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Performance of India's Tea Exports: A Comparative Study of Major Tea Exporting Countries of The World

B.H. Nagoor

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TITLE OF THE PAPER: "PERFORMANCE OF INDIA'S TEA EXPORTS: A COMPARATIVE STUDY OF MAJOR TEA EXPORTING COUNTRIES OF THE WORLD"

BY

Dr. B.H.Nagoor
Lecturer
Department of Economics
Karnatak University, Dharwad
Karnatak
E-mail: nagoor_bh@yahoo.co.in
Cell: 09448112166
Office: 0836-2215251

PERFORMANCE OF INDIA'S TEA EXPORTS: A COMPARATIVE STUDY OF MAJOR TEA EXPORTING COUNTRIES OF THE WORLD

B.H.Nagoor

I Introduction

From the available data it is evident that India is the largest producer and consumer of tea in the world. Over the years it has continued to be an important foreign exchange earner of the country. This is the only industry where India has retained its leadership over the last 150 years. The percentage share of tea in India's total agriculture export during 1981-90 is 20.16 per cent, during 2001-04 it has come down to 5.78 per cent. The decade of nineties and beginning of twenty first century has been quite depressing for the tea industry in India.

On the production front India has been the major producer of the tea in the world. Other major producing countries include China, Srilanka, Kenya and Indonesia. During 1951-60, India was producing around 40 per cent of world production, declined to 26 per cent during 2004. China and Kenya are able to increase their share in world production considerably. The share of China and Kenya during 1951-60 was 13.59 per cent and 2.67 per cent respectively, increased to 24.90 per cent and 10.30 per cent in 2004. In recent years China emerged as major tea producer in the world.

India's share in world export declined from 42 per cent during 1951-60 to 21.91 per cent during 1981-90, further declined to13.35 per cent during 2001-04.Kenya during 1951-60, was producing and exporting 3 per cent of the world, by 2001-04 share in world export of tea increased to 19.50 per cent and share in world production increased to 9.67 per cent. Kenya has done exceedingly well. China was exporting 5.37 per cent of world export during 1951-60, increased its share to 17.85 per cent during 2001-04.

Now question arises what are the factors responsible for decline in share of India's tea exports in world tea exports and increase in share of other major tea exporting countries in world tea exports. Given this backdrop, the present study attempts to evaluate India's tea export performance and examines the underlying factors, and discusses the prospects of India's tea exports. Comparison is made with the other major tea exporting countries. The study also looked at Tea exports and production response in major tea exporting countries under WTO regime.

From the review of earlier studies, it is evident that, earlier studies mainly focused on India's own experience without comparing with the performance of other major tea exporting countries of the world. There is a need of further study which can focus on performance of India's tea export in comparison with the performance of other major tea exporting countries of the world, identify underlying factors, estimate India's future tea export prospects.

The present study has been divided into seven sections. The following section provides a data source and methodology. Brief analysis of tea exports of India, economic benefit of tea exports, export consistency, price competitiveness is discussed in third section. Comparison is made with the performance of major tea exporting countries of the world in section fourth. The fifth section deals with factors affecting global tea exports. Prospects of Indian tea exports are discussed in section sixth. The last section contains summary and policy suggestions.

II Data Source and Methodology

The study is based on time series data pertaining to the period 1950-2006.Wherever long period data are not available, short period data are used. To see the Tea exports and production response in major tea exporting countries under WTO regime, ten years before the WTO and ten years after the establishment of WTO is considered. Data is obtained from, FAO, UNCTAD, IMF, WTO, RBI, Ministry of Agriculture GOI, Ministry Finance GOI, Tea Boards of India,Kenya,China,Srilanka Indonesia and DGCIS Calcutta. To examine the tea export performance, statistical tools like, compound annual growth rate (CAGR), for volatility and consistency co- efficient of variance (CV), To measure the competitiveness of tea export, nominal protection co- efficient (NPC) is applied. Economic benefit of tea export is calculated through movement in growth rate (CAGR) of quantity and value of tea exports.

Measuring Price Competitiveness through Nominal Protection Coefficient (NPC)

Portar (1990) has argued that the theory of international trade must move beyond comparative advantage to competitive advantage. Thus, price cum cost comparisons, at best, become preliminary indicators of competitiveness. Therefore exports competitiveness of agricultural commodities has also been assessed by the computing the Nominal Protection Coefficient (NPC). NPC is the simplest of indices and measures the divergence of domestic price from international price and determines the degree of export and import competitiveness of the commodity in question.

The measure is given by

NPCi=Pid/Piw

Where,

NPCi= Nominal protection co-efficient of the commodity i

pid = Domestic price of commodity i

piw= World reference price (border price) of commodity i, adjusted for transportation, handling and marketing expenses.

NPC greater than unity indicates effective incentives to producers compared to free trade scenario and NPC lower than 1 indicates that the commodity is not protected. Similarly, NPC <1 indicates that the commodity is exportable and possesses export competitiveness. NPC>1 indicates commodity is importable and the commodity is not export competitive. The expression 1-NPC reveals price wedge for exports, depending upon the sign. For example, if NPC = 0.75, it indicates, export enjoys price advantage to the tune of 25 per cent, (given 1-NPC multiplied by 100). On the other hand NPC = 1.20, it indicates export disadvantage to the tune of 20 per cent.

Domestic price is taken from Agricultural Prices in India, Various Issues Ministry of Agriculture, Government of India. International price taken from IMF Year Book 2007 in terms of dollar. International price in terms of dollar converted into Indian rupee with respective annual average exchange rate from RBI Hand Book of Statistics on Indian Economy 2006-07. The domestic price referred to here, is annual average of wholesale prices, adjusted for freight prices, marketing and trading margins or other processing costs to make product comparable to the product which is traded in international markets. The border price or world reference is international price. Indian price for a commodity is compared with the price of leading exporting or trading country. While comparing prices of different crops, due care has been taken about variety being compared.

In the present study, analysis of India's tea exports has been made in terms of rate of export growth, share in total agricultural export, share in world tea exports, export consistency, economic benefit of export, price competitiveness of exports, and factors influencing exports. Comparison is made with performance of major tea exporting countries.

