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## Export Performance and Factors Affecting Competitiveness of Plantation Commodities in India

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COMPETITIVENESS OF PLANTATION COMMODITIES  
IN INDIA**

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## **ABSTRACT**

With the opening of Indian agriculture and high level of integration of domestic markets with the world markets there is high dependence of many plantation crops on export markets directly or indirectly. This along with the dynamic policy environment calls for an analysis towards the export performance, potential and competitiveness of plantation crops in India. The study examines the changing patterns of international trade in plantation commodities and analyses the factors contributing to or retarding the competitiveness of plantation commodities in India. Unlike the earlier studies, which have used protection coefficients as indicators of competitiveness, the study uses the ratio of unit export prices (f.o.b) to examine the performance of select plantation commodities in India. From the analysis of unit export price ratios of select four commodities, coffee, tea, cashew and pepper, we see that price performance in international markets has been good only for cashew. The poor price performance of coffee, tea or pepper is a reflection of lower value addition or poor quality against the competitors. Cashew nut which has good price performance is an exception among the commodities chosen for analysis, which can be attributed to higher attention paid by the policy makers for cashew processing in India through promotion of processing industries. However, the sector currently depends heavily on imports of raw cashew which calls for measures to boost the domestic production within the country. Though tariff barriers are very limited in the case of plantation commodities under study, non tariff barriers continue to retard competitiveness of plantation commodities in India. The need for certification emerges as a major non-tariff barrier for coffee and tea. In the case of coffee, the threat becomes intense to India when the competitors are increasing the share of sustainable coffee in the world markets. There are lessons to India from competitors in Central and Latin America who,

in addition to leveraging on technology to increase the yield have made certification possible to a great extent without much cost with the existing local institutions and infrastructure. Finding a low cost model for individual farm certification calls for collaboration among a range of local and international actors which needs to be addressed through the right set of policies. One of the keys to the expansion of sustainable coffee in India is co-operatives which is currently absent in the coffee growing districts of India. Stringent rules of labeling in developed markets, quality standards, maximum residual limits, food safety, ethical practices are the major non-tariff barriers confronting exports of tea from India. Investors have also been slow to invest in India for tea processing due to high costs brought about by the hefty taxes levied on the activity. India also lost some of its international markets for tea due to lack of strategic government policies, especially, with Russia, Poland and Pakistan. Improved trade relation with Pakistan would open doors to one of the major markets of the world. False certification of re-exports of poor quality tea is a serious concern, which needs immediate policy attention. To make the Indian cashew more complaint to standards there is a need to attain ISO, GMP and HACCP certifications which is currently obtained by only a few cashew processors. Similarly for spices, the largest threat among the non-tariff barriers is with the multiplicity of rules governing the sanitary and phytosanitary requirements. Wide difference on the rules and procedures adopted by different organizations and countries while importing this commodity has created confusion in the Indian pepper exporters which needs to be negotiated for standardization of rules in the international forums.

## **Introduction**

Despite the diminishing share of agriculture in the GDP and the total export earnings of the country, the role of agriculture sector and its importance to the overall economic growth continues to assume importance. Its significance is all the more emphasised as a key to the strategy of inclusive growth which was envisioned in the 11<sup>th</sup> and 12<sup>th</sup> Five year Plans. Plantation crops within the agriculture sector in India got a special prominence in the 1970s and 1980s largely due to its export orientation. Given its importance to the foreign exchange earnings in those decades, the policies were targeted towards promoting their international competitiveness. Today the share of plantation sector in the export basket of India has considerably declined, the sector not being able to keep up with the pace of growth and value addition that took place over the years in the non-agricultural sector. With the share of plantation crops in total export earnings of India falling from 13.09 percent in 1970-71 to less than a percent in recent years (Joseph, 2010; Nagoor, 2010), its relative importance to policy makers also seemed to have declined. However, the increasing presence of small holders in the sector; its role in employment generation especially, among the small farmers and women, its concentration in backward areas and therefore, its role in the regional balance of the country and its role in ecological and sustainable development calls for research and policies towards protection and promotion of the sector. With the opening of Indian agriculture and high level of integration of domestic markets with the world markets there is a continued dependence of many plantation crops on export markets directly or indirectly. This along with the dynamic policy environment calls for an analysis towards the export performance, potential and competitiveness of plantation crops in India.

The present study is an attempt in this direction with following specific objectives-

### **Objectives of the study**

1. To examine the changing patterns of international trade in plantation commodities and changing policies towards the sector.
2. To analyse the export performance of select plantation commodities of India and analyse the factors contributing to or retarding their competitiveness.

## **Data sources and methods**

The study is based on secondary sources of information. Data on domestic prices of plantation crops is obtained from respective commodity boards and international price from FAO, trademap.org. Information on domestic trade policies are found in EXIM Policies various years, published by Ministry of commerce, Government of India, APEDA and also from the commodity Boards like Coffee Board, Rubber Board, Tea Board of India, Spices Board and commodity boards of other countries. Information on policies and on tariffs is accessed from the WTO website [www.wto.org](http://www.wto.org). Information from international organization like International Coffee Organization (ICO) have thrown light on global issues pertaining to those commodities. Studies analysing competitiveness of agricultural commodities in India have relied extensively on the protection coefficients. The relevance of using these indicators as a measure of competitiveness is limited due to various reasons. Plantation commodities like coffee, tea or spices being price inelastic, lower prices may not symbolize higher competitiveness. Rather realization of higher prices as against the competitor in different markets reflects higher quality or better value addition. The study therefore, relies on the ratio of unit export prices (in f.o.b terms) against the competitors in different regions and markets to examine the performance through price realization. Higher unit value realization (in f.o.b prices) for exports in the same market as against the competitor is the reflection of better quality or value addition. Four major plantation crops are chosen for analysis, coffee, tea, cashew and pepper. Information on subsidies and other non tariff barriers, especially, the technical barriers to trade is obtained from trade policy reviews and that of information obtained from the earlier literature and studies.

The first section of the paper introduces the recent issues concerning trade in plantation commodities in India. The second section states the objectives of the study, data sources and methods used for meeting the objectives. The third section contains the review of literature covering issues in the area of measurement of competitiveness of agricultural commodities and trade in plantation commodities. The fourth section demonstrates the patterns and changes in patterns of trade in plantation commodities in India, the fifth section deals with the export performance and competitiveness of select plantation commodities, coffee, tea, cashew and pepper and the last section concludes with policy implications.

## **Export Competitiveness of Plantation Sector: A Review**

A concern has been raised on many issues pertaining to exports of India's plantation commodities in the recent years. The plantation sector in India in the current open trade regime faces intense competition from exporting countries with limited domestic market who have no option but to export for their survival (Nagoor, 2010; Joseph, 2010). While there are other sectors that promote inclusive growth, plantation agriculture is one sector where the international competitiveness determines so decisively the ability to foster inclusive growth (Joseph, 2010). India's losing export competitiveness to low cost producers like Vietnam, and European countries who export value added products in the international market shows the threat to the plantation sector from many directions (Nagoor, 2010). The study also recognises the opportunity India has in exporting value added products in case of many plantation crops. Change in the direction of trade in plantation crops has been observed due to growing economic integration (Nagoor, 2010). Post WTO situation is seen more favorable for high value added food products. In addition, India is posed to risk in terms of gap in quality and food safety standards in the international markets. Though some attempts have been made by India to bridge those gaps there is much more to go for India to keep up with the international standards (Charyulu and Prahadeeswaran, 2010).

Studies measuring the competitiveness of agricultural commodities in India have relied extensively on the protection coefficients. Nominal Protection Coefficient (NPC) is a ratio of the domestic to border price after making due adjustments, EPC considers the price differences in both the inputs and outputs in both the markets. This technique has been used by Baldwin (1975), Bhagwati and Srinivasan (1975) and Roningen and Yeats (1976). With the assumption that the domestic price is distorted and the border price is a free trade price, the difference in these two prices shows the amount of total protection through the tariff and the non-tariff barriers in the output market. An NPC greater than one would mean that the commodity under consideration is protected (imports are restricted) and has potential for imports, whereas an NPC less than one would mean that the commodity is taxed (as exports are restricted) and has potential for exports. Freeing trade barriers would lead to integration of domestic and border prices leading to competitive equilibrium in the international markets. When there is no barrier to trade of any kind the domestic price is equivalent to the world price and NPC is equal to one. There are a few studies on the empirical measurement of protection on agriculture commodities in India but we do not come across many studies analyzing competitiveness of plantation commodities. Deepika (2003) has estimated NPCs



under importable and exportable hypothesis for given set of agricultural commodities of which Cashew, pepper, tea, coffee and rubber are plantation crops. NPC has emerged more than one under exportable hypothesis but less than one under importable hypothesis for cashew indicating that the commodities neither have an import threat nor export potential seen in terms of price differences. For tea, coffee and rubber NPC is seen more than one under both importable and exportable hypothesis. Nagoor (2010) makes a price comparison for Pepper, Tea and Coffee and found that Domestic price for coffee and tea is less than world price of coffee, and tea and domestic price is greater than world prices of cardamom.

The relevance of using these indicators of competitiveness in a dynamic competitive environment is limited due to various reasons (Deepika, 2003). NPC, EPC or DRCRs are protection coefficients and may not be suitable to identify competitiveness. Lower domestic price as compared to the world price may not be indicative of competitiveness for the reason that the quality of the commodity and the exact value addition made may not be truly comparable; studies earlier have depended on one reference price which may not be applicable to all export markets of the world. In addition these coefficients are based on the assumption of perfect competition of free flow of commodities under free trade with complete information. Yet another challenge in the use of protection coefficients for export competitiveness is the choice of the border price. Price prevailing in the predominant market is chosen for border price. Barriers of any kind therefore reflects in the difference in prices and these coefficients are poor measures of competitiveness. The concept of competitiveness should also encompass a variety of factors including changes in nominal exchange rates, relative prices and production costs. Product differentiation, for instance has an important role when competitive strategies of enterprises are concerned. Productivity growth, reliability, time delivery, quality after sale service, financing arrangements, technological innovation, investment in physical and human capital, management style and the institutional and structural environment play dominant roles in revealing competitiveness. Many of these factors are qualitative in nature and research has typically focused on easily quantifiable indicators such as export price indices and unit labour costs (Tweeten and Pai, 1990, Agenor, 1997; Dohlman, Schnepf and Bolling, 2001, Kagochi, 2007).

