FAOSTAT (2017) reports, the global tobacco exports are 2.3 million tons. The top tobacco exporters in the world are Brazil, India, USA, China and Malawi (fig 8). The BRICS share in global tobacco exports is 35 per cent (fig 9). The global tobacco imports are 2.3 million tons and the top tobacco importers are Russia, China, Germany, USA and Netherlands (fig 10). The BRICS share in global tobacco imports is 18 per cent (fig 11).

**BRICS in the Global Context**

The five countries, known collectively as the “BRICS” (Brazil, Russia, India, China and South

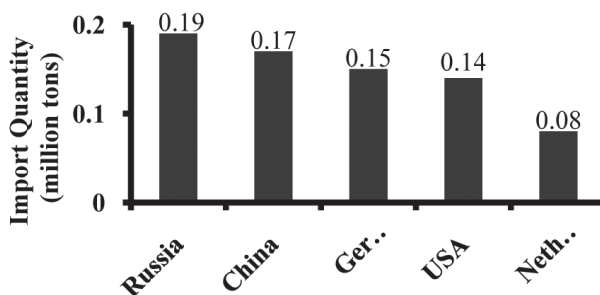


**Fig. 8: Top tobacco exporters in the world**

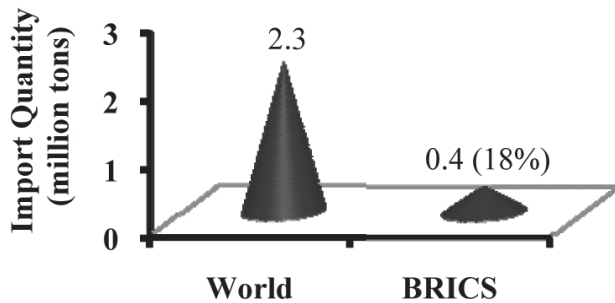


Source: FAOSTAT accessed on 10.12.2017

**Fig. 9: World vs BRICS tobacco exports**



**Fig. 10: Top tobacco importers in the world**



Source: FAOSTAT accessed on 10.12.2017

**Fig. 11: World vs BRICS tobacco imports**

Africa), have existed as a coherent economic group since 2009 and forms an important economic block and well placed for a leadership role. They account for 40 percent of the world's population (3 Billion people), more than 25 percent of the world's land, 20 percent of global GDP, accounted for 50 per cent of global growth and 17 per cent of global trade (FAO, 2017).

BRICS countries play a crucial role in food security, together they produce more than one-third of global cereal production and these had prominent place in top agricultural countries. The presence of a sizeable domestic market, industrial and technological diversification, investment in infrastructure and liberalization are the hallmarks of the BRICS increasing autonomy. The accelerated economic globalization and integration has promoted the development of world agricultural trade, BRICS countries are increasingly important in international agricultural trade and have shaped trade structures in the world. The five nations conduct their bilateral relations based on equality, mutual benefit and non-interference. They are the fastest growing and largest emerging market economies and play an important political role in the international arena.

### Share of BRICS in world tobacco

Among the top tobacco leading countries, three of the five top tobacco producers (China, India and Brazil), two of the five top tobacco consumers (China, Russia), three of five top tobacco leaf exporters (Brazil, India, China) and two of the top tobacco importers (Russia, China) are the BRICS countries having the largest share of the total world volume of tobacco. The BRICS share in global tobacco is given in table 1.

In general, all the five countries have strong agricultural research systems and with respect to tobacco in particular, BRICS has major share. Nevertheless, after the introduction of anti-tobacco measures of WHO Framework Convention on Tobacco Control (FCTC), the impact of FCTC is also majorly evident in BRICS countries as they are the crucial players on the global stage. WHO-FCTC entered into force in 2005 and currently with 180 Parties covering more than 90 per cent of the world's population (WHO 2017). All the five BRICS countries are parties to the FCTC, which obligates them to implement policies that effectively reduce tobacco use and exposure to tobacco smoke. Before the launch of the FCTC, tobacco production and use was ubiquitous and widely accepted. There are different tobacco organizations in different forms are working in the BRICS countries.

- Brazilian Tobacco Growers Association (AFUBRA) in Brazil
- Tabakprom – Tobacco Manufacturers Association in Russia
- Tobacco Board in India
- Tobacco Society of China
- The Tobacco Institute of South Africa

**Table 1: BRICS share in global tobacco**

Parameters	World	BRICS	BRICS Share (%)
Area (million ha)	3.75	2.08	55
Production (million tons)	6.67	4.24	64
Consumption (trillions)	5.5	3.0	54
Exports (million tons)	2.30	0.84	35
Imports (million tons)	2.30	0.41	18

Source: FAOSTAT, WEF and Statista accessed on 15.12.2017

In addition, Brazil, India, China and South Africa are also the member countries in 'The International Tobacco Growers Association' (ITGA) which represent the interests of transnational tobacco manufacturers.