III Analysis of India's Tea Export

Before analyzing the tea export of India, let us see the structure of production and consumption within the country as domestic demand and supply play important role in export. Table-1 illustrates the relative share of domestic consumption and exports in

production of tea in India from 1950 to 2004.From the Table we find that, from 1950, the share of domestic consumption in production increased drastically. During 1950-60, the percentage share of consumption in production was 32.06 per cent, increased to 66.92 per cent during 1981-90.This further increased to 76.94 per cent during 2001-04.Even though, India's tea production, area and yield increased (Appendix Table-1), it could not match the growing internal domestic demand. Increase in population and per capita income seems to be the major factors responsible for increase in share of domestic demand in production of tea in India. The demand for tea is primarily determined by income elasticity of demand, as it is price inelastic. Various studies (Nayyar1976; Reddy 1991) suggest that income elasticity is low for developed countries and high for developing countries.

It is clear that over a period of time due to increase in domestic demand the percentage share of export surplus in production of tea in India declined drastically. Tea economy of India, which was more export oriented in the earlier period, was becoming more domestic market oriented.

India's export performance of tea from 1981 to 2004 is summarized in Table-2. In Table, India's tea export share in total agricultural exports, compound annual growth rate (CAGR) in terms of quantity and value, co-efficient variation (CV) and movement in value of export (CAGR value\CAGR qty*100) have been calculated. The results show that, the percentage share of India's tea export in total agricultural exports has declined drastically. During 1981-90 the share was 20.16 per cent, declined to 10.23 per cent during 1991-95 and further declined to 8.11 per cent and 5.78 per cent during 1996-2000 and 2001-04 respectively. The growth rate of India's tea export in terms quantity shows that during 1981-90, it is -0.79 per cent per annum and further negative growth rate of 6.86 per cent during 1991-95.However, during 1995-04 revival is witnessed, during this period growth rate in terms of quantity increased by 1.21 per cent per annum, but in terms of value it is -0.88 per cent per annum during the same period

Table-1 Trends in Relative Share of Consumption and Exports in Production of Tea in India

Year	Percentage Share of Consumption in Production	Percentage Share of Exports in Production
Avg1950-60	32.06	67.94
Avg1961-70	46.01	53.99
Avg 1971-80	58.97	41.03
Avg 1981-90	66.92	33.08
Avg 1991-95	76.66	23.34
Avg 1996-2000	76.73	23.27
Avg 2001-04	76.94	23.06
1996	79.28	20.72
1997	75.20	24.80
1998	76.25	23.75
1999	77.00	23.00
2000	74.78	25.22
2001	79.00	21.00
2002	70.75	29.25
2003	80.00	20.00
2004	78.0	22.00

Source: Calculated from Tea Statistics, Tea Board of India Various Issues

Table-2 Tea Export of India (value in dollar)

Year	Percentage Share in total agri-export	CGR in Quantity	CGR in Value	CV in Quantity	CV in Value	CGR value / CGR qty * 100	CV value / CV qty * 100
1981-90	20.16	-0.79	1.33	6.82	16.22	-168.4	237.83
1991-95	10.23	-6.86	-7.51	15.76	19.07	109.48	121.00
1996-00	8.11	6.93	6.66	14.44	21.77	96.10	150.76
2001-04	5.78	-0.9	1.06	1.91	7.13	-117.8	373.30
1995-04	6.95	1.21	-0.88	10.72	19.17	-72.73	178.82
1991-04	7.26	0.54	-0.25	12.29	19.18	-46.30	156.06

Source: computation based on data from www.fao.org

Movement in Quantity and Value of Export

In Table – 2, we examined the growth rate of India's tea export in terms of quantity and value. Value of exports increases either through increase in quantity of export or price of export or both. It is important to find out the relative importance of change in price of export

and change in quantity of export in the overall change in value. In case of export, it is good for the economy, if export value is increased more than quantity of export (Sathe and Deshpande 2006). In this section, we have ascertained the importance of quantity and price in export value. To find the relative importance of movement in export quantity and price, the following exercise is done. In Tables -2, India's Tea export growth rate in terms of quantity and value is estimated. In the same Table –2, we have calculated the ratio of both export growth rate in terms of quantity and value and multiplied it by 100 (CAGR value /CAGR quantity * 100). It gives whether value of export increased due to increase in price or quantity or both. In Table–2, if the ratio is less than 100, for that commodity, the increase in value has been less than that of quantity and hence the increase in value of exports has been more due to increase in quantity than increase in price. If ratio is more than 100, for that commodity the increase in value of exports has been more than that of quantity and hence the increase in value of exports has been more due to increase in price than increase in quantity. This is beneficial for the economy. Thus we construe the movement in prices in an indirect way. This is true only when, growth rate is positive (increasing) for both quantity and value. If growth rate in quantity export is declining (i.e. negative value) and growth rate in export value is increasing (i.e. positive value), it is beneficial to the economy as it occurs only when prices are increasing. If growth rate in quantity export is increasing (positive value) and growth rate in export value is declining (negative value), it is not beneficial for the economy as it happens only when prices are declining. In such cases ratio will be negative. In case both export quantity and export value are declining, if decline in export value (negative growth rate) is less than decline in quantity export (negative growth rate), which is beneficial to the economy, it happens when prices are increasing. In such case ratio value will be less than 100. In other words, if decline in export value is more than decline in export quantity, it is not beneficial for the economy as it happens only when prices are declining. In such cases ratio value will be more than 100.

The result of this exercise is shown in Table -2. It shows that, during 1981-90, growth rate of export in quantity declined but growth rate of export in value increased. The ratio value during 1981-90 is –168.4, which is beneficial to the economy. It happened due to increase in price per unit of export quantity of Indian tea. During 1991-95, both growth rates of export in quantity and value have declined. Decline in growth rate of export in value is more than decline in growth rate of export in quantity. It happened due to decline in price per unit of export quantity of Indian tea. The ratio value during this period is 109.48.

