

## **Direction of Tea Export and Its Destination and Performance**

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### **Introduction**

India is the largest producer and consumer of tea in the world and accounts for around 27 per cent of world production and 13 per cent of world trade. Export of tea is around 20 per cent of domestic production. The bulk (75 to 80 %) of tea production comes from Northern India, Assam and West Bengal being the major contributors. In recent years, however, India's long-standing predominance in the world market as the largest producer and exporter of tea has taken a beating due to sluggish growth in production coupled with slow ascendancy in domestic consumption (Mitra, 1991). India's share in world exports of tea has also drastically declined indicating that India is unable to take advantage of the expanding world market. To add to the woes of the tea firms and farmers is the falling prices of tea both in domestic and international markets. These changes would have an adverse impact on the economy. It is pertinent to assess the performance of tea sector and identify ways and means of overcoming the problems. Therefore, the present study was taken up with following specific objectives; a) to study the composition 'nature and of tea trade and (b) to assess the competitiveness of tea and to suggest policies to ameliorate the depreciating situation of tea industry.

### **Data and methodology**

#### *Direction of Trade*

The data on export of tea and its products were collected for the period 1980 to 2004 from various publications of Director General of commercial Intelligence and statistics (DGCI&S) Ministry of Commerce. Tea leaf in bulk, constitutes 57 percent of total tea exports and therefore, an in depth assessment of shift in destinations and its future demand was performed taking 10 major tea importing countries. The biannual averages at four yearly interval data for the period 1995-2004 were used to *analyze* the market share for the tea exports.

#### *Comparative Advantage*

The study estimated the comparative advantage in tea trade with the help of Export Performance Ratio (EPR), using data from FAOSTAT for the period 1995-2004. The EPR of the tea during a period can be

expressed as a ratio of share of exports for tea of the country to the world to the share of total exports of the country to world for all the commodities. If EPR is greater than unity, the country has comparative advantage in the export of that commodity and vice versa (Balassa, 1965). The comparative advantage was also studied using the net protection Coefficient (NPC) which is given as the ratio of domestic price tea. The NPC less than 1 means the country is competitive in that commodity.

### **Results and discussion**

#### *India's status in global Tea Production*

India is second in terms of both area (20 per cent) and production (25 per cent) of tea in the world (Table 1). Six countries i.e., India, china, Kenya, Sri Lanka, Turkey and Indonesia together account for 80 per cent of the world's total tea production. The productivity of tea in India is less than that of Kenya (2.15 tones/ha), Japan (1.98 tones/ha), and Turkey (1.82 tones/ha). It is also observed that in the last decade and a half the country has not recorded any significant growth in yield (0.23 per cent). Though tea production has increased over the years due to expansion in its area, further increase in production is possible only by way of increasing yield.

Across the states Assam is the leading state with an area of 2.31 lakh hectares and production of 4.45 lakh tones followed by West Bengal, Tamil Nadu, Kerala and Tripura (Table 2). The productivity is higher in Southern states compared to that of northern states of the country. Tea is produced in almost all the North Eastern states. Assam is the world's largest distinct tea-growing area and produces the instantly recognizable, rich, malty, full-bodied, bright teas that have established themselves as favorites around the world. In West Bengal Darjeeling is known as the 'Champagne of teas'. Darjeeling tea, with its unique Muscatel flavour and exquisite bouquet, is the world's most exclusive tea, fetching the highest prices across the world.

Tripura is categorized as a traditional tea-growing state producing about 7.5 million kg of tea. There is a considerable scope to increase the area under tea plantation as well as productivity. The tea currently produced in Tripura is recognized for its good blending qualities. In Nagaland most of the farmers have shifted

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Table1: Production of tea in the world