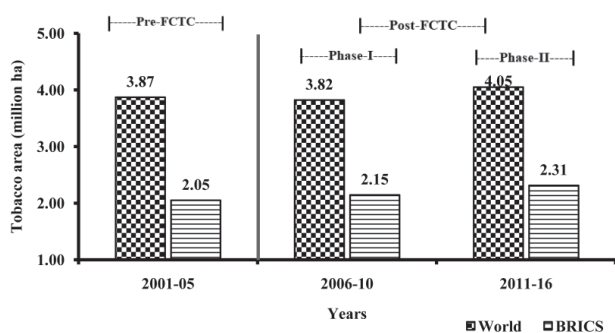
**Impact of WHO-FCTC**

To witness the impact of WHO-FCTC, the trend of before (2001-05) and after FCTC (2006-16) measures on tobacco control is mentioned below.

**A. Tobacco Dynamics in World and BRICS during pre and post-FCTC period**

**Trends in tobacco area**

The average tobacco area during pre-FCTC period (2001-05) and post-FCTC period viz., first decade of implementation (2006-10 as Phase-I and 2011-16 as Phase-II) was analyzed for World and BRICS countries to assess the impact of WHO-FCTC on tobacco area. Fig. 12 indicates the trend in average global tobacco area has increased from 3.87 to 4.05 million ha while in BRICS countries it has increased from 2.05 to 2.31 million tons during post-FCTC compared to pre-FCTC period. The findings shows that there is marginal increase in area under tobacco cultivation in both world and BRICS countries during the above mentioned period.



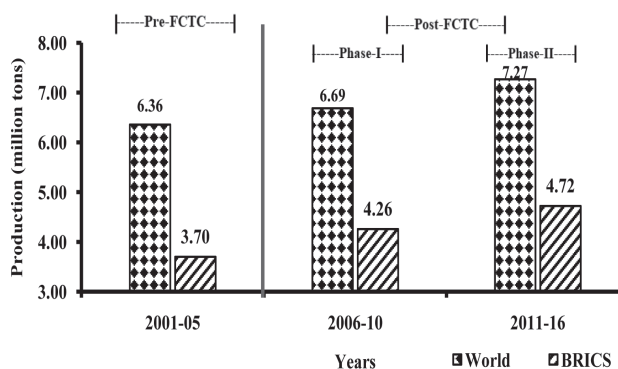
Source: FAOSTAT accessed on 10.12.2017

**Fig. 12: Trends in tobacco area during pre and post-FCTC periods**

**Trends in tobacco production**

The average tobacco production during pre-FCTC period (2001-05) and post-FCTC period

(2011-16) was analyzed for World and BRICS countries to assess the impact of WHO-FCTC on tobacco production. Fig. 13 indicates the rising trend of average tobacco production of world from 6.36 to 7.27 million tons while in BRICS countries it has increased from 3.70 to 4.72 million tons during post-FCTC compared to pre-FCTC period. The tobacco production growth was 14.3% in world whereas in BRICS countries it is 27.56% from 2001-05 to 2011-16. It is evident that tobacco production growth in BRICS countries outpaced in world. This shows that there is almost nil impact of FCTC on reduction of tobacco production in world in general and BRICS countries in particular.