Table-3 Average Export Unit Value of Indian Tea(US $ per ton)

Year	*Average Export unit value*
1990	3010.35
1991	2295.29
1992	2207.95
1993	2196.85
1994	2061.08
1995	2286.79
1996	2080.83
1997	2615.38
1998	N.A.
1999	2311.99
2000	2174.83
2001	2125.95
2002	1854.83
2003	1978.34
2004	2254.14

Source: www.fao.org

This kind of trend is not beneficial to the economy and will lead to a decline in export unit value. For instance, in 1990, average export unit value of Indian tea is US $ 3010.35 per ton declined to US $ 2209.59 per ton during 1991-96 (Table-3). During 1995-04, growth rate of export in quantity increased, but growth rate of export in value declined. The ratio value during this period is –72.73. This kind of trend is not beneficial to the economy and will lead to decline in export unit value. From the above analysis it is clear that, in real sense the export of tea in post- liberalization and post -WTO period has not benefited the Indian tea economy.

To capture the variability and consistency in India's tea export in pre and post- WTO period, co -efficient of variation (CV) is calculated in Table –2. Table shows that, in post-liberalization and post -WTO period, tea exports in terms of quantity and value show volatility more than for earlier period of 1981-90. With the help of CV for value of export and quantity of export, we have calculated volatility ratio between value and quantity exported and then multiplied by 100(C V value/CV quantity * 100) in Table- 2 it self. If ratio value is more than 100, it means volatility is more in value of export compared to quantity exported. If ratio value is less than 100, it means volatility is more in quantity compared to value of export. The results of Table show that, for all the periods from 1981 to 2004, volatility in value exported is more than volatility in quantity of export in Indian tea, as ratio

value is more than 100 for all the periods. During 1991-2004, volatility in value exported is more than compared to 1981-90.

Competitiveness of Indian Tea Exports

The competitiveness of Indian tea export is calculated in Table-4. Trade competitiveness basically depends upon the level of domestic prices relative to international prices. If domestic price of a commodity is lower than the net export price, the commodity is export competitive other wise it is not. We have used the simplest method, Nominal Protection Co efficient (NPC) to measure the export competitiveness of Indian tea. There are lots of quality variations and there are several grade categories of tea produced in India. Similarly, India's tea export also consists of several types of tea like green tea, black tea, dust tea etc. The most common type is dust tea and the same has been selected to compare domestic and export price. NPC under exportable hypothesis is worked out for Calcutta all dust tea, assumed to represent India. Under exportable hypothesis, the tea is deemed to compete with Srilankan dust tea. From Table-4, we find that since 1991, international price of tea is higher than domestic price. Indian tea experiencing export advantage of more than 30 per cent during 2000-04.Interestingly, export growth rate in quantity during 2001-04 has shown negative growth rate of 0.9 per cent even though Indian tea in world market during this period was very much competitive. The main reasons are; i). After disintegration of former USSR in 1991, India lost USSR market, which was a major importer of Indian tea. For instance, in 1991, India exported 48.07 per cent of its total tea export to USSR, in 2001 this declined to 24.36 per cent and during 2004 further declined to 13.32 per cent (nagoor 2008). ii) Indian tea lacks in quality compared to its competitors. iii) Due to preference for other beverages like coffee, cold drinks etc, the consumption of tea in developed countries declined especially in U.K (Appendix fig-1). iv). Emergence of new producer – exporting countries like East African countries, China, Indonesia, Latin American countries (Fig-1& Table-11) increased the world supplies and therefore competition in world market increased. v). Depreciation of currencies in competing countries like Srilanka, Kenya and Indonesia increased export competitiveness of tea in these countries.vi). Rising domestic demand in India, improved the relative profitability of domestic sales against exports.

Table-4 International and Domestic Price of Tea in India (Rs. Per quintal)

Year	World (FOB) Price	Domestic price	Ratio of domestic to FOB Price (NPC)	1-NPC	1-NPC*100
1986	2434.083	4150	1.70	-0.70	-70.50
1987	2215.339	4210	1.90	-0.90	-90.04
1988	2493.514	4250	1.70	-0.70	-70.44
1989	3267.473	4231	1.29	-0.29	-29.49
1990	3174.355	4334	1.37	-0.37	-36.53
1991	4186.121	3531	0.84	0.16	15.65
1992	5171.16	4084	0.79	0.21	21.02
1993	5845.421	4777	0.82	0.18	18.28
1994	5760.303	4546	0.79	0.21	21.08
1995	5329.815	4641	0.87	0.13	12.92
1996	6284.927	4920	0.78	0.22	21.72
1997	8625.881	7853	0.91	0.09	8.96
1998	9858.567	9003	0.91	0.09	8.68
1999	10018.95	7987	0.80	0.20	20.28
2000	11109.19	7576	0.68	0.32	31.80
2001	11031.07	6649	0.60	0.40	39.72
2002	10998.02	5910	0.54	0.46	46.26
2003	11086	6708	0.61	0.39	39.49
2004	11165.08	6957	0.62	0.38	37.69

Source: World price: International Financial Statistics-2005,IMF
Value in terms of dollar converted into Indian rupee with respective annual average exchange rate of particular year from RBI, Hand Book of Statistics on Indian Economy-2004-05
Domestic Price: Ministry of Agriculture, GOI
Note: World price--Annual average price of Srilankan dust tea
Domestic Price-- All dust Calcutta, annual average price

IV India's Tea Export in World Scenario

In this section, an attempt has been made to evaluate the performance of India's tea export comparing it with the export performance of other major tea exporting countries. By doing so it is possible to assess the impact of global environment on Indian tea export in multilateral trade regime. Moreover, it is important in understanding the changing world market for tea in multilateral trade regime. Major tea exporting countries of the world are Kenya, Srilanka, China, India and Indonesia. However, prior to evaluation of export performance of major tea exporting countries of the world, it is necessary to analyse the production and domestic demand of tea in these countries. On the production front India has been the major producer

of the tea in the world (Table-5). Other major producing countries include China, Srilanka, Kenya and Indonesia. Table-5 shows, during 1951-60, India was producing around 40 per cent of world production, declined to 26 per cent in 2004.The declining trend can be observed in case of Srilanka as well. Only China and Kenya are able to increase their share in world production considerably. The share of China and Kenya during 1951-60 was 13.59 per cent and 2.67 per cent respectively, increased to 24.90 per cent and 10.30 per cent in 2004.In recent years China emerged as major tea producer in the world. Fig-1 shows, during 2004 and 2005, China became number one tea producer in the world pushing India into number two position. India had doubted China's emergence as a top raking producer, citing limitations in field level statistics and under reporting of the tea production in India. Tea board of India was then engaged in revising the production (Asopa, 2007).

Since 1985, even though China's area under tea cultivation is lower than earlier period (Appendix Table-1), due to improvement in yield, production increased by 3.28 per cent per annum during 1984-94, further increased by 4.13 per cent per annum during 1995-05.In India production increased by 1.83 per cent per annum and 1.07 per cent per annum respectively during the same period. In Kenya, production increased by 5.53 per cent per

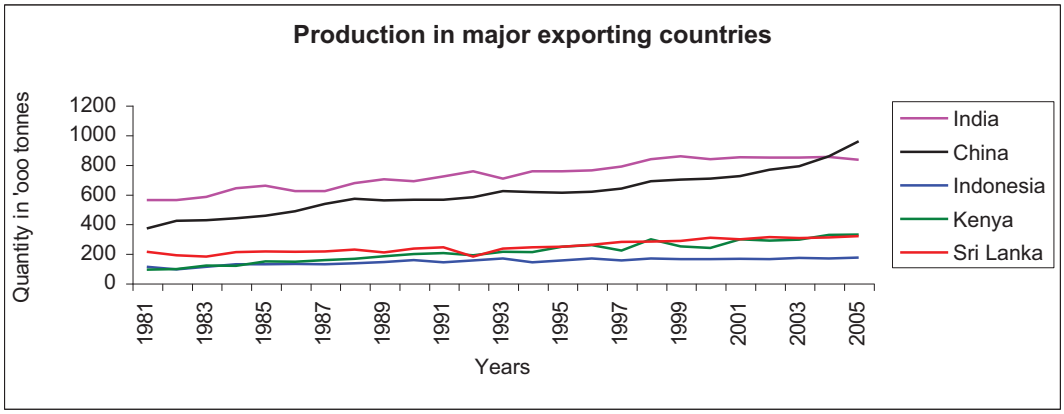
Table-5 Share of Tea in Major Producing Countries in World Production

(Percentage)

Year	India	Srilanka	Indonesia	China	Kenya	Others
Avg1951-60	39.52	21.93	5.67	13.59	2.67	16.62
1961-70	34.24	20.07	4.00	14.97	5.59	21.13
1971-80	31.63	13.03	4.34	14.45	7.09	22.41
1981-90	28.42	9.36	5.51	20.27	6.17	30.27
1991-95	29.15	8.95	5.41	22.46	8.29	25.83
1996-00	28.69	9.84	5.71	22.91	8.87	23.99
2001-04	27.29	9.83	5.39	24.21	9.69	23.60
1991	28.89	9.25	5.11	20.75	7.80	28.20
1992	28.48	7.20	5.86	22.54	7.57	28.35
1993	28.77	8.80	5.20	21.82	8.02	27.39
1994	29.70	9.73	5.18	23.52	8.37	23.5
1995	29.91	9.75	5.68	23.68	9.67	21.71
1996	27.27	9.38	6.46	23.23	9.73	23.93
1997	29.60	10.10	5.60	22.40	8.10	24.20
1998	29.20	9.40	5.60	22.20	9.80	23.80
1999	28.40	9.80	5.50	23.30	8.60	24.40
2000	29.00	10.50	5.40	23.40	8.10	23.60
2001	28.30	9.80	5.30	23.20	9.80	23.60
2002	27.35	10.13	5.64	24.32	9.37	23.19
2003	27.50	9.60	5.40	24.40	9.30	23.80
2004	26.00	9.80	5.20	24.90	10.30	23.80

Source: Calculated from, Tea Statistics Tea Board of India.

Fig-1



Source: Calculated from Appendix Table-1

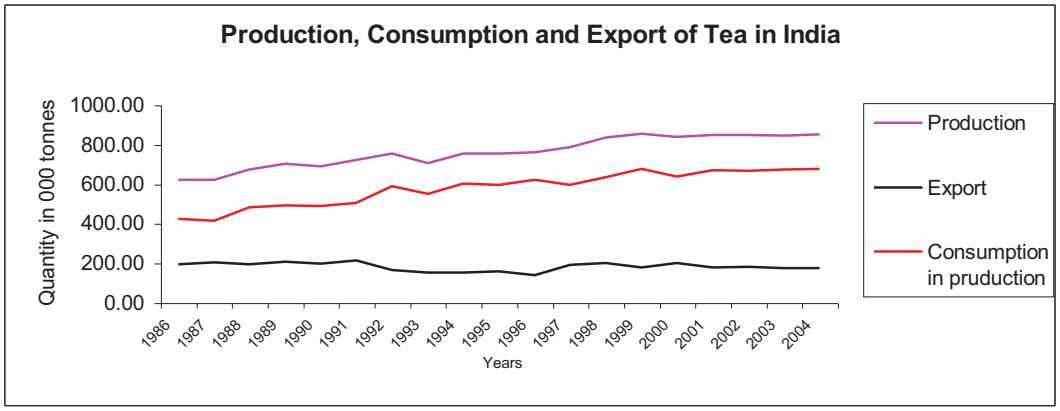
annum and 3.12 per cent per annum respectively during the same period. Production in Srilanka and Indonesia also increased during this period (Table-9). With improvement in supply conditions in Kenya, China and Indonesia, India's share in world production declined even though its total production increased. Table-6 illustrates the share of domestic consumption in production in major producing countries. Domestic consumption is calculated by deducting export from production. In case of India, there is continuous increase in share of domestic consumption in production, it increased from 32.06 per cent during 1951-60 to 66.92 per cent in 1981-90, further increased to 78.26 per cent in 2001-04.From Fig-2 we can observe that, whatever additional production is taking place, it is almost entirely consumed internally leaving export surplus to remain stagnant and some times export even shows declining trend. In contrast, Kenya's domestic consumption share in production is very low and declined over a period of time (Table-6). Fig-3 shows that except for a few years, the increase in production of tea in Kenya is almost entirely used for export.