Country		TE 1990	TE 2005	% to total	CAGR (%)	C.V. (%)
China	A	8.44	9.46	(37)	0.65	3.24
	P	5.63	8.62	(26)	2.72	13.56
	Y	0.67	0.91		2.06	10.47
India	A	4.15	5.00	(20)	1.34	7.21
	P	6.88	8.42	(25)	1.56	7.59
	Y	1.66	1.69		0.23	4.43
Indonesia	A	0.91	1.16	(5)	1.72	8.67
	P	1.44	1.69	(5)	0.98	4.76
	Y	1.59	1.45		-0.72	5.19
Japan	A	0.59	0.49	(2)	-1.43	7.04
	P	0.90	0.98	(3)	0.03	3.55
	Y	1.53	1.98		1.49	7.68
Kenya	A	0.90	1.37	(5)	2.52	11.84
	P	1.81	2.95	(9)	3.38	15.72
	Y	1.99	2.15		0.84	4.90
Sri Lanka	A	2.22	2.03	(8)	0.72	6.24
	P	2.22	3.06	(9)	2.81	13.56
	Y	1.00	1.51		3.56	16.97
Turkey	A	0.89	0.92	(4)	0.62	7.41
	P	1.37	1.86	(6)	1.94	14.53
	Y	1.55	1.82		2.55	15.93
Vietnam	A	0.54	1.02	(4)	3.60	19.49
	P	0.31	1.06	(3)	9.14	43.49
	Y	0.57	1.04		5.31	25.62
World	A	22.40	25.29	(100)	0.69	3.67
	P	24.82	33.23	(100)	2.06	9.95
	Y	1.11	1.31		1.36	6.76

Note: A=Area (lakh Hectares); P= Production (lakh tonnes); and Y= Yield (tonnes/Ha).

Source: FAOSTAT Database, [www.FAO.ORG](http://www.FAO.ORG)

towards exclusive tea cultivation instead of mixed crops, which was the tradition. The price received by the farmers, however, is not as satisfactory. People are actually new to this crop and do not know about the market dynamics or quality differences. There is an urgent need for extension support at every level of cultivation and processing.

#### *Declining global prices affecting sustainability of tea industry*

The fall in price of tea was observed both in India as well as world over. The tea prices recorded in Mombasa (Kenya) in 2005 were same as that recorded about a decade ago. Tea prices in India and all over the world have not shown an increasing trend. Nevertheless immense variability in prices was observed in the past decade. Moreover the Indian prices have always remained lower than (Mombasa) Kenya prices. This phenomenon has effect on the profitability of the industry.

Efforts have been made to arrest fall in prices by way of setting up of price stabilization fund, creating a separate fund for long term development and modernization of plantation sector, increasing the allowance under Sec 33 AB of income tax Act from 20 per cent to 40 per cent; introduction of price sharing formula for equitable sharing of the sale proceeds between the bought leaf factories and small tea growers; implementation of a credit relief package; and development of IT based Information dissemination plan for the tea industry (GOI, 2004). These efforts have had a positive impact on the health of Indian tea sector. However, to make Indian tea sector more competitive, the long term strategy should be to give emphasis on quality of the product; tea product and

Table 2: State wise tea production in India

States	Area('000 ha)		Production ('000 tonnes)		Yield (kg/ha) 2004 TE
	2004 TE	% to total	2004 TE	% to total	
Assam	231.00	(44.54)	445.25	(53.09)	1928
West Bengal	104.20	(20.09)	194.45	(23.19)	1866
Tamil Nadu	49.10	(9.47)	131.22	(15.65)	2672
Kerala	36.80	(7.09)	53.15	(6.34)	1444
Tripura	6.10	(1.18)	7.35	(0.88)	1205
Himachal Pradesh	2.10	(0.40)	1.60	(0.19)	
Karnataka	2.10	(0.40)	5.24	(0.62)	2495
Arunachal Pradesh	2.00	(0.39)	0.90	(0.11)	
Nagaland	0.50	(0.09)	0.25	(0.03)	
Manipur	0.90	(0.08)	0.25	(0.03)	
Orissa	0.05	(0.01)	0.10	(0.01)	
Sikkim	0.05	(0.01)	0.10	(0.01)	
North India	403.91	(77.87)	649.04	(77.39)	1607
South India	114.78	(22.13)	189.60	(22.61)	1652
Northeast region	240.05	(46.28)	454.09	(54.15)	1892
<b>India</b>	<b>518.68</b>	<b>(100.00)</b>	<b>838.64</b>	<b>(100.00)</b>	<b>1617</b>

Source: GOI (Various issues), Horticulture Production Yearbook, NHB, Ministry of Agriculture, New Delhi.