High protection for agricultural commodities in the form of tariffs continues to be the major factor restricting world trade and retarding competitiveness. In general tariffs impose costs both in the country where they are applied and on other countries. The global average tariffs on agricultural products is 62 percent which is much higher than manufacturing products.

(Charyulu and Prahadeeshwaran, 2012). From the global perspective high average tariffs cause damage by making demand to contract and supply to expand by drawing resources into agriculture, both leading to lower world prices. And finally, while most protection is given through some form of trade measure, substantial additional support is provided by direct budgetary payments to farmers. Study by Kagochi (2007) on measuring the competitiveness of US agricultural exports includes qualitative factors, such as technological innovation measured by research and development (R&D) which is seldom included in studies of competitiveness. The study has developed a R&D and human capital index. The results of the study indicate that investments in R&D and factors like promotional campaigns are two important factors influencing the export performance. The study shows how Australia had defended its market share and maintained higher prices by differentiating its wheat through creating a perception that its wheat is of better quality through effective promotional campaigns.

### **Patterns of Trade in Plantation Commodities in India**

Exports of plantation products had a moderate share in the total exports of the country in the 1980s but a considerable share in the total agricultural exports (Table 1). Increase in share of non-agricultural exports and also other commodities in the export basket led to decline in the share of plantation crops. The share of plantation exports to the total exports of India declined from close to six percent in the decade of 1980s to less than one percent in the last decade. At the same time the share of plantations in the total agricultural exports too declined from 36 percent in the 1980s to 12 percent of the total agricultural exports. This is largely due to the change in the composition of agriculture exports which now comprises largely the cake of oilseeds, milled paddy rice, cotton, and some select edible oil seeds and meat. The percentage of plantation imports to total imports is quite negligible in most of the years but has occupied a prominent share in a few exceptional years ranging from 10 percent to 12 percent in the 1990s and 2000s (FAO statistics, various years).

**Table 1: Percentage share of plantation commodities in Total Agricultural Exports and Total Exports of India**

% of plantation commodities to total agricultural exports of India			% of plantation commodities to total exports of India		
1982-91	1992-2001	2002-2011	1982-91	1992-2001	2002-2011
36.42%	22.18%	12.49%	5.49%	2.29%	0.80%

Source: FAOstat for plantation commodity export values from 1982-2011 (<http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E>), United Nations Statistics Division for agriculture exports and total exports value from 1980-2011 (<http://unstats.un.org/unsd/trade/imts/annual%20totals.htm>)

**Table 2: Percentage share of plantation commodities in Total Agricultural Imports and Total Imports of India**

% of plantation to total agricultural import			% of plantation to total imports of India		
1982-91	1992-2001	2002-2011	1982-91	1992-2001	2002-2011
5.76%	7.87%	8.77%	0.48%	0.42%	0.26%

Source: FAO statistics for plantation crops import values from 1982-2011 (<http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E>), United Nations Statistics Division for agriculture imports and total imports value from 1980-2011 (<http://unstats.un.org/unsd/trade/imts/annual%20totals.htm>)

**Table 3: Composition of Exports of Plantation commodities and its share in world exports**

Crops	1982-91 average (in 000 tons) and % to total exports			1992-2001 average (in 000 tons) (% to total exports)			2002-2011 average (in 000 tons) (% to total exports)		
	Exports from India	World exports	%	Exports from India	World exports	%	Exports from India	World exports	%
Coffee	88485.2	4573063.8	1.93	158715.9	5499622.1	2.89	197301.1	7262219.4	2.72
Tea	202628.9	1107991.5	18.29	173798.2	1363555.5	12.75	206621.1	2019485.7	10.23
Rubber	342.2	3841572.4	0.01	2043.6	4951985.8	0.04	40137	7226568.6	0.56
Cashewnut	39216.6	157796.8	24.85	78134.4	414265.6	18.86	117044.4	960383	12.19
Coconut	73.9	295020.1	0.03	335.2	414033.4	0.08	15585.5	666173.3	2.34
Cardamom	1553.6	36085.1	4.31	2162.9	47703.3	4.53	4653.3	68049.5	6.84
Pepper	44766.3	827832.4	5.41	76692.6	1583819.1	4.84	222535.6	2935998.4	7.58
Cocoa	599.3	2259607	0.03	177.4	3261775.7	0.01	1109.3	4663408.3	0.02
Cinnamon	789	53197	1.48	753	77990.6	0.97	968.8	116306.9	0.83
Clove	9.7	25345.2	0.04	86.6	39439.7	0.22	379.2	50208.9	0.76

Source: FAOstat for plantation crops export quantity from 1982-2011 (<http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E>)

Of the major plantation commodities exported from India only four commodities have prominence in world markets in terms of their market share, viz, tea, cashewnut, cardamom and pepper. The fall in share of tea and cashew in the recent decade is a matter of concern (Table 3). Not all commodities have shown similar pattern in the growth of their exports. A decadal comparison of average growth of 1980s, 1990s and 2000s shows that coffee exports have experienced high growth in one decade but not so impressive performance in the last decade. Negative growth of tea in the nineties and only a moderate revival in the last decade is a major concern while other commodities like cashew, rubber and clove have shown moderate growth in the same period (Tables 4 and 5). Of the plantation crops in India, coffee is heavily dependent on export markets (with 70% of produce getting exported), followed by 30% for cardamom, 22% for tea, 20% for cashew, 17% for pepper and 10% for cocoa. Rubber and coconut are the least export intensive with 5% and 0.16% of the domestic production exported. Similarly Cashew, Cardamom and Cocoa are heavily imported in the last decade either for re-exports or for domestic consumption (Table 6).

**Table 4: Growth in Exports and Imports of plantation commodities in India**

	Exports (Average in 000 tones)	% change over the decade	Imports (in 000 tones)	% change over the decade
<b>Coffee</b>				
1982-1991	88485.2		18.4	
1992-2001	158715.9	79%	1976.5	10642%
2002-2011	197301.1	24%	27271.2	1280%
<b>Tea</b>				
1982-1991	202628.9		0	
1992-2001	173798.2	-14%	3829.5	
2002-2011	206621.1	19%	22660	492%
<b>Rubber</b>				
1982-1991	342.2		41973.5	
1992-2001	2043.6	497%	22360.9	-47%
2002-2011	40137	1864%	93736	319%
<b>Cashew</b>				
1982-1991	39216.6		46651.8	
1992-2001	78134.4	99%	214719.8	360%
2002-2011	117044.4	50%	566274.4	164%
<b>Coconut</b>				
1982-1991	73.9		0	
1992-2001	335.2	354%	18.9	
2002-2011	15585.5	4550%	1325.1	6911%
<b>Cardamom</b>				
1982-1991	1553.6		684.9	
1992-2001	2162.9	39%	3913.3	471%
2002-2011	4653.3	115%	6084.4	55%
<b>Pepper</b>				
1982-1991	44766.3		983.1	
1992-2001	76692.6	71%	3253	231%
2002-2011	222535.6	190%	16248.8	400%
<b>Cocoa</b>				
1982-1991	599.3		138.8	
1992-2001	177.4	-70%	2663.6	1819%
2002-2011	1109.3	525%	12272	361%
<b>Cinnamon</b>				
1982-1991	789		1720	
1992-2001	753	-5%	4940.3	187%
2002-2011	968.8	29%	14931.8	202%
<b>Cloves</b>				
1982-1991	9.7		2290.8	
1992-2001	86.6	793%	5589.3	144%
2002-2011	379.2	338%	10946.8	96%

Source: FAOstat for plantation crops export and import quantity from 1982-2011  
(<http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E>)

**Table 5: Growth performance of Exports of Plantation commodities in India in the last three decades**

Commodities	High growth		Moderate Positive growth		Negative growth	
	1980s to 1990s	1990s to 2000s	1980s to 1990s	1990s to 2000s	1980s to 1990s	1990s to 2000s
Coffee	√			√		
Tea				√	√	
Rubber		√	√			
Cashew	√			√		
Coconut		√	√			
Cardamom		√	√			
Pepper	√	√				
Cinnamon				√	√	
Clove	√	√				
Cocoa						

FAO stat for plantation crops export and import quantity from 1982-2011 (<http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E>)

**Table 6: Percentage of Exports and Imports of Plantation commodities to Domestic Production And share of India in World Exports**

	% of exports to domestic production 2002-2011	% of imports to domestic production 2002-2011	% of India's exports to world exports 2002-2011
Coffee	70.46%	9.74%	1.79%
Tea	22.16%	2.43%	11.00%
Rubber	5.05%	11.79%	0.49%
Cashew	19.87%	96.15%	25.98%
Coconut	0.16%	0.01%	1.90%
Cardamom	29.06%	38.00%	8.75%
Pepper	17.12%	1.25%	8.09%
Cocoa	10.70%	118.35%	0.05%

Source: FAOstat for plantation crops export, import and production quantity from 2002-2011 (<http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E>), ITC trademap for export values of India and world from 2002-2011 ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 7: India's position in world production and presence in the Major markets for Plantation Commodities**

India's share in world production (average of 2009-11)	India's position in world exports(average of 2002-11)	Presence in Major import markets with at least 10% of the share(2002-11)	Among major importing countries (2002-11)	Export orientation (2002-11)
Tea, 21.9%, 2 <sup>nd</sup>	Tea, 11%, 4 <sup>th</sup>	Tea- 7 countries	Pepper (4.23%)	Coffee (70.4%)
Cardamom, 22%, 3 <sup>rd</sup>	Cardamom, 9%, 3 <sup>rd</sup>	Cardamom- 5 countries	Cardamom (6%)	Tea (22.16%)
Pepper, 10.5%, 4 <sup>th</sup>	Pepper, 8%, 4 <sup>th</sup>	Pepper- 4 countries		Cardamom (29%)
Coffee, 3.46% 6 <sup>th</sup>	Coffee, 1.7%, 15 <sup>th</sup>	Coffee: only in Italy		Pepper (17.12%)
Rubber, 8.02%, 4 <sup>th</sup>	Rubber, .04%, 14 <sup>th</sup>	No	Rubber (1.5%)	Cashew (20%)
Cashew, 16.16%, 3 <sup>rd</sup>	Cashew, 25%, 2 <sup>nd</sup>	Cashew- 6 countries		Rubber (5.05%)
Coconut, 17.7%, 3 <sup>rd</sup>	Coconut, 1.9%, 9 <sup>th</sup>	No		Cocoa (10.7%)
Cocoa, .27%, 18 <sup>th</sup>	Cocoa – very minute	No		

Table 7 shows India has a prominent place in the world in the production of most of the plantation commodities. India ranks 2<sup>nd</sup> in Tea, 3<sup>rd</sup> in cardamom, cashew and coconut, 4<sup>th</sup> in pepper and rubber, 6<sup>th</sup> in coffee. India is seen in the top exporters list only for tea and cashew with the market share of above 10 percent in the world market. Cardamom and pepper are the only two other plantation crops to have tapped the export markets. Coffee, rubber, cocoa and coconut do not seem to have exploited the major markets to the potential extent.