Table-6 Share of Tea Consumption in Production in Major Producing Countries (Percentage)

Year	India	SriLanka	Kenya	China	Indonesia
Avg 1951-60	32.06	4.51	24.47	76.88	19.00
1961-70	46.01	5.22	9.05	80.14	23.78
1971-80	58.97	5.40	8.71	72.08	29.75
1981-90	66.92	6.97	15.71	66.61	30.70
1991-95	77.29	7.07	10.30	68.13	24.63
1996-00	76.78	8.11	9.29	68.22	45.61
2001-04	78.26	5.99	6.32	65.29	42.43
1991	73.26	12.73	13.77	65.87	17.40
1992	76.33	0.60	11.47	68.65	16.78
1993	76.53	9.46	10.87	64.97	9.55
1994	82.42	7.94	12.54	69.47	34.57
1995	77.89	4.62	2.87	71.69	44.86
1996	80.65	11.06	-1.09	69.62	39.91
1997	75.20	7.26	10.00	67.00	56.50
1998	76.25	5.48	10.46	67.31	59.52
1999	77.00	7.46	2.85	70.47	39.23
2000	74.78	9.29	24.21	66.69	32.91
2001	79.00	2.97	12.40	64.42	38.14
2002	76.03	7.93	5.1	66.16	42.02
2003	80.00	3.75	8.32	66.16	47.73
2004	78.0	9.29	-0.53	64.4	41.82

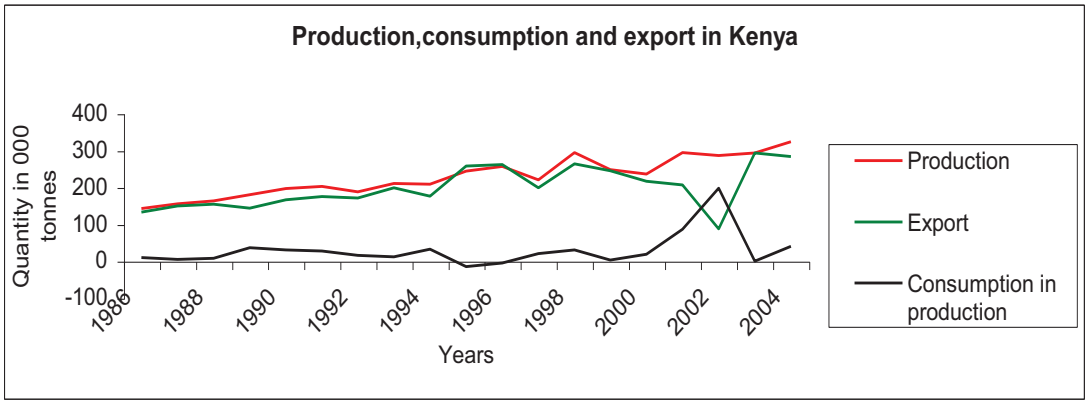
Source: Calculated from, Tea statistics, Tea Board of India, Various Issues.

Fig-2



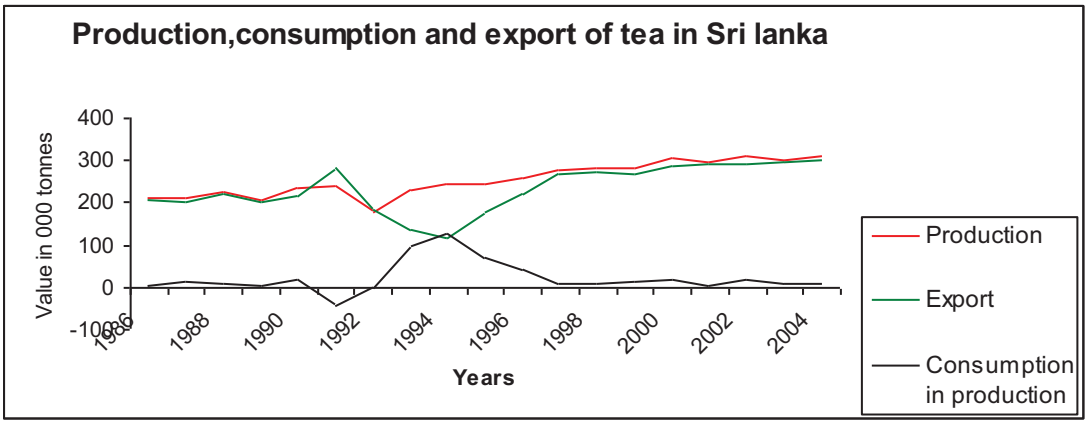
Source: Calculated from Appendix Table-1 and 4

Fig-3



Source: Calculated from Appendix Table-1 and 4

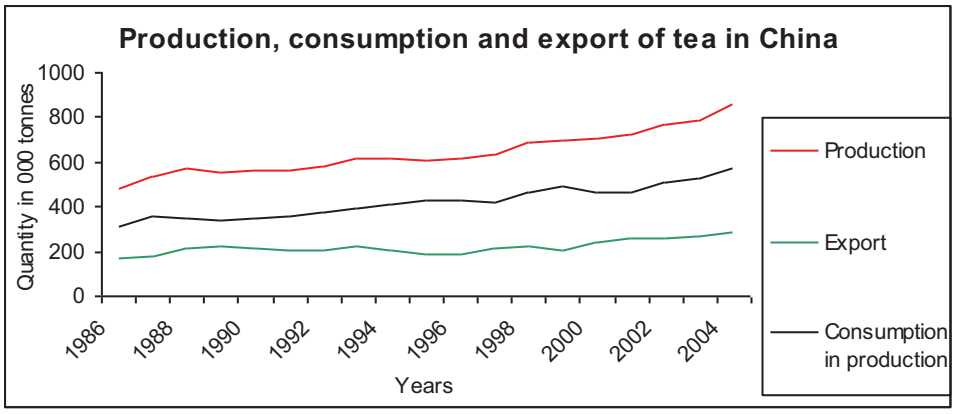
Fig-4



Source: Calculated from Appendix Table-1 and 4

In Srilanka, domestic consumption in production is very low and is declining. In 2001-04, around 94 per cent of tea production (Table-7) in Srilanka is used for export. Fig-4 shows, in recent years, tea export and production are almost same in Srilanka.In china, share of export in production of tea increased over a period of time. From Fig –5 one can observe that in China, production, export and consumption shown increasing trend. In Indonesia, share of consumption in production increased, but it is lower than India.

Fig-5



Source: Calculated from Appendix Table-1 and 4

Fig-6

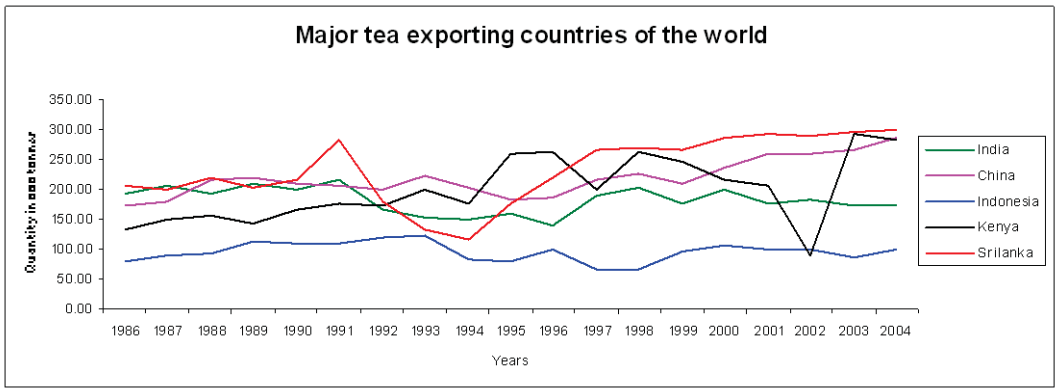
Source: Calculated from Appendix Table-1 and 4

In India, due to high and increasing domestic consumption, surplus available for export is declining. As noted earlier, India, which is leading producer of tea in world, is observed to retain a sizeable share of export in production with only around 22 per cent during 2001-04 (Table-7). With such developments within India and in major producing and exporting countries, India's share in world export declined from 42 per cent during 1951-60 to 21.91 per cent during 1981-90, further declined to13.35 per cent during 2001-04.Kenya during 1951-60, was producing and exporting 3 per cent of the world, by 2001-04 share in world

export of tea increased to 19.50 per cent (Table-8) and share in world production increased to 9.69 per cent. Kenya has done exceedingly well. From Fig – 3, one can observe that tea production in Kenya continuously increased but the exports are not so buoyant. Srilanka's share in world export also declined from 35.44 per cent during 1961-70 to 20.24 per cent during 2001-04.However, since 1995 with continuous increase in production and decline in domestic consumption in Srilanka, tea export from Srilanaka increased continuously (Fig-4.). Fig –7 shows that since 1997 Srilanka is top tea exporter in the world. China was exporting 5.37 per cent of world export during 1951-60, increased its share to 17.85 per cent during 2001-04.Eventhough, domestic consumption of tea increased in China, it is able to export more through higher production. Looking at the tea economy of China, no doubt in future it will be top producer and exporter in the world. In Indonesia, even though production increased, with increase in domestic consumption, the share of export in production declined from 81 per cent during 1951-60 to 57.57 per cent during 2001-04.Indonesia's tea export share in world export also declined from 7.23 per cent during 1951-60 to 6.82 per cent during 2001-04 (Table-8).

From the above analysis it is clear that, the major underlying factors for decline in export share of India in world export of tea is increase in domestic consumption in production and increase in supply of tea from other exporting countries.

Fig-.7



Source: Calculated from Appendix Table- VI.4

Table-7 Share of Tea Exports in Production in Major Producing Countries (Percentage)

Year	India	Sri Lanka	Kenya	China	Indonesia
Avg1951-60	67.94	95.49	75.53	23.12	81.00
1961-70	53.99	94.78	90.95	19.86	76.22
1971-80	41.03	94.60	91.29	27.92	70.25
1981-90	33.08	93.03	84.29	33.39	69.30
1991-95	22.71	92.95	89.70	31.87	75.37
1996-00	23.22	91.89	90.71	31.78	54.39
2001-04	21.74	94.02	93.68	34.72	57.57
1991	26.74	87.27	86.23	34.13	82.60
1992	23.67	99.40	88.53	31.35	83.22
1993	23.47	90.54	89.13	35.03	90.45
1994	17.58	92.06	87.46	30.53	65.43
1995	22.11	95.38	97.13	28.31	55.14
1996	19.35	88.94	101.09	30.38	60.09
1997	24.80	92.74	90.00	33.00	43.50
1998	23.75	94.52	89.54	32.69	40.48
1999	23.0	92.54	97.15	29.53	60.77
2000	25.22	90.71	75.79	33.31	67.09
2001	21.00	97.03	87.60	35.58	61.86
2002	23.97	92.07	94.90	33.84	57.98
2003	20.26	96.25	91.68	33.86	52.28
2004	22.00	90.71	100.53	35.60	58.18

Source: Calculated from Tea Statistics, Tea Board of India, Various Issues

Analysis of Tea Export through Growth Rate

In this section, performance of tea exports of major tea exporting countries is analyzed through growth rate during ten years before establishment of WTO and ten years after establishment of WTO. The purpose of this section is to see the Tea exports response in major tea exporting countries under WTO regime. Unlike rice, tea is not trade distorted commodity in international market. Most of the export of tea comes from developing countries, where domestic subsidy and export subsidy are not given, and it is believed that in these countries tea export is taxed for the purpose of revenue to the government. Major importing countries are developed countries, where, due to consumer preference for tea and as tea is not competing with their domestic products, import of tea is not restricted except for quality standards The provisions of WTO AoA may not have much impact on global tea trade except for quality standard. The growth rate in terms of yield, area and production is also assessed. The results are shown in Table-9. Production increased in both the periods 1984-94 and 1995-2005 for all the major exporting countries and shown positive growth rates. Except Srilanka and China in 1984-1994, area under tea cultivation increased in all the major

exporting countries in both the periods 1984-94 and 1995-2005. Except Indonesia in 1984-94 and India in 1995-05 yield increased for all the major exporting countries in both the periods. From the above observation and from Fig-1 we can infer that supply of tea in global market increased. Let us observe the demand side.

Table-8 Share of Tea in Major Exporting Countries in World Export

(Percentage)

Year	India	SriLanka	Indonesia	Kenya	China	Others
Avg1951-60	42.08	33.00	7.23	3.30	5.37	9.02
1961-70	34.80	35.44	5.66	10.06	5.50	8.54
1971-80	27.46	26.01	6.39	12.54	8.63	18.97
1981-90	21.91	19.57	8.88	12.18	15.80	21.66
1991-95	16.41	19.92	9.80	17.89	17.11	19.04
1996-00	15.48	20.96	7.12	18.84	16.38	21.22
2001-04	13.35	20.24	6.82	19.50	17.85	22.25
1991	18.85	19.71	10.30	16.41	17.28	17.45
1992	17.11	17.55	11.97	16.44	17.33	19.60
1993	16.03	18.89	11.15	16.95	18.12	18.86
1994	14.77	21.98	8.32	17.96	17.61	19.36
1995	15.27	21.47	7.24	21.70	15.22	19.91
1996	14.20	20.70	9.00	21.70	15.10	19.3
1997	16.70	21.40	5.60	16.50	16.90	22.90
1998	16.00	20.50	5.20	20.30	16.80	21.20
1999	15.10	21.00	7.80	19.30	15.90	20.90
2000	15.40	21.20	8.00	16.40	17.20	21.80
2001	13.00	20.65	7.20	18.50	17.93	22.72
2002	13.97	19.88	6.96	18.94	17.53	22.72
2003	12.30	21.00	6.40	19.40	18.70	22.20
2004	12.00	18.70	6.40	21.80	18.70	22.40

Source: Calculated from Tea Statistics, Tea Board of India various Issues.

The major tea importers represent the demand side. The major tea importers of the world are shown in the Table-10. U.K continues to be the largest importer of the world. However, U.K registered declining trend. Large decline in import from, U.K, Saudi Arabia, Iran, Egypt, Japan and recent stagnant import in USA (Table-10) affected the global export of tea in recent years. It has lead to decline in average export unit value of major exporting countries (Fig- 8).

Table-9 Comparative Analysis of Growth Rate (CGR) of Tea Production, Area, Yields, and Exports in Major Exporting Countries

Country	1984-1994			1986-95		1995-2005			1995-04	
	Production	Area	Yield	Export Qty	Export Value	Production	Area	Yield	Export Qty	Export Value
India	1.83	0.97	0.85	-3.39	-4.35	1.07	2.09	-1.00	1.21	-0.88
China	3.28	-0.45	3.75	0.76	-0.85	4.13	1.39	2.70	4.95	1.99
Indonesia	2.19	4.60	-2.30	0.73	-1.26	0.69	0.35	0.34	2.62	1.18
Kenya	5.53	3.05	2.41	5.57	5.56	3.12	2.35	0.76	-1.95	-1.82
Sri Lanka	0.77	-1.48	2.28	-4.63	-2.98	2.29	1.61	0.67	4.66	4.33

Source: Calculated from Appendix Table-1 and 4

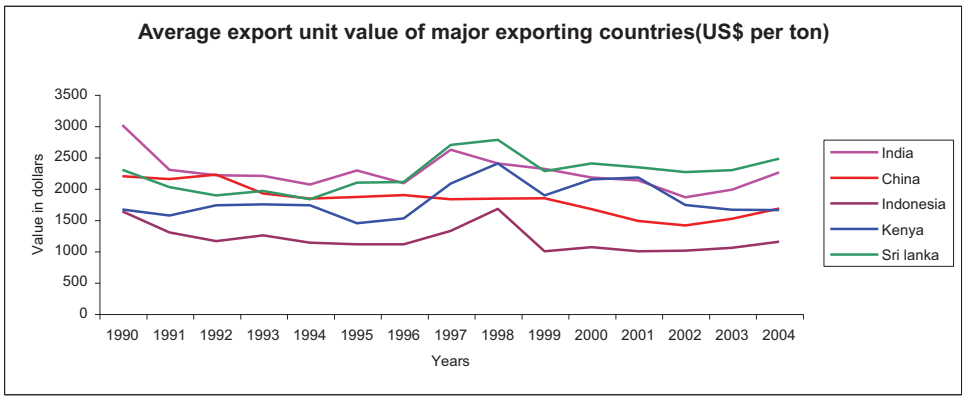
Table-10 Major importers and their percentage share in the world (value in million dollars)

Country	1986	%	1991	%	1996	%	2001	%	2004	%
U.K.	381.08	18.66	332.59	13.17	317.94	12.73	289.68	10.23	292.02	8.93
USA	150.72	7.38	164.06	6.50	202.93	8.13	208.69	7.37	204.88	6.26
Pakistan	134.86	6.60	139.00	5.51	171.20	6.86	178.79	6.31	190.20	5.81
RussiaFed	N.A		N.A		202.93	8.13	208.69	7.37	292.15	8.93
Japan	107.21	5.25	138.78	5.50	200.84	8.04	208.69	7.37	193.49	5.91
Egypt	147.21	7.21	155.30	6.15	86.71	3.47	99.82	3.52	0.00	0.00
UAE	34.31	1.68	63.39	2.51	92.35	3.70	102.00	3.60	172.06	5.26
S.Arabia	64.98	3.18	74.55	2.95	62.22	2.49	114.49	4.04	37.42	1.14
Iran	71.96	3.52	114.98	4.55	68.00	2.72	50.06	1.77	32.20	0.98
Germany	66.24	3.24	85.89	3.40	159.11	6.37	97.24	3.43	117.31	3.59
Poland	74.36	3.64	0.00		69.83	2.80	53.64	1.89	65.58	2.00
France	47.81	2.34	63.11	2.50	63.72	2.55	74.45	2.63	102.31	3.13
Canada	57.97	2.84	60.28	2.39	62.56	2.51	74.65	2.64	98.76	3.02
World total	2042.68	100	2524.95	100	2496.79	100	2832.85	100	3271.66	100.00

Source: Calculated from WWW.fao.org

The export growth rate of tea in major exporting countries (Table-9) shows that, no country has shown continuous positive export growth rate both in terms of quantity and value during both the period 1986-95 and 1995-2004. However, China and Indonesia shown export growth rate (in quantity) of 0.76 per cent and 0.73 per cent per annum during 1986-95 and 4.95 per cent and 2.62 percent per annum during 1995-04. China's average export in quantity increased from 201.70 thousand tonnes during 1986-95 to 232.85 during 1995-2004 (Table-11). However, value of tea export in China declined over a period of time.

Fig-8



Source: Calculated from Appendix Table-5

Kenya during 1986-95 shown high export growth rate of 5.56 per cent both in terms of export quantity and value; negative (decline) export growth rate during 1995-04 both in terms of export quantity and value. In contrast, Srilanka experienced negative export growth rate of 4.63 per cent in terms of quantity and negative export growth rate of 2.98 per cent in terms of

value during 1986-95; however it has shown high positive (increase) export growth rate of 4.66 per cent in terms of quantity and 4.33 per cent in terms of value during 1995-04. It seems that, poor export performance of Srilanka in 1986-95 led to increase in export of Kenya during this period. The poor export performance of Kenya in 1995-04 led to increase in export of Srilanka during this period. Tea being an oligopoly market in the world, any decline in export of a major exporting country will lead to increase in export of other major exporting county or countries. From Table-9 and 11, we find that, compared to other major tea exporting countries, India's export performance of tea is very poor. During 1986-95, export growth rate in terms quantity and value shown negative growth rate of 3.39 per cent and 4.35 per cent per annum respectively. However, during 1995-04, tea export growth rate of India in terms of quantity increased by 1.21 per cent per annum; export growth rate in value shown -0.88 per cent. Compared to 1986-95, during 1995-04, the average export in quantity and value of tea export of India declined.

Table-11 Comparative Analysis of Average and CV of Tea Export in Quantity and Value in Major Exporting Countries

(Quantity in 000 tonnes and Value in million dollars)

Country	1986-1995				1995-2004			
	Export in quantity		Export in Value		Export in quantity		Export in Value	
	Average	CV	Average	CV	Average	CV	Average	CV
India	184.48	13.35	431.15	21.73	177.68	10.72	389.98	19.17
China	201.70	8.98	415.64	12.60	232.85	14.95	385.93	9.35
Indonesia	100.73	17.20	130.67	23.42	90.51	15.98	102.67	10.14
Kenya	173.18	20.50	281.88	17.91	232.00	25.65	426.32	28.52
Sri Lanka	193.98	23.96	368.62	27.71	267.08	14.68	640.29	17.60

Source: Calculated from Appendix Table-4

The comparative analysis of co-efficient of variance (CV) of export in quantity and value of tea in major exporting countries is calculated in Table-11. The results of the Table show that, among all the countries shown in Table, China is the most consistent supplier of tea in the world. The CV value of export in terms of quantity is 8.98 per cent and 14.95 per cent during 1986-95 and during 1995-04 respectively. After China, India is the second consistent supplier of the world. Kenya and Srilanka show more volatility both in terms of quantity and value in both the periods.

Whether volatility is more in terms quantity of export or value of export is calculated in Table-12. The results of Table show that volatility in export value of India is quite high in both the periods under study. Except Kenya during 1986-95 and China and Indonesia during 1995-04, the volatility in export value is higher than export quantity for all the countries

shown in the Table during both the periods under study. It shows that international price of tea fluctuated largely.

Table-12

Comparative Analysis of CV Export Value/ CV Export Quantity*100 of Tea in Major Exporting Countries

Country	1986-1995 CV Export Value/ Export Quantity*100	1995-2004 CV Export Value/ Export Quantity*100
India	162.77	178.82
China	140.31	62.54
Indonesia	136.16	63.45
Kenya	87.37	111.19
Sri Lanka	115.65	119.89

Source: Calculated from Table-11

Movements in Export Value and Quantity

The same methodology as used in earlier section is used in Table -13 also to know the movement in value and quantity of export in major tea exporting countries of the world. From this, we can assess whether a country is economically benefited or not through export. The results of Table –13 show that except Srilanka during 1986-95, all major exporting countries that are shown in Table, were not economically benefited; this happened due to decline in prices of tea and resulted in decline in average export earning from a unit quantity of tea exported. During 1995-04, all major exporting countries that are shown in Table are not economically benefited. China, Indonesia and India are badly affected in terms of economic benefit from tea export during 1995-2004 as ratio value for these countries is less than 100 and also far away from 100.Kenya is least affected in both the periods. Tea export from these major exporting countries is not economically benefited in both the periods.

Table-13 Comparative Analysis of CGR Export value/ CGR Export quantity*100 of Tea in Major Exporting Countries

Country	1986-1995 CGR Export Value/ Export Quantity*100	1995-2004 CGR Export Value/ Export Quantity*100
India	128.32	-72.73
China	-111.84	40.20
Indonesia	-172.60	45.04
Kenya	99.82	93.33
Sri Lanka	64.36	92.92

Source: Calculated From Table—12

V **Factors Affecting Global Tea Export**

From the earlier analysis we find that, since 1985, tea export from these major exporting countries is not economically benefited. Now question arises what are the underlying factors, which affected tea export of major exporting countries in world tea market. The major underlying factors are both supply side and demand side.

Supply Side Factors

From the earlier analysis we find that production has increased in these major exporting countries. Except for India and China, most other producers consume only a small proportion of their production. Tea is mainly produced and exported by developing countries and tea industry in these countries is biggest employer. Limiting supply of tea in these countries creates social problems. Tea is also major foreign exchange earner in these countries. To earn more foreign exchange to meet their huge import bill, these countries adopted aggressive export strategy and encouraged more domestic production. Over a period of time, the global supply of tea became more than demand.

Tea is exported by few countries of the world. Kenya, China, Srilanka, India and Indonesia export around 80 per cent of the world tea. It can be called oligopoly market. To dispose off their surplus tea, these countries compete among themselves by cutting prices. These supply side factors seem to affect tea export of major exporting countries in the world.

Demand Side Factors

In our analysis we find there is large decline in import by major developed countries of the world. Even though, in recent years there is increase in import demand by developing countries, this increase is less than decline in import by developed countries.

Many studies show that (Nayyar 1976; Dindsa 1981 and Bhattacharya 2004) the demand for tea is primarily determined by the income elasticity of demand, as it is price inelastic and found negligible income elasticity for developed countries and high for developing countries. The possible major reason for decline in demand for tea import in developed countries could be; changes in consumer preference from tea to substitutes like coffee, alcohol etc.

Finally in recent years, the consumption of cold drinks both hard and soft, as is expected, in an affluent society, is increasing rapidly; this is also another cause for decline in the consumption of hot beverages as a whole.

VI Prospects for Indian Tea Exports in