Table 3: Changing composition of tea exports from India

S. No.	Commodity		TE 1990	TE 2004	CAGR1989-2004 TE
A.	Black tea aggregate	Q	199.06(97.58)	157.32(97.32)	-0.97
		V	519.11(97.61)	315.94(94.09)	-2.31
		UV	2.61	2.01	-1.35
i)	Black tea in packets >25 gm but < 1 kg	Q	46.80(22.94)	28.79(17.81)	-0.32
		V	131.85(24.79)	58.22(17.34)	-2.22
		UV	2.82	2.02	-1.92
ii)	Tea black leaf in bulk	Q	123.89(60.73)	91.33(56.50)	-3.78
		V	318.28(59.85)	189.06(56.30)	-4.52
		UV	2.57	2.07	-0.78
iii)	Tea black dust in bulk	Q	21.32(10.45)	17.43(10.78)	-0.99
		V	48.67(9.15)	29.29(8.72)	-0.98
		UV	2.28	1.68	0.01
B.	Green tea aggregate	Q	3.99(1.96)	1.08(0.67)	-7.11
		V	7.51(1.41)	2.79(0.83)	-4.71
		UV	1.88	2.58	2.61
C.	Others tea aggregate	Q	0.94(0.46)	3.25(2.01)	9.78
		V	5.23(0.98)	17.07(5.08)	8.58
		UV	5.54	5.26	-1.10
Total tea		Q	203.99	161.65	-0.99
		V	531.85	335.80	-2.32
		UV	2.61	2.08	-1.35

Note: 1) Q is quantity in million kg, V is value in million \$, UV is unit value in \$/kg.

2) Figures in parentheses are percent to the total

process diversification; and also on the market diversification.

#### *Issues with small tea growers*

Attempts to expand tea in non-traditional areas have not been met with much success since large plantations don't seem interested in increasing their area (Bhowmick, 1991). Under such a situation promoting small scale tea cultivation appears to be most practical business proposition in the potential areas. These small tea estates could be located in the periphery of existing big tea plantation that enables the growers to have a tie-up arrangement with the large estates for technical know-how and sale of green leaf. This would increase tea production on one hand and also alleviate the ever swelling unemployment problem on the other. However, the small scale tea sector faces a number of problems too: lack of capital, improper knowledge about the agro-techniques of tea cultivation, inadequate input availability and problem of marketing (Das, 1998). There is a need to strengthen the technical services in order to disseminate the technical know-how of tea cultivation. A new type of production organization and ownership structure may be promoted to look after the multi-pronged problems of production, marketing and supporting services for the small holder tea production. Such an organization would be able to take care of the interest of the tea growers by making the inputs available in right quantity at right price: can make arrangements for processing of green leaves and eventually, can undertake

marketing of products to enhance profits. Such a body could be drawn on the lines of Kenyan Tea Development Agency (KTDA) of Kenya or the "Tea Small Holdings Development Authority, of Sri Lanka" to cater to the needs of small tea growers.

#### *Tea exports and its composition*

In the year 2004-05 a total of 162 million kg of tea was exported, earning a foreign exchange of \$ 336 million (Table 3). Tea exports could be classified into three categories based on nature of processing as black, green and others tea. In volume terms black tea accounts for 97 per cent of total tea exports and is followed by others (2 per cent) and green tea (1 per cent). The unit value realization was found to be higher in case of others group of tea (\$5/Kg) followed by green tea (\$3/kg) and black tea (\$2/kg). The export of black tea in volume terms declined from 199 million kg in TE 1990 to 157 million kg in TE 2004. Exports in value terms also revealed similar pattern, with export earnings falling from \$ 519 million to \$ 316 million. The major cause of concern, however, is fall in unit value realization of tea exports from \$ 3/kg in TE 1990 to \$ 2/kg in TE 2004. Out of the various grades of black tea exported from the country the largest share in total tea exports is of "tea black leaf in bulk" (57 per cent) followed by "Black tea in packets >25 gm but < 1 kg" (18 per cent) and Tea black dust in bulk (11 per cent).

#### *Comparative Advantage*

The export competitiveness of tea was

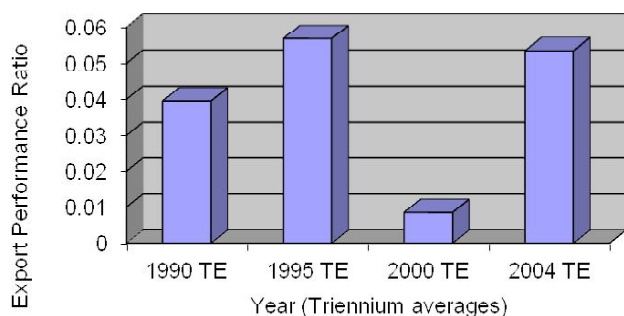


Fig 4.1. Revealed Comparative Advantage of Tea in India ascertained using the Export Performance Ratio (PER) for the selected years and shown in figure 1. During the early 1990s, the EPR recorded an increasing trend. However, during the late 1990s the EPR fell sharply, revealing erosion of comparative advantage of Indian tea. The trend was reversed through corrective measures in the form promotional efforts of the government, which needs to be sustained on a long term basis.