## **Export Performance and Competitiveness of Select Plantation Commodities**

### **Coffee**

India ranks 6<sup>th</sup> in the world production of coffee (3.4 percent of world production) but has only 1.7 percent of world exports ranking 15<sup>th</sup> among the exporters of coffee in the world (Table 7). Coffee is the most export oriented of plantation crops in India with 70 percent of domestic production of coffee being exported. Brazil, Columbia, Vietnam, Germany and Italy are major exporters of coffee, while USA, Germany, France, Japan and Italy together constitute more than 50 percent of import market of the world (Table 8). Currently India's exports of Coffee are concentrated towards some of the European countries, largely Italy, Germany, Belgium and Spain who import coffee largely for re-exports and countries like Kuwait and Jordan and Russian provinces. India's export share among major importers is minimal specifically in North America, Japan and even the western European markets. Columbia and Vietnam are the two major producers who have as well exploited the international markets having an export share of 20 percent and 8 percent respectively. Countries like Germany, Italy, Belgium and USA who produce no coffee are also among major exporters. This speaks of the amount of value addition and branding that could make a country a major player in the market. Though India has one of the best varieties of shade grown coffees, especially the Indian Robusta known for its strong blend, the major coffee markets of the world are not exploited by India. Other than in the case of Italy, India's share in the major importing countries of coffee like USA, Germany, France, Japan, Belgium is very minute (Table 8). Brazil, Columbia, Honduras, Ethiopia and Guatemala are the major competitors for India in Green coffee. Roasted coffee markets are largely dominated by the European countries like Switzerland, Germany, Italy, UK, Netherlands, Belgium and Spain who have made their presence in markets of Canada, US, Africa and Egypt. Poor value addition to Indian coffee even at a primary level is reflected out of the fact that nearly 70 percent of coffee exported by India is neither roasted nor decaffeinated (Ministry of agriculture, IIFT capacity building program).

**Table 8: Global Trade in Coffee and Direction of Coffee Trade of India**

Major Exporting Countries (%share)		Major Importing countries		% share of India among major importer	Export Destination of India and India's share in the commodity export		Countries imported from	
Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)
Brazil	3435655 (20.33)	USA	3612470 (20.9)	7561.6 (0.21)	Italy	92303.1 (30.59)	Viet Nam	17194.3 (45.37)
Colombia	1533722 (9.08)	Germany	2547772 (14.74)	44069.9 (1.73)	Germany	40449.7 (13.41)	Indonesia	11869.1 (31.32)
Viet Nam	1379944 (8.17)	France	1132833 (6.55)	10113 (0.89)	Belgium	24313 (8.06)	Uganda	4352.5 (11.49)
Germany	1374236 (8.13)	Japan	1074367 (6.22)	5404.7 (0.5)	Spain	14816.7 (4.91)	Côte d'Ivoire	1135 (3.00)
Italy	736562.4 (4.36)	Italy	1000374 (5.79)	94949.3 (9.49)	Jordan	8546.3 (2.83)	Kenya	383.4 (1.01)
Belgium	663570.5 (3.93 %)	Belgium	757657.6 (4.38)	13804.2 (1.82)	Slovenia	8350 (2.77)	Italy	382.2 (1.01)
Indonesia	617291.9 (3.65)	Canada	694295.6 (4.02)	2860.8 (0.41)	Kuwait	7731.8 (2.56)	China	323.8 (0.85)
Switzerland	566766.2 (3.35)	Spain	552513.1 (3.2)	17612.6(3.19)	Greece	7418.9 (2.46)	United Kingdom	274.6 (0.72)
Peru	560596.9 (3.32)	United Kingdom	489964.8 (2.83%)	2685.3 (0.55)	Russian Federation	6621.2 (2.19)	Germany	208.9 (0.55)
Guatemala	540452.5 (3.20)	Netherlands	474832 (2.75)	4518.8 (0.95)	Australia	6260.5 (2.08)	USA	177.5 (0.47)
USA	527567.1 (3.12)	Switzerland	354478.9 (2.05)	18604.7 (5.25)	Switzerland	5804.9 (1.92)	Burundi	174.1 (0.46)
Honduras	488331.5 (2.89)	Sweden	336368.6 (1.95)	636.2 (0.19)	France	5501.7 (1.82)	Ghana	142.5 (0.38)
Ethiopia	423917.4 (2.51)	Austria	292974.3 (1.70z)	3711.9 (1.27)	USA	5470.9 (1.81)	Mexico	128.7 (0.34)
Mexico	326806 (1.93)	Poland	250489.8 (1.45)	1192.9 (0.48)	Netherlands	5274.5 (1.75)	Rwanda	119.6 (0.32)
India	301706.6 (1.79)	Korea	230914.4 (1.34)	1798.3 (0.78)	Croatia	5056 (1.68)	Taipei, Chinese	102.9 (0.27)

Source: ITC Trademap for export and import values of India and world from 2002-2011 ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 9: Major Markets and India's Presence in the Major markets of Coffee**

Major Importing countries in the world	India's major Exporting destinations
USA	Italy
Germany	Germany
France	Belgium
Japan	Spain
Italy	Jordan
Belgium	Slovenia
Canada	Kuwait
Spain	Greece
United Kingdom	Russian Federation
Netherlands	Australia
Switzerland	Switzerland
Sweden	France
Austria	United States of America
Poland	Netherlands
Korea	Croatia

Source: ITC Trademap for export and import values of India and world from 2002-2011 ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

Unit export price realized by Indian coffee in the international markets is shown in the matrix (Table 10) below. The table shows the ratio of unit export prices realized by India as against the major competitors in different markets. The row average shows the average of the export price realized by Indian coffee against major exporters and the column average shows the average of the ratio of export prices realized in the major markets against the competitors. In most of the markets and against most of the competitors the export price realization of Indian coffee has been low. Competitors like Brazil and Columbia receive much higher price than India. Similarly, looking into major markets India's price realization is very poor in most of the European countries in Netherlands, Spain, UK and Canada. This is reflective of either the quality of coffee or value addition made by the competitors while exporting to those countries. The other reason for higher export price realization, especially in some of the European countries like Germany, Belgium, and Netherlands is re-exports of the commodity either due to geographical advantages, or because of high value additions and branding. Unit values of re-exports by importing countries are generally higher than those of exporting countries (ICC, 2012). Coffee is re-exported in those countries in all forms like green coffee, roasted coffee and soluble coffee. Germany and Belgium have high volumes of re-exports of green coffee which is attributable in large part to their extensive network of ports which are used to receive coffee from producing countries and redistribute to other destinations. In case of Germany re-exports also include a significant volume of decaffeinated green coffee processed within that country. Earnings from exports of roasted and soluble coffee are far higher than those forms exported by exporting countries (ICC, 2012). Germany, Belgium, Italy, Sweden and Denmark are the countries with highest form of re-exports of roasted coffee. These countries account for 91 percent of total re-exports of roasted coffee a figure that indicates the importance of high value processing industry in countries concerned. Germany is also the world's leading re-exporter of soluble coffee accounting for 18 percent of the total re-exports of soluble coffee by importing countries. UK, Spain, USA, Netherlands and France have the next highest share of soluble coffee re-exports.



**Table 10: Price Realised (ratio of unit export prices) for Indian Coffee (Coffee Green) in the International Markets**

Competitors/ Market	USA	Germany	Japan	Italy	Belgium	France	Spain	Canada	Switzerland	United Kingdom	Average
Brazil	0.91	0.82	0.81	0.71	0.77	0.84	0.62	0.71	0.89	0.78	0.79
Colombia	0.65	0.62	0.59	0.54	0.58	0.63	0.43	0.57	0.68	0.64	0.59
Honduras	0.78	0.75	0.70	0.63	0.65	0.68	0.54	0.62	0.85	0.67	0.69
Viet Nam	1.63	1.47	1.44	1.28	1.39	1.51	1.12		1.64	1.45	1.44
Peru	0.71	0.70		0.61	0.61	0.67		0.57		0.61	0.64
Ethiopia		0.83	0.65	0.56	0.76	0.79			0.70	0.57	0.69
Indonesia	0.83		1.18	1.25	1.13			0.53		1.36	1.05
Guatemala	0.71		0.64	0.58	0.65			0.60	0.73		0.65
Uganda		1.07		1.22	1.24		1.01				1.13
Germany					0.61	0.85	0.59			0.63	0.67
Mexico	0.78							0.60	0.75		0.71
Costa Rica	0.71							0.56	0.69		0.65
Nicaragua	0.76						0.51	0.64			0.63
El Salvador		0.73	0.72					0.69			0.71
Netherlands						0.66	0.50			0.56	0.57
Papua New Guinea		0.72	0.66								0.69
Kenya									0.48	0.45	0.46
United Republic of Tanzania			0.64								0.64
Belgium						0.86					0.86
Cote d'Ivoire							1.12				1.12
<b>Average</b>	0.85	0.86	0.80	0.82	0.84	0.83	0.72	0.61	0.82	0.77	

Source: Price Relative obtained by dividing unit price of India with unit price of the competitors in various markets, Its computed from the average of 2009,2010 and 2011 trade statistics from ITC Trade Map. ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 11: Price realised (ratio of unit export prices) for Indian Coffee (Coffee Roasted) in the International Markets**

Competitors/Market	France	Germany	USA	Canada	Netherlands	Austria	UK	Italy	South Africa	Egypt	Average
Switzerland	0.13	0.47	0.09	0.46	0.20	0.16	0.17	0.07	0.16	1.85	0.38
Germany	0.64		0.51	0.90	1.12	1.39	1.03	0.50	1.32	1.65	1.01
Italy	0.51	0.96	0.41	1.43	0.80	1.26	0.94		0.68	1.95	0.99
UK	0.22	0.49	0.26	0.72	0.57			0.17	0.98	2.66	0.76
Netherlands	0.55	0.84				1.30	1.20	0.47	1.05	1.40	0.97
Belgium	0.52	0.73			1.23		0.90	0.47	1.23		0.85
Spain	0.74	0.47			0.57		0.97	0.12	0.99		0.64
Brazil	0.98		0.56	1.36		0.89		0.48			0.85
France		0.84			0.91		1.26	0.53		1.34	0.98
Czech Republic	0.55	0.97				1.27	1.13				0.98
Poland	0.70	1.03				0.68		0.56			0.74
Austria		1.19			1.22			0.25			0.89
Mexico			0.85	1.86							1.35
Sweden			0.57				0.82				0.70
Colombia			0.45	1.05							0.75
USA				1.81						2.21	2.01
Portugal				1.16					1.36		1.26
Canada			0.44								0.44
Dominican Republic			0.95								0.95
Ethiopia				1.64							1.64
Luxembourg					0.97						0.97
Denmark					1.11						1.11
Slovakia						1.58					1.58
Honduras						1.68					1.68
Bosnia & Herzegovina						2.03					2.03
Ireland							1.16				1.16
Australia									0.72		0.72
Syrian Arab Republic										1.17	1.17
Jordan										1.20	1.20
UAE										1.31	1.31
Average	0.55	0.80	0.51	1.24	0.87	1.22	0.96	0.36	0.94	1.68	

In addition to the price factors, India faces threat from its competitors Columbia, Brazil, Ethiopia and Kenya in terms of yield, quality or better institutions. Columbia which is a major grower and competitor has the variety of coffees and brands which have worldwide reference. The ‘100 percent Columbian Coffee Program’ provides consumers with 100% Columbia coffee brands. The well known Columbian Coffee Logo featuring Juan Valdez and his mule and the Columbian mountains had added to the brand’s popularity in the western countries ([www.cafedecolumbia.com](http://www.cafedecolumbia.com)). Kenya, though not a top producer of coffee sells high priced coffee in two major markets Switzerland and UK. Kenyan Arabica is grown on rich volcanic soils where it is an established fact that the finest Arabica coffee is grown in Kenya. Kenyan Arabica has been rated as the second best in the world next only to Ethiopia (Daily Nation, 2013).

While India faces the threat from Columbia, Kenya or Ethiopia due to their better quality of coffees, there is also a threat from Brazil in terms of higher yield of coffee, especially for the robusta variety grown in the country. The country had adopted the strategy of large scale low cost coffee plantations to ensure large harvests and access to international markets. The development and implementation of new technologies have enabled a marked increase in the Brazilian coffee bean production. Coffee productivity in Brazil has steadily and comprehensively risen as a result of changes in technology. According to CECAFE statistics, bean productivity in Brazil increased by 76 percent from 1990 to 2000 (ICO, Embrapa, nd).

**Table 12: Tariff Rates Imposed on Roasted coffee by some of the Importers**

<b>Market</b>	<b>Average of AV Duties</b>	<b>List of non- AV Duties</b>
Canada	0.0	Nil
Egypt	10.0	Nil
European Union	7.5	Nil
South Africa		[6c/kg]
United States of America	0.0	Nil

Source: Tariff rates obtained for 6 level HS code in the major markets for coffee roasted as an average of 2009, 2010 and 2011 data from the WTO Tariff download facility. The European Union includes the markets like France, Germany, Netherlands, Austria, and Italy. <http://tariffdata.wto.org/ReportersAndProducts.aspx>

**Table 13: Tariff Rates Imposed on Coffee Green by some of the Importers**

Market	Average of AV Duties	List of non- AV Duties
Canada	0.0	Nil
European union	0.0	Nil
Japan	0.0	Nil
Switzerland	0.0	Nil

Source: Tariff rates obtained for 6 level HS code in the major markets for coffee green as an average of 2009, 2010 and 2011 data from the WTO Tariff download facility. The European Union includes the markets like Germany, Italy, Belgium, France and Spain. <http://tariffdata.wto.org/ReportersAndProducts.aspx>

There is no major threat of tariffs for Green Coffee of India from the major importers. The advalorem duties are almost nil in US, EU, Canada or Japan. However roasted coffee is subject to an advalorem duty of 7.5 percent and 10 percent in Egypt and EU which is disincentive for Indian exporters to sell value added coffee in those markets (Tables 12 and 13).

Meeting the phytosanitary conditions is one of the major non tariff barriers for coffee under the WTO. Phytosanitary certificate is required while the commodity is being exported. A pest risk management is conducted if an importer wants to import product that either has no previous history of being important in the country or product is from new origin. In the late nineties and early 2000 there was increasing international attention to the problem of Ochratoxin A (OTA) contamination in coffee and its public health implications (FAO, 2005). OTA is one of the several naturally occurring toxins, known as mycotoxins which are produced by moulds that grow on crops in the field or on storage. FAO in close collaboration with the ICO and funding from common fund for commodities launched a five year project for dealing with this problem for partnering countries including India.

Currently one of the major implicit barriers for Indian coffee, though not explicitly stated under non-tariff barriers under the WTO, is the need for certification. Under the IDH (organization involved in sustainable trade initiatives) umbrella major coffee roasters have set a goal of increasing global sustainable coffee sales from 8 percent to 25 percent by 2015. In 2009 more than 8 percent of all the green coffee exported worldwide had some form of certification or credible claim of sustainability (Technoserve 2013). In addition to the strong growth of fair trade and organic coffees, the three relatively new sustainability coffee standards, UTZ certified, rainforest alliance and Starbucks CAFÉ practices also grew dramatically(www.ico.org). In terms of concentration, the world coffee market is dominated

by 3 very large transnational's, Nestle, Kraft and Sara Lee and a few big coffee roasters. Almost all large coffee companies buy one or more of the certified coffees. In developed coffee markets, of Western Europe, North America and Japan, finer quality regular coffee is gradually gaining more popularity. NORTH Europe and US are the primary markets for organic coffee. Speciality coffees which are high quality coffees are getting popular in world coffee markets. Over the course of past two decades the market for speciality coffees in the US has grown at a pace of approximately 10 percent per annum giving rise to significant opportunities for producer diversification into value added markets based upon specific quality characteristics.

The threat becomes intense to India when the competitors are increasing the share of sustainable coffee in the world markets, especially in the European and the Northern American Markets which is fastly moving towards certified coffee consumption. Netherlands is a leader with 40 percent of its coffee being certified. In US it is 16 percent and countries like Denmark, Sweden and Norway have passed 10 percent (ITC, 2011). Though Brazil's coffee sector currently lacks a scalable model for expanding certification/verification to new farms, Brazil is currently the world leader in exports of sustainably verified or certified coffees because of its large volume of coffee exports. In 2011 Brazil represented 42 percent of UTZ certified coffee sales globally and 50 percent of rainforest alliance supply (Technoserve, 2013). In Brazil most of these certified production comes from large estates and major co-operatives. Brazilian government has also recently intervened to provide some price stabilization and help farmers who are most exposed. Brazil is currently in the process of increasing its share of sustainable coffee. Brazil also has strong existing infrastructure and local institutions for training and extension including programs such as EMBRAPA, SENAR and CMC. Finding a low cost model for individual farm certification will require collaboration among a range of local and international actors. The selection of an appropriate baseline sustainability standard international, national or state level is an important starting point(Technoserve, 2013).A survey conducted by CDKN (Climate and Development Knowledge Network) in India shows strong correlation between farmer's environmental awareness and certification. The price premiums for organic and certified coffee being relatively small in India is acting as another disincentive for certification ([www.cdkn.org](http://www.cdkn.org)).

Dr Philippe Vaast, a project leader with the CAFNET programme, says that our competing countries have managed to increase their certification process with cost effective ways. The scheme of financial assistance to help certify wasn't there in Central America. In spite of that,

50 per cent of the coffee area of Costa Rica is certified, and in Nicaragua and Guatemala it is probably in the range of 15-20 per cent but growing. In Central America, it was large farms, except for organic, that started the certification process, and now they have gone up to a stage where certified coffee farmers in Costa Rica are small, medium and large. It is recommended by CAFNET that one of the keys to the expansion of sustainable coffee in India is cooperatives. There aren't many cooperatives, especially in the Kodagu region, the largest coffee growing district of India (Businessline, 2011).

The emphasis in pattern of coffee growing in India has to shift from just economic viability in terms of profits and returns to environmental aspects of sustainability. There is a move towards growing more of differentiated subset of sustainable coffees like organic, fair trade, eco friendly value based products on account of distinct origin specialized processes or exceptional characteristics like superior taste or zero defects. It is in this context, in India the problem of improvement of coffee safety in addition to coffee quality has to be considered (Bhat 2005). The Indian coffee Board has endorsed the ICO quality plan as part of 7 steps to quality coffees. It has during 2004 brought out a guide to Indian coffee quality aimed at making quality specifications of Indian coffee grades even more transparent. Though there are some efforts by organizations like ITC and Coffee board towards attaining certification of coffee there is a need to scale up the operation in India ([www.ico.org](http://www.ico.org)).

## **Tea**

In spite of the fact that exports of tea from India has shown a negative growth in the last decades, India continues to have a major share in the world exports of tea, next only to cashew among the plantation crops. India ranks fourth in the world exports of tea next to Srilanka, Kenya and China who together along with India constitute around 50 percent of the market share (Table 14). Unlike Coffee, Indian Tea has its presence in the major importing markets like Russian Federation, UAE, UK, Iran and USA. In addition, Kazakhstan, Germany, Australia and Iraq are other export destinations. India is also the largest consumer of black tea in the world consuming more than 70 percent of tea produced in India (Table 7). But India has minimal presence in major markets of Japan, Saudi Arabia, Germany, Canada and France and bare presence in Pakistan which is one of the major importers. Markets with high per capita consumption, UAE, Iran, Tunisia, Iraq, Egypt and USA have high per capita consumption as compared to developed countries and have good potential for future growth (Table 14). India's losing position in the world markets for tea in the decades of 1990s and 2000s raises serious concerns. India today faces competition from three major tea

exporters, Sri Lanka, Kenya and China. China largely produces and exports green tea which does not expose to direct competition for Indian Black tea. However, with the change in consumption patterns of tea in the European countries Green tea is getting substituted with Black tea for its health advantages. The market share of green tea globally has risen to 3% from 17% over the past decade (The Economic Times, 2012). Moreover the Chinese have experimented and captured some of the niche markets with high value added green teas like Chrysanthemum tea, Jasmine tea, Ginger tea or Herbal brown sugar tea to name a few.

**Table 14: Global trade in Tea and Direction of India's Tea Trade**

Major Exporting Countries (% share)		Major Importing countries		% share of India among major importers	Export Destination of India and share		Import destination of India	
Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)
Sri Lanka	1002349 (22.36%)	Russian Federation	406537.4 (10.08%)	86367 (21.24%)	Russian Federation	74990.8 (15.22%)	Nepal	9581.1 (28.23%)
Kenya	717548.4 (16.01%)	United Kingdom	337461 (8.36%)	54513.8 (16.15%)	United Arab Emirates	61916.9 (12.56%)	Kenya	7271.8 (21.42%)
China	590737.2 (13.18%)	United States of America	291005.2 (7.21%)	33849.6 (11.63%)	United Kingdom	59874 (12.15%)	Viet Nam	4941.5 (14.56%)
India	492850.7 (11%)	Pakistan	215262.4 (5.33%)	14500.78 (6.74%)	Iran (Islamic Republic of)	31427.1 (6.38%)	Indonesia	3709.3 (10.93%)
United Kingdom	269943.2 (6.02%)	United Arab Emirates	185464.5 (4.6%)	44860 (24.19%)	United States of America	31292.7 (6.35%)	China	1434.3 (4.23%)
Germany	161754.3 (3.61%)	Japan	182484.5 (4.52%)	22686.4 (12.43%)	Kazakhstan	27154.3 (5.51%)	Sri Lanka	1385.3 (4.08%)
Indonesia	137373.9 (3.06%)	Saudi Arabia	151973 (3.77%)	16521.5 (10.87%)	Germany	26781.6 (5.43%)	Argentina	1228.7 (3.62%)
Viet Nam	131504.7 (2.93%)	Germany	148118 (3.67%)	36045.9 (24.34%)	Australia	19715.1 (4%)	Iran (Islamic Republic of)	992.8 (2.92%)
United Arab Emirates	107175.7 (2.39%)	Canada	125840.2 (3.12%)	9316.2 (7.4%)	Iraq	16246 (3.3%)	Malawi	766.4 (2.26%)
Belgium	67602.3 (1.51%)	France	124468.5 (3.08%)	5878.4 (4.72%)	Japan	14154.8 (2.87%)	United Kingdom	601.5 (1.77%)

Source: ITC trademap for export and import values of India and world from 2002-2011  
([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 15: India's Export Markets and Presence in the Major Markets for Tea**

<b>Major Importing countries</b>	<b>India's Export market</b>
Russian Federation	Russian Federation
United Kingdom	United Arab Emirates
United States of America	United Kingdom
Pakistan	Iran (Islamic Republic of)
United Arab Emirates	United States of America
Japan	Kazakhstan
Saudi Arabia	Germany
Germany	Australia
Canada	Iraq
France	Japan

Source: ITC Trademap for export and import values of India and world from 2002-2011 ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

Looking into unit price realization of Indian tea in the export markets, Indian tea in general seems to have realized better prices against major competitors like China, Kenya, Vietnam and Indonesia with an exception to that of Srilanka. Srilanka has realized better prices against India in all its major markets like Russian Federation, UK, USA, Pakistan, Egypt, UAE, and Saudi Arabia (Table 16). Like in coffee, there is substantial volume of re-exports of tea by countries like UAE, UK, Saudi Arabia and Japan who re-export after sufficient value addition. Only 56 percent of EU tea imports is sourced directly from developing countries. These markets depend on high re-exports by other EU member countries like UK, Germany, Poland and France. India would therefore, be unable to play a direct role in the markets of EU for tea blends (Ministry of Agriculture and IIFT, Capacity Building program).

According to the Ministry of foreign trade Dubai has emerged a major re-exporter of tea. During the past five years the country has garnered a 60 percent share of the USD99 million global re-export market earning approximately USD 48 million in 2011 ([www.worldteanews.com](http://www.worldteanews.com)). Dubai's multi commodity center has emerged as one of the world's most important hubs for processing and finishing of teas. Dubai's processing centers bring in a blend of Indian, Srilankan, Nepali, Kenyan, Tanzanian, Ugandan and Indonesian Black tea to maintain the consistency in packed tea. The Center's modern tasting unit and its research and development laboratory evaluate tea arriving from 13 producing countries.



Table 16: Price Realised (ratio of Unit export prices) for Indian Tea in the International Markets

Competitors/Markets	Russian federation	United Kingdom	USA	Pakistan	Egypt	UAE	Saudi Arabia	Germany	Japan	Iran	Average
Sri Lanka	0.61	0.56	0.70	0.79	0.93	0.80	0.88	1.06	1.50	1.05	0.89
China	1.05	0.91	1.44		1.21	1.14	1.08	1.51	2.27	1.25	1.32
Kenya	0.88	1.09		0.80	0.91	1.16	1.05		2.24	1.18	1.16
Viet Nam	1.75	1.29		1.17	0.84	1.76	1.52	2.86	2.49	1.64	1.75
Indonesia	1.24		2.07	1.07	1.23	1.90		2.87	2.53		1.78
Germany	0.44		0.75			0.12				0.70	0.50
UAE	0.62				0.67		0.30			1.28	0.72
Malawi		1.49	2.21	1.06	0.77			1.52	0.42		1.38
UK			0.36				0.35			1.56	0.66
Azerbaijan	1.15										1.25
United Republic of Tanzania		1.13		1.08							1.10
Argentina			3.01					3.35			3.18
Japan			0.23					0.19			0.21
Uganda				1.06	0.94						1.00
Saudi Arabia					0.28			0.80		0.90	0.59
Austria										0.48	0.64
Papua New guinea	1.53										1.53
Poland		0.49									0.49
Ireland		0.73									0.73
South Africa		1.25									1.25
Canada			0.25								0.25
Kwanda				0.88							0.88
Burundi				0.85							0.85
Iran						0.28					0.28
Yemen							0.50				0.50
Oman							0.78				0.78
Netherlands								1.22			1.22
Taipei									0.88		0.88
Australia									0.65		0.65
USA									0.27		0.27
Average	1.03	0.99	1.22	0.97	0.86	1.88	0.81	1.71	1.47	1.09	

Source: Price Relative obtained by dividing unit price of India with unit price of the competitors in various markets, Its computed from the average of 2009, 2010 and 2011 trade statistics from ITC Trade Map. ([http://www.tsdamap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.tsdamap.org/Country_SelProductCountry_TS.aspx))

Sophisticated infrastructure facilities created in the ports by Dubai has attracted big multinationals like Unilever to invest. Investors have been slow to invest in countries like Kenya or India or on value addition due to high costs brought about by the hefty taxes levied on the activity. Modern transport and progressive trade practices are an edge UAE intends to hone. Port Jebel Ali located 35 kms south west of Dubai has 67 berths and more than a million square meters of container yard. The surrounding industrial complex of 134 square miles houses both the DTTC and Lipton facilities along with several other tea processing factories. Srilanka's establishment of Tea Trading centre in Dubai also has attracted considerable attention ([www.worldteanews.com](http://www.worldteanews.com)).

It is seen that herbal teas and flavoured teas are increasingly becoming popular in EU. Fair trade tea is consumed largely in UK. India's export to UK has declined because of sharp increase in African tea production and exports, stiff price competition from Kenyan CTC and a shift towards consumption of higher quality tea in the UK. Consumption of conventional black tea is slowly decreasing in the UK. Producers in developing countries who want to sell black tea to the UK market will have to show some different alternatives in order to compete in other markets like organic black tea. The major competition in the markets of Europe is not from major exporters like Srilanka or Kenya but from re-exporters like UK, Germany and Poland (Ministry of agriculture, IIFT, Capacity Building program).

India also lost some of its markets due to lack of strategic government policies, especially with Russia, Poland and Pakistan (Asaop, 2007). The lack of competition in the earlier days, remunerative prices in the domestic market and buoyant export off take from CIS provided little incentive to the Indian tea industry to develop alternative export markets (Ministry of agriculture and IIFT, Capacity Building program). Russia has been one of the major markets for tea while bilateral agreements of India with Russia added to its advantage. India today has around 21 percent of Russian market. When the bilateral agreements expired with Russia and Poland, India's leadership in Russian Federation and Poland weakened. Srilanka's FTA with Pakistan creates better access to another major market. In the US markets, cheaper teas are demanded which is consumed in the form of Ice teas which are positioned as health drink and Argentina is the major supplier of such teas. Kenya is a major supplier to Egypt and Kenya and Egypt are members of COMESA. India's Black tea competes with Srilanka's dust tea. Depreciation of currencies in competing countries like Srilanka, Kenya and Indonesia increased export competitiveness of tea in those countries. Rising domestic demand in India improved the relative profitability of domestic sales against exports (Nagoor, 2009).

Srilanka is one of the few countries where each tea leaf is picked by hand rather than by mechanization. The use of the Lion Logo is closely monitored by the Srilankan Tea Board which performs a strict inspection procedure, the passing of which allows the producer to use the logo which is an assurance of the origin of tea and its quality. ‘Cylon Tea’ is being endorsed by its other world famous product Srilankan cricket driving the brand globally ([www.pureceylontea.com](http://www.pureceylontea.com)). Tea Board of Srilanka adopts sustainable practice in all aspects of the cultivation manufactures, storage and transportation. Srilanka now produces the world’s only ozone friendly tea certified under the Montreal protocol and greenhouse gases. This was achieved through an industry wide effort backed by Tea Board (Tea Board of Srilanka). There is strong emphasis in forest conservation in the Cylon Tea Industry. Many Srilankan estates and small holder co-operatives have entered into partnership with the rainforest alliance which offers certification to cultivators who conform to these standards.

**Table 17: Tariff Rates levied on Tea by some of the Importing countries**

Market	Average of AV Duties	List of Non-AV Duties
Egypt	2.0	Nil
European Union	0.8	Nil
Japan	11.7	Nil
Pakistan	10.0	Nil
Russian Federation	0.0	Nil
Saudi Arabia, Kingdom of	0.0	Nil
United Arab Emirates	0.0	Nil
United States of America	1.6	Nil

Source: Tariff rates obtained for 4 level HS code in the major markets for Tea as an average of 2009, 2010 and 2011 data from the WTO Tariff download facility. <http://tariffdata.wto.org/ReportersAndProducts.aspx>

Barrier to India’s tea exports through tariffs has been minimal or nil in major markets of Russia, Saudi Arabia and UAE. Countries like Japan and Pakistan imposed high tariffs on Indian tea to the extent of 11 and 10 percent respectively (Table 17). Stringent rules of labeling in developed markets, quality standards, maximum residual limits, food safety, ethical practices, certification and fair trade practices are the major non-tariff barriers confronting exports of tea from India. Pesticide residue in Indian tea has been a major cause of concern for India with respect to market access in EU. For example, Germany complained about high residue levels of bicofol in Assam, Terai, Dooars. Darjeeling Gold brand was rejected because it contained 0.24 mg of tetrafid on per kg which was 24 times the limit set by Germany (Das Kasturi, 2008). Non recognition by EU of tea testing laboratories in India by EU, registration of tea consignment under Bio terrorism ACT of USA are some other non-tariff barriers on tea faced by India (Shashank and Joseph, 2009). With increased stringency in national and international regulations the choice of pesticides for use in tea plantations

recalls for a total review of plant protection strategy and a look out for alternative ways to tackle pests as well as MRL (maximum residue limits)(Barooah, , et al, 2012).

Tea Board of India had undertaken an exercise to develop mid-term strategies during the 10<sup>th</sup> plan period. This included focused effort at developing and promoting an Indian Tea Logo and assistance in brand-building approaches of major players; geographical diversification of markets and consolidation of existing primary markets; a comprehensive exporter rating; targeting value addition and niche segment opportunities in specific markets; realignment of the product mix in line with demand in key high value markets and comprehensive product quality up gradation program; industry wide information technology backbone for greater transparency and dissemination of price and other market related information. In line with medium term export strategy for Indian tea (2002-07) the Board strategized on 22 markets. The plan was to increase Indian exports of tea to these markets. But consequently, the exports to these markets showed a decline with significant losses in markets like Arab Republic of Egypt, CIS, UK and Poland. Small size but well paying markets like Saudi Arabia, Germany, Japan, France, Ireland and Sudan showed a decline of Indian exports to them(Asopa, 2007).

The Parliamentary Standing Committee Report on Tea Plantation sector submitted to the Rajya Sabha on Aug 2012 identified reasons for the poor performance of tea exports in the recent years. More than 40 percent of tea bushes are more than 50 years of age, whereas in Kenya more than 80 percent of the bushes are young. The committee during its interaction with Darjeeling tea industry was informed that rampant use of chemical fertilizers has deteriorated the quality of top soil in the tea cultivating areas. The committee recommended that the orthodox tea fetches more earnings and could be provided support through the orthodox subsidy scheme. False certification of re-exports of poor quality tea and the department not taking any serious action is a concern raised by the committee. Darjeeling tea producers are bringing in green leaf from gardens in Nepal and selling them as Darjeeling tea has jeopardized the GI value of Darjeeling tea. The committee felt that the industry failed to penetrate new markets and the inability to secure preferential duty treatment from some of the countries. Restrictions like ban on usage of earth excavators, restrictions on irrigation, uncertainty about the lease tenure, lack of nutrient based subsidy, etc have affected the success of the Special purpose tea fund scheme. Direct subsidies on exports in India for tea is also quite limited. The committee recommended that the Board should tie up with the National Skill development commission to tailor details regarding best practices in the training module of small tea growers and plantation workers.

## **Cashew**

India is the second largest exporter of Cashew in the world having 25 percent of world markets (Table 6). India has around 16 percent of share in the world production ranking third. Close to 20 percent of domestic production of cashew is exported. Exports of cashew showed high growth in the decade of 1980s but showed a decline in growth and had moderate performance in the decade of 2000. The major markets of India for Cashew are USA, UK, Japan, Netherlands, Australia, Canada and Middle eastern countries. India has dominant presence in around six major importing markets of the world. Vietnam has emerged as a major competitor to India in International Cashew trade. Brazil and Cote d'Ivoire are the other two major producer exporters of cashew. Netherlands, though not a producer has close to 5 percent of world export share which is largely re-exported. Most Cashew Kernels exported from India are plain kernels packed in pouch/tin with net weight of 11.34 kg (25 lb). Similarly, Cashew nut shell liquid which is a by-product of the cashew industry is exported mainly to countries like USA, Korea, Japan and Zimbabwe. India has a high percentage share in the imports of USA (38%) Netherlands (31.5%), Germany (76%), UK (30.43%), Australia,(10.52%), UAE,(89%) Canada (13.41%) and France (62.9% ) (Table 18).

India has also been importing cashew often in large quantities the figures going up to 96 percent on average for the period from 2002-11. India does not produce sufficient quantities of raw nuts required by the processing units and resorts to import from African countries and south East Asian countries. Major portion came from Cote d'Ivoire, Guinea Bissau, Tanzania, Benin, Indonesia, Ghana and Mozambique (Table 18).

**Table 18: Global Trade in Cashew nuts and Directions of India's Trade in Cashew nuts**

Major Exporting Countries (% share)		Major Importing countries		% share of India among major importers	Export Destination of India and share		Import destination of India	
Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)
Viet Nam	672586.8 (30.83%)	USA	592244.2 (26.48%)	227806.7 (38.46%)	USA	213072.8 (37.59%)	Côte d'Ivoire	126107.8 (24.92%)
India	566779.8 (25.98%)	India	505977.4 (22.63%)	NA	Netherlands	66865.6 (11.8%)	Guinea-Bissau	83793.2 (16.56%)
Brazil	191996.3 (8.8%)	Netherlands	173968.9 (7.78%)	54845.6 (31.53%)	UAE	61423.7 (10.84%)	United Republic of Tanzania	66288.4 (13.1%)
Côte d'Ivoire	133745 (6.13%)	Viet Nam	166455.3 (7.44%)	2018.3 (1.21%)	Japan	26973.6 (4.76%)	Benin	64011.7 (12.65%)
Netherlands	104691.8 (4.8%)	Germany	94979.9 (4.25%)	72616.8 (76.45%)	United Kingdom	22929.1 (4.05%)	Indonesia	45112.9 (8.92%)
Guinea-Bissau	80099.5 (3.67%)	United Kingdom	82861.1 (3.71%)	25218.3 (30.43%)	Saudi Arabia	16864.3 (2.98%)	Ghana	40312.6 (7.97%)
United Republic of Tanzania	69046 (3.16%)	Australia	66409.9 (2.97%)	6984.1 (10.52%)	France	16407.1 (2.89%)	Mozambique	23797.2 (4.7%)
Ghana	68722.7 (3.15%)	UAE	55239.7 (2.47%)	49449.67 (89.52%)	Spain	13138.9 (2.32%)	Gambia	15684.5 (3.1%)
Indonesia	65573.2 (3.01%)	Canada	50721.3 (2.27%)	6800.5 (13.41%)	Belgium	11876.3 (2.1%)	Nigeria	10711.9 (2.12%)
Nigeria	55669 (2.55%)	France	39317.1 (1.76%)	24729.9 (62.9%)	Germany	8348.5 (1.47%)	Senegal	8011.3 (1.58%)

Source: ITC trademap for export and import values of India and world from 2002-2011  
([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 19: India's Export Markets and Presence in the Major Markets for Cashew nuts**

Major Importing countries	India's Export market
United States of America	United States of America
India	Netherlands
Netherlands	United Arab Emirates
Viet Nam	Japan
Germany	United Kingdom
United Kingdom	Saudi Arabia
Australia	France
United Arab Emirates	Spain
Canada	Belgium
France	Germany

Source: ITC Trademap for export and import values of India and world from 2002-2011  
([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

Table 20: Price realised (ratio of unit export prices) for Indian Cashew nuts in the International Markets

Competitors/Market	USA	Netherlands	Germany	Australia	UK	Canada	Japan	Russian Federation	China	France	Average
Viet Nam	1.1	1.0	1.1	0.9	1.1	0.9	1.1	1.1	0.5	1.0	0.99
Brazil	1.0	1.0	1.4	1.3	1.0	1.0		1.1		1.2	1.12
United Republic of Tanzania	1.2	1.1		0.9	1.1	1.0	1.7	1.0	0.4		1.05
Indonesia	1.0		1.0	0.9		1.5	1.3		0.6		1.04
Cote d'Ivoire	1.4	1.1	0.9		0.8	0.9					1.03
Mozambique	1.2	1.1			0.9	1.1					1.09
Germany					0.9			0.5	0.3	0.8	0.63
Kenya	1.0				1.7	1.0	1.3				1.22
Nigeria	1.2	1.2						1.0			1.13
Spain		0.9								0.9	0.86
Netherlands			1.0		1.2					0.9	1.04
Sri Lanka			0.7				0.5			0.8	0.68
China				0.8				1.0		0.5	0.77
USA				1.0		1.3			0.3		0.89
Singapore			1.0	0.9							0.96
Thailand	0.8								0.3		0.57
UK		0.9								1.4	1.16
Myanmar							1.8		0.4		1.07
Honduras			1.0								1.04
Austria		0.9									0.94
New Zealand				1.0							1.00
Turkey			1.0								0.96
Italy					0.7						0.66
Australia						0.5					0.45
Lithuania								1.1			1.06
Belgium										0.9	0.90
Average	1.09	1.02	1.02	0.97	1.04	1.02	1.28	0.98	0.41	0.93	

Source: Price Relative obtained by dividing unit price of India with unit price of the competitors in various markets, Its computed from the average of 2009, 2010 and 2011 trade statistics from ITC Trade Map. ([http://www.trademap.org/Country\\_SelfProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelfProductCountry_TS.aspx))

India has been realizing good unit export prices against the competitors in almost all the markets which is reflected through the ratio of unit export prices being more than one. This also shows good amount of value addition carried out for cashew in India, thanks to the early policies towards promotion of cashew processing industries in India. India's export price realization is low only against Germany due to its higher value addition met by this country through re-exports (Table 20). India was a predominant player until 1970s in the export of Cashew kernels to world market although it was not a major producer of raw cashew nuts. Government of India had promoted cashew processing industries ever since the early 1950s. The Cashew Export Promotion Council of India was set up in 1953 with processors and exporters as members to actively engage in the export promotion of Cashew Kernels and Cashew nut shell liquid.

Cashew nuts are imported in the country for the purpose of re-export of processed kernels since India has a labour cost advantage in this commodity. According to a study by NABARD (2010), the availability of domestic raw nuts was only 38.2 percent of the processing capacity. Even with the present level of production the availability is only 44 percent of processing capacity. This has led to dependence of imported nuts. The study also shows that the Cashew processing countries in Africa and South East Asia which were traditional suppliers of raw nuts into India are developing their cashew processing facilities to process and export kernels. Developing of Cashew processing in their countries will affect the availability of raw nuts for import into India. Vietnam is the major competitor for India for cashew kernels. Increasing competition from other cashew kernel producing countries like Brazil, Vietnam, Tanzania and Mozambique has affected India's exports of cashew. Brazil and Vietnam also compete with India in purchasing raw nuts. African countries due to African Cashew Alliance (ACA) have been trying to build African processing capacity and provide a sustainable global market for African Cashew. In addition competition from other surrogate nuts like almonds, pistachios, hazelnuts and brazil nuts which are grown in large plantations and more steady in supply have affected the consumption of cashew worldwide.



**Table 21: Tariff Rates levied on Cashew nuts by some of the Importing countries:**

<b>Market</b>	<b>Average of AV Duties</b>	<b>List of Non-AV Duties</b>
Australia	0.0	Nil
Canada	0.0	Nil
China	20.0	Nil
European Union	0.0	Nil
Japan	0.0	Nil
Russian Federation	5.0	Nil
United States of America	0.0	Nil

Source: Tariff rates obtained for 6 level HS code in the major markets for Cashew Nut as an average of 2009, 2010 and 2011 data from the WTO Tariff download facility. The European Union includes the markets like Netherlands, Germany and France. <http://tariffdata.wto.org/ReportersAndProducts.aspx>

There does not seem to be a major tariff barrier existing for Cashew nuts. Tariff rates in the countries of Australia, Canada, EU, Japan and USA is zero. China imposes a high tariff for cashew nuts to the extent of 20 percent and Russian Federation to the extent of 5 percent. These are however, not major markets for cashew or currently India's export destinations. Further non tariff barriers imposed by major developed countries worked as deterrent at times on Cashew industry (Government of Kerala, 2013). Phytosanitary standards are seen as greater constraints on business growth of industries. In India only a few cashew processors have attained ISO, GMP (Good manufacturing practices) and HACCP (Hazardous analysis of critical control points) certifications. US and European markets are receiving standardized quality certification for assured access to their markets.

The Vision document for 2030 of Government of Kerala (Government of Kerala, 2013) raises the concerns on cashew sector in the state and also comes up with some policy suggestions. High quality is a major criterion for success in the world markets. It is seen that the labour intensive manufacturing process practiced in India results in a higher percentage of holes and avoids blanching that can occur with foot pedal machines although the later are also used. Scientific processing techniques to recover cashew shell liquid oil may be used in the processing of raw nuts. Establishment of cashew clusters using the processors may facilitate the expansion of market linkage and improvement of quality of kernel. The vision document suggests for the involvement of Private sector to boost competitiveness. Primitive measures are suggested to promote producer's companies, promote special integrated cashew zones along the lines of special agri-zones. Cashew is the only major plantation crop that is not regulated by any autonomous Boards. Considering the importance of the crop, the vision document suggests setting up of the Board by the Commerce ministry. Cashew is one

commodity with high alternative uses and every byproduct is of high value. Cashew nut shell liquid, cashew apple, liquor, cashew testa, cashew shell, medicinal value of the plant, bark, leaves gums and shell makes cashew an important economic commodity. Cashew can also be promoted based on its health properties. Cashew is a unique combination of fat, proteins, carbohydrates, minerals and vitamins (Hall, et al, 2007). Given a good export market and less of competition from producers, the challenge before the country is to boost the domestic production. The use of vegetative propagated planting materials, better management practices like pruning, top working for rejuvenating cashew trees, improved planting material, adequate disease and pest control, phased replantation program etc are required to increase the yield. Concentrated efforts are now headed for promoting certified organic cashew (NABARD, 2012).

## **Pepper**

India ranks 4<sup>th</sup> in the world production of pepper having 10.5 percent of world production and has 8 percent of world exports. More than 80 percent of pepper produced is consumed within and only 17.2 percent of the produce is currently exported. India has presence in 4 major import markets of the world. Vietnam, Indonesia, Brazil, Malaysia and Singapore are other major exporters. European countries like Germany and Netherlands are re-exporters of the commodity. US, Germany, Netherlands, Singapore, Japan, France and UK are the major importers (Table 22). India imports pepper to the extent of 4.2 percent of domestic production from countries like Srilanka, Vietnam and Indonesia. USA, UK, Germany, Canada and Italy are major export markets of India. The products developed from pepper broadly fall into 4 categories, black pepper, white pepper, green pepper and oil and oleoresin of pepper. Currently Vietnam is the world's largest producer and exporter of pepper, producing 34 percent of the world's pepper crop in 2008. While black and white pepper were already known in antiquity, green pepper and even more red pepper is a recent invention. India has a major presence in USA, Germany among the major importers. Netherlands being the third largest importer, India has minor presence, where there is scope to exploit the market better. India has good share of imports of pepper at France, UK and UAE but they are not the major consumers (Table 22).

**Table 22: Directions of Pepper Trade of India**

Major Exporting Countries (%share)		Major Importing countries		% share of India among major importers	Export Destination of India and share		Import destination of India	
Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)	Country	Value (Average in 000 \$) (%)
Viet Nam	279431 (29.8%)	United States of America	193600.3 (21.82%)	31716.7 (16.38%)	United States of America	31021.5 (40.88%)	Sri Lanka	14091.1 (37.58%)
Indonesia	129309 (13.79%)	Germany	83215.7 (9.38%)	4993.7 (6%)	United Kingdom	4465.3 (5.88%)	Viet Nam	12258.1 (32.69%)
Brazil	94830.5 (10.11%)	Netherlands	46803.6 (5.27%)	1545.3 (3.3%)	Germany	4093.6 (5.39%)	Indonesia	8802.8 (23.48%)
India	75890.6 (8.09%)	Singapore	40963.3 (4.62%)	1023.9 (2.5%)	Canada	3635.3 (4.79%)	United States of America	819.4 (2.19%)
Malaysia	47894 (5.11%)	India	37496.1 (4.23%)	NA	Italy	3235.1 (4.26%)	Brazil	378.6 (1.01%)
Singapore	47550.9 (5.07%)	Japan	36469 (4.11%)	2117.3 (5.81%)	Australia	2567.8 (3.38%)	China	320.5 (0.85%)
Germany	41934.9 (4.47%)	France	33044.7 (3.72%)	5105.3 (15.45%)	Viet Nam	2552.1 (3.36%)	Madagascar	224 (0.6%)
Netherlands	38752.8 (4.13%)	United Kingdom	31461.5 (3.55%)	5435.2 (17.28%)	Japan	1954.4 (2.58%)	Singapore	91.7 (0.24%)
Sri Lanka	21857.5 (2.33%)	United Arab Emirates	22612.7 (2.55%)	1751.6 (7.75%)	Sweden	1898.3 (2.5%)	Ecuador	77.5 (0.21%)
United States of America	20006.1 (2.13%)	Spain	21623.7 (2.44%)	1034.2 (4.78%)	United Arab Emirates	1751.6 (2.31%)	Malaysia	59.4 (0.16%)

Source: ITC trademap for export and import values of India and world from 2002-2011 ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 23: India's Export Markets and Presence in the Major Markets for Pepper**

Major Importing countries	India's Export market
United States of America	United States of America
Germany	United Kingdom
Netherlands	Germany
Singapore	Canada
India	Italy
Japan	Australia
France	Viet Nam
United Kingdom	Japan
United Arab Emirates	Sweden
Spain	United Arab Emirates

Source: ITC Trademap for export and import values of India and world from 2002-2011 ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 24: Price Realized (ratio of Unit export prices) for Indian Pepper in the International Markets**

<b>Competitors/ Market</b>	<b>USA</b>	<b>Germany</b>	<b>Netherlands</b>	<b>UAE</b>	<b>Japan</b>	<b>UK</b>	<b>Singapore</b>	<b>France</b>	<b>Vietnam</b>	<b>Italy</b>	<b>Average</b>
<b>Viet Nam</b>	1.01	1.10	0.88	1.00	0.99	1.02	1.07	1.17		0.82	1.01
<b>Indonesia</b>	1.14	0.91	0.79	1.07	0.76		0.79	1.00	1.00	0.82	0.92
<b>Brazil</b>	1.19	1.29	0.92	0.86	1.05		0.59	1.21	1.00	0.80	0.99
<b>China</b>	0.76	0.81	0.82	1.36	0.28	0.63	0.69	0.78	1.00		0.79
<b>Malaysia</b>	0.59	1.03		0.93	0.99	0.78	0.98		0.90		0.88
<b>Germany</b>	0.94		0.74			0.64	1.03	0.77		0.47	0.76
<b>Srilanka</b>	0.68	0.81		1.08	0.58						0.79
<b>Netherlands</b>		1.08				0.99		0.83		0.23	0.78
<b>Belgium</b>			1.09			1.26		0.87		0.55	0.94
<b>Madagascar</b>				0.74			1.01	1.43		0.88	1.02
<b>USA</b>				1.45	0.36	0.54	0.19				0.63
<b>South Africa</b>	0.66				0.17	0.63					0.49
<b>Singapore</b>					0.64			0.86	1.00		0.83
<b>France</b>		0.46				0.45				0.31	0.41
<b>Ecuador</b>	0.99										0.99
<b>Austria</b>		0.43									0.43
<b>Italy</b>			1.49								1.49
<b>Spain</b>			1.37								1.37
<b>Thailand</b>			0.85								0.85
<b>Mexico</b>				0.91							0.91
<b>Korea</b>							0.55				0.55
<b>Cambodia</b>									0.93		0.93
<b>Area Nes</b>									1.00		1.00
<b>UAE</b>									0.92		0.92
<b>Poland</b>										0.60	0.60
<b>Average</b>	0.89	0.88	0.99	1.05	0.65	0.77	0.77	0.99	0.97	0.61	

Source: Price Relative obtained by diving unit price of India with unit price of the competitors in various markets, Its computed from the average of 2009,2010 and 2011 trade statistics from ITC Trade Map. ([http://www.trademap.org/Country\\_SelProductCountry\\_TS.aspx](http://www.trademap.org/Country_SelProductCountry_TS.aspx))

**Table 25: Tariff Rates imposed on Pepper by some of the major importers**

<b>Market</b>	<b>Average of AV Duties</b>	<b>List of Non-AV Duties</b>
European Union	3.0	Nil
Japan	1.7	Nil
Singapore	0.0	Nil
United Arab Emirates	5.0	Nil
USA	0.0	Nil

Source: Tariff rates obtained for 4 level HS Code in the major markets for Pepper as an average of 2009, 2010 and 2011 data from the WTO Tariff download facility. The European Union includes the markets like Germany, Netherlands, France and Italy. <http://tariffdata.wto.org/ReportersAndProducts.aspx>

India's unit export price realization as seen in the ratio of prices is close to one against Vietnam, Brazil, Belgium, Italy and Spain. It is lower to one as against South Africa, France, Srilanka and Netherlands. Price realized in Singapore, Japan, UK and Italy as against the competitors in general has been low for India. Tariffs do not seem to be a major barrier for exports. There is a tariff rate of 2 to 5 percent in UAE, Japan and EU.

Some of the recent trade policy changes have affected the direction of pepper exports from India. The restructuring of foreign trade policy by scrapping incentive for value-added black pepper for developed countries and retaining it to emerging markets have left the Indian pepper exporters unhappy. This has resulted in increased exports to emerging markets like Vietnam, which is the largest producer of black pepper, at the expense of consignments to major buyers like the US and European countries. Under the new Merchandise Export from India Scheme (MEIS), the earlier 5 per cent export incentive available for value-added pepper has been withdrawn and replaced with 3 per cent incentive for raw pepper and 2 per cent benefit to value-added pepper to emerging markets(The Economic Times, April 2015).

The largest threat among the non-tariff barriers faced by Spices is with the Sanitary and Phytosanitary requirements and the multiplicity of rules governing them. As per the CODEX rules clear instructions regarding the method of packing to be adopted, quality and characteristics of spices are explained explicitly for spices (Arati, et al, 2012).Under the Inprocess quality control(IPQC) only units having all prescribed facilities as per rules to produce safe product shall be approved for the processing and packaging of black pepper export under their own supervision and control. In US, (United states Food and Drug administration) fixes the standards for black pepper to be sold in USA in consultation with the ASTA (American Spice Trading Association). Indian export consignments to the US are inspected based on the standards and requirements of USFDA. For Europe the European Spice Association (ESA) fixes the standards for black pepper imports and also imposes rules regarding the procedure to be adopted for sample test. ESA also specifies methods to be adopted by the black pepper exporting countries to test the physical parameters. In EU eradication is banned, unless agreed mutually by the buyer and the seller. The Agmark Standards regarding organic extraneous matter are 250 percent stricter than the ESA (European Spice Association) Standards. For inorganic extraneous matter, the Indian Agmark standards are stricter compared to those of US, Malaysia and IPC by 500 percent and ESA by 1000 percent. In respect to moisture content, the Indian Agmark standards are 190 percent higher than that of US, EU and IPC. The Japanese and Indian standards are on the same level

where as the Malaysian standards are stricter compared to Agmark (Indian standards).A minimum bulk density of 490 g/z is required for marketing in India whereas IPC requires a higher min requirement of 550g/L. Compared to EU standards, the volatile oil content standards are relaxed in India. This shows a wide difference in the rules and procedures adopted by different organizations and countries while importing this commodity, which has created confusion in the Indian pepper exporters.

## **Conclusions**

Plantation crops within the agriculture sector in India had special prominence in the 1970s and 1980s largely due to its export orientation. A concern has been raised on many issues pertaining to exports of India's plantation commodities in the recent years. With the opening of Indian agriculture and high level of integration of domestic markets with the world markets there is a continued dependence of many plantation crops on export markets directly or indirectly. This along with the dynamic policy environment calls for an analysis towards the export performance, potential and competitiveness of plantation crops in India.

Studies analyzing competitiveness of agricultural commodities in India have relied extensively on the use of protection coefficients as indicators of competitiveness. The relevance of using these indicators as a measure of competitiveness is limited due to various reasons. Plantation commodities like coffee, tea or spices being price inelastic, lower prices may not symbolize higher competitiveness. Rather realization of higher prices as against the competitor in different markets reflects higher quality or better value addition. The study therefore relies on the ratio of unit export prices (in f.o.b terms) against the competitors in different regions and markets to examine the performance through price realization. Four major plantation crops are chosen for analysis, coffee, tea, cashew and pepper.

In case of coffee most of the markets and against most of the competitors the export price realization of Indian coffee has been low. Competitors like Brazil and Columbia receive much higher price than India. Similarly, looking into major markets India's price realization is very poor in most of the European countries in Netherlands, Spain, UK and Canada. In addition to the price factors, India faces threat from its competitors Columbia, Brazil, Ethiopia and Kenya in terms of yield, quality or better institutions. Currently one of the major implicit barriers for Indian coffee is the need for certification. Under the IDH (organization involved in sustainable trade initiatives) umbrella major coffee roasters have set a goal of increasing global sustainable coffee sales from 8 percent to 25 percent by 2015. The threat

becomes intense to India when the competitors are increasing the share of sustainable coffee in the world markets, especially in the European and the Northern American Markets which is fastly moving towards certified coffee consumption. The price premiums for organic and certified coffee being relatively small in India are acting as another disincentive for certification. Studies have shown that our competing countries have managed to increase their certification process in coffee with cost effective ways. It is recommended that one of the keys to the expansion of sustainable coffee in India is co-operatives.

Unlike Coffee, Indian Tea has its presence in the major importing markets like Russian Federation, UAE, UK, Iran and USA. In addition, Kazakhstan, Germany, Australia and Iraq are other export destinations. India is also the largest consumer of black tea in the world consuming more than 70 percent of tea produced in India. But India has minimal presence in major markets of Japan, Saudi Arabia, Germany, Canada and France and bare presence in Pakistan which is one of the major importers. India's losing position in the world markets for tea in the decades of 1990s and 2000s raises serious concerns. India today faces competition from three major tea exporters, Srilanka, Kenya and China. The major competition in the markets of Europe is not from major exporters like Srilanka, Kenya or China but from re-exporters like UK, Germany and Poland. India also lost some of its markets due to lack of strategic government policies, especially with Russia, Poland and Pakistan. Stringent rules of labeling in developed markets, quality standards, maximum residual limits, food safety, ethical practices, certification and fair trade practices are the major non-tariff barriers confronting exports of tea from India. Pesticide residue in Indian tea has been a major cause of concern for India with respect to market access in EU. With increased stringency in national and international regulations the choice of pesticides for use in tea plantations recalls for a total review of plant protection strategy and a look out for alternative ways to tackle pests as well as MRL (maximum residue limits). There are also lessons to learn for India from Tea Board of Srilanka. Tea Board of Srilanka adopts sustainable practice in all aspects of the cultivation manufactures, storage and transportation. Srilanka now produces the world's only ozone friendly tea certified under the Montreal protocol and greenhouse gases. This was achieved through an industry wide effort backed by Tea Board.

For Cashew, India has been realizing good unit export prices against the competitors in almost all the markets which is reflected through the ratio of unit export prices being more than one. This also shows good amount of value addition carried out for cashew in India, thanks to the early policies towards promotion of cashew processing industries in India.

India's export price realization is low only against Germany due to its higher value addition met by this country through re-exports. India was a predominant player until 1970s in the export of Cashew kernels to world market although it was not a major producer of raw cashew nuts. Non tariff barriers imposed by major developed countries worked as deterrent at times on Cashew industry. In India only a few cashew processors have attained ISO, GMP (Good manufacturing practices) and HACCP (Hazardous analysis of critical control points) certifications. US and European markets are receiving standardized quality certification for assured access to their markets. There is need for measures to promote producer companies involving private sector and promote special integrated cashew zones along the lines of special agri-zones. Cashew is the only major plantation crop that is not regulated by any autonomous Boards. Considering the importance of the crop, the vision document suggests setting up of the Board by the Commerce ministry. Cashew is one commodity with high alternative uses and every byproduct is of high value. Cashew nut shell liquid, cashew apple, liquor, cashew testa, cashew shell, medicinal value of the plant, bark, leaves gums and shell makes cashew an important economic commodity. Cashew can also be promoted based on its health properties given the unique combination of fat, proteins, carbohydrates, minerals and vitamins. Given a good export market and less of competition from producers, the challenge before the country is to boost the domestic production. The use of vegetative propagated planting materials, better management practices and promotion of certified organic cashew is recommended. India's unit export price realization for pepper has been good against most of the major competitors and in major markets. But Indian spices face larger threat from non-tariff barriers, especially with the Sanitary and Phytosanitary requirements and the multiplicity of rules governing them. A wide difference in the rules and procedures adopted by different organizations and countries while importing this commodity has created confusion in the Indian pepper exporters.



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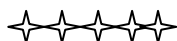
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