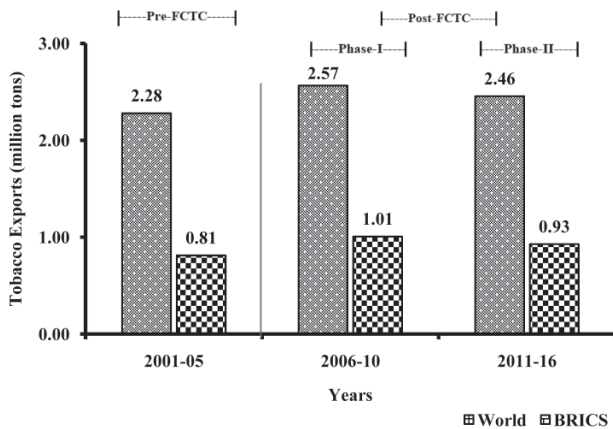


Source: FAOSTAT accessed on 10.12.2017

**Fig. 13: Trends in tobacco production during pre and post-FCTC periods**

**Trends in Tobacco Exports**

The average tobacco exports during pre-FCTC period (2001-05) and post-FCTC period (2011-16) was analyzed for World and BRICS countries to assess the impact of WHO-FCTC on tobacco exports. Fig. 14 indicates the rising trend of average tobacco exports of world from 2.28 to 2.46 million tons while in BRICS countries it has increased from 0.81 to 0.93 million tons during post-FCTC compared to pre-FCTC period. The tobacco production growth was 7.72 % in world whereas in BRICS countries it is 14.31 % from 2001-05 to 2011-16. It is evident that tobacco exports growth in BRICS countries outstripped in world. This shows that there is almost nil impact of FCTC on reduction of tobacco production in world in general and BRICS countries in particular.

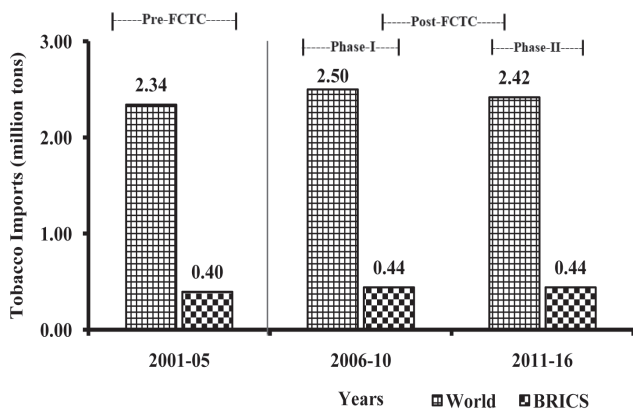


Source: FAOSTAT accessed on 10.12.2017

**Fig. 14: Trends in Global Tobacco Exports**

**Trends in Tobacco Imports**

The average tobacco imports during pre-FCTC period (2001-05) and post-FCTC period (2011-16) was analyzed for World and BRICS countries to assess the impact of WHO-FCTC on tobacco imports. Fig. 15 indicates the rising trend of average tobacco imports of world from 2.34 to 2.42 million tons and similar kind of trend was noticed in BRICS countries it has increased from 0.40 to 0.44 million tons during post-FCTC compared to pre-FCTC period. The tobacco production growth was 3.26 % in world whereas in BRICS countries it is 11.47 % from 2001-05 to 2011-16. The findings revealed that BRICS countries growth in imports surpassed the world.



Source: FAOSTAT accessed on 10.12.2017

**Fig. 15: Trends in Global Tobacco Imports**

**B. Tobacco Dynamics in BRICS vs Non-BRICS**

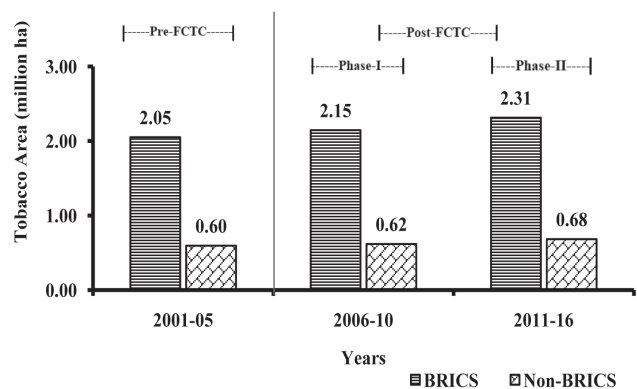
A comparison of BRICS countries and Non-BRICS countries was carried out to analyze the tobacco dynamics in area, production, exports and imports during pre and post-FCTC periods. The non-BRICS countries taken for the present study are United States of America, Indonesia, Malawi, Zambia and Zimbabwe, as these are the other major tobacco players in the world.

**Trends in tobacco area and production**

The average tobacco area and production during pre-FCTC period (2001-05) and post-FCTC periods (2011-16) was analyzed for BRICS and Non-BRICS countries to assess the impact of WHO-FCTC. It is evident from the findings that the increasing trend was witnessed in BRICS countries in area (2.05 to 2.31 million ha) and production (3.7 to 4.72 million tons) during pre and post-FCTC periods whereas status quo position is observed in Non- BRICS countries (fig. 16 & 17).