The Nominal Protection Coefficient (NPCs) for Indian tea has been less than one for all reference years (Fig. 2), indicating that the Indian tea is price efficient. In mid 1990s NPCs showed an increasing trend revealing the erosion of export competitiveness. However, of late the NPC has started declining, revealing the gain in competitiveness. This turnaround

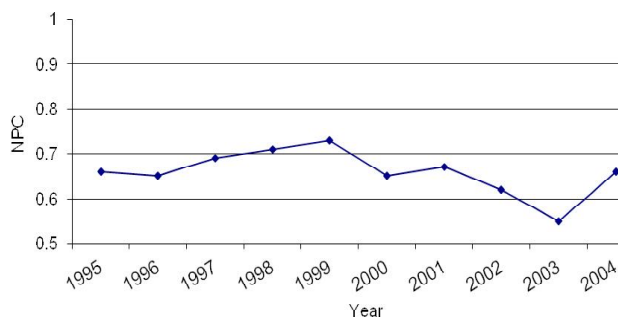


Fig 4.2. Nominal Protection Coefficient (NPC) of Tea in India

in export performance could partly be attributed to improvement in exports to UAE, the UK and Iraq, and to some extent to CIS. Another important factor in improvement in export performance has been increase in exports to newer markets such as Pakistan, Australia, etc. Such a trend shows diversification of our export market portfolio leading to improvement in our global competitiveness in the long run. The future strategy for the tea sector should be to augment our competitive strengths in the supply chain management, value addition and marketing. The country needs to reorient our product mix, which is skewed in favour of CTC teas whereas the global demand is for orthodox tea (Nair, 2004).

#### *Determinant of Export Demand for Tea*

It appears that despite the price competitiveness of Indian tea, its export has declined over the years. Therefore, to ascertain the factors responsible for

decline in India' tea exports, export

Demand function has been estimated. The five determinants of export demand, namely, exports prices ( $X_{pr}$ ), market size ( $T_{tea}$ ), exchange rate (ERR), coffee market in the international market (coffee\_PRI), and production of tea in the world other than that in India ( $TEA_q$ ) together explain 59 percent of the total variation in the exports of tea from India (Table 6). The exchange rate and market size (world) and coffee price in international market have emerged as significant and strong determinants for tea exports. The estimates for world tea market shows that for one per cent increase in the world tea trade, exports demand for Indian tea would increase by around 1.4 per cent. The coffee price, in terms of unit value of export, has a positive and significant bearing on the export demand of tea. This establishes the substitutability nature of the two products. The recent fall in demand for tea both in the domestic and international markets is attributed to consumer preference for soft drinks, which means that the whole of beverages could be viewed as one, with each of the commodities vying for their share. Massive campaign about the health and fitness benefits of tea has to be undertaken on a continuous basis so as to improve its demand.

The increase in the production of tea in other parts of the world would have negative impact on the export of tea from India. The country can avert the effect, of increase in production in other parts of the world would have negative impact on the export of tea from India, by way of product diversification emphasizing on quality, and widespread development of logo and brand name of Indian tea. International export price of Indian tea has positive but insignificant impact on export demand of tea. This is because tea is a popular drink whose demand is relatively insensitive to price.

#### *Suggestions and Policy Implications*

To make the Indian tea sector more robust and resilient the following steps need to be taken up:

Concerted efforts have to be made by different stakeholders to increase the productivity of tea plantations. The extension services should be strengthened to disseminate the technical know-how to the small tea growers located in remote areas.

A new type of production organization and ownership structure may be promoted to look after the multi-pronged problems of production, marketing and supporting services for the small holder tea production > such an organization would be able to take care of the interests of the tea growers by making the inputs available in right time at right price.

The country can get back its place among our traditional tea markets of Russia and other CIS nations

by diversification of tea products, quality up gradation and aggressive brand and logo campaign. These efforts would also help in realization of better prices thus improving our competitiveness and profitability of tea industry.

In the short terms, aggressive generic promotion for tea in the domestic market is very much needed. A slight change in the promotion theme, from health to fitness would be more appealing. The focus at first should be on those states where per capita tea consumption is very low.

Market diversification away from traditional markets offers great scope to boost Indian tea exports.

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