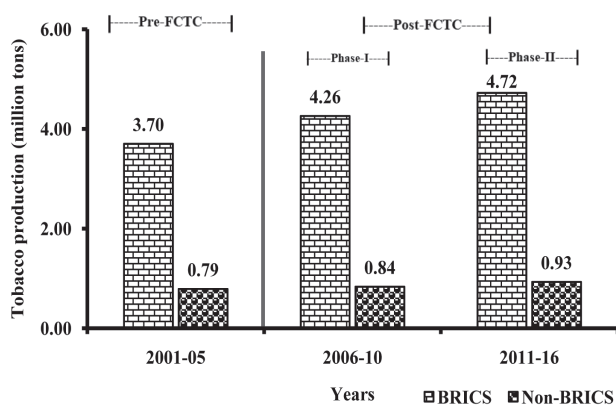
**Trends in tobacco trade**

The average trends in tobacco trade during pre-FCTC period (2001-05) and post-FCTC periods (2011-16) was analyzed for BRICS and Non- BRICS countries to assess the impact of WHO-FCTC. As far as exports is concerned, the findings revealed that more than one third share of global tobacco exports is coming from BRICS countries whereas



Source: FAOSTAT accessed on 10.12.2017

**Fig. 16: Trends in tobacco area in BRICS vs Non- BRICS**



Source: FAOSTAT accessed on 10.12.2017

**Fig. 17: Trends in tobacco production in BRICS vs Non- BRICS**

the share of non-BRICS countries oscillating between 18-20 per cent during the above mentioned period. Whereas the share of BRICS and non-BRICS countries in global tobacco imports is less than 20 and 15 per cent during the equivalent period (table 2).

#### Demand side measures of WHO-FCTC

- According to WHO (2017), Euro monitor International (2017) reports, after FCTC came into force, the cigarette production has not decreased much due to demand for the cigarette market. Whereas the volume sales of cigarettes have been fluctuating in BRICS countries due to substantial increase of real prices and growing taxes on cigarettes.

- Article 6 of the WHO-FCTC encourages parties to raise prices of tobacco products by means of increased excise tax.
- According to WHO Benchmark, 70 per cent of retail price is fixed as excise tax (Tobacco Atlas, 2017) but there is variation in excise taxes among BRICS countries and other major tobacco producing countries (United States of America, Indonesia, Zambia and Zimbabwe). According to Tobacco Atlas (2017), among the dominant tobacco players in the world, high excise taxes on cigarettes are found in Indonesia and South Africa (table 3). Because of this variation in excise taxes, it may be one of the reasons for non-significant impact of WHO-FCTC in the first decade of its implementation.

**Table 3: Excise Tax on Cigarettes in BRICS**

Country	Per cent of Retail price as Excise Tax
Brazil	31.98
Russia	35.81
India	26.46
China	36.30
South Africa	40.12
United States	37.81
Indonesia	48.74
Zambia	23.53
Zimbabwe	22.86

Source: Tobacco Atlas accessed on 30.12.2017

**Table 2: Tobacco Trade Matrix in BRICS vs Non-BRICS**

Tobacco Trade Matrix	Exports			Imports		
	Pre-FCTC	Post-FCTC		Pre-FCTC	Post-FCTC	
Years	2001-05	2006-10	2011-16	2001-05	2006-10	2011-16
World	2.28	2.57	2.46	2.34	2.50	2.42
BRICS	0.81(35%)	1.01(39%)	0.93(37%)	0.40(17%)	0.44(17%)	0.44(18%)
Non-BRICS	0.47(20%)	0.48 (18%)	0.50(20%)	0.33(14%)	0.33(14%)	0.32(13%)

Figures in parenthesis indicates per cent share in world tobacco trade

Source: FAOSTAT accessed on 10.12.2017

### Conclusion and way forward

On the global landscape, “BRICS” (Brazil, Russia, India, China and South Africa), a group of developing countries are emerging as a new growth pole in the multi polar world. As far as tobacco is concerned, the BRICS are the crucial players in global tobacco sector. The future of tobacco sector is uncertain after the introduction of WHO-FCTC. As all the BRICS countries are the parties to WHO-FCTC, the impact is also majorly evident in these countries. But, the impact measures of WHO-FCTC on both supply and demand side has not made significant dent on global tobacco production and consumption during first decade of its implementation. In addition, steady increase was noticed in the trends of global tobacco production, exports and imports after intervention of WHO-FCTC compared to pre-FCTC period. With 42 percent of the world’s population, the group of countries that make up the BRICS are in a position to shape agricultural policies in general and policies related to tobacco in particular. Undoubtedly the BRICS has greater role in world tobacco sector as it occupies lion share in area (55%), production (64%), consumption (54%), exports (35%) and imports (18%). Given the above facts, the BRICS are in a position to dictate the future of global tobacco sector. Therefore, the BRICS countries should come out with new legislations to witness the real implementation of WHO-FCTC and the future policies on global tobacco sector should essentially evolve from BRICS nations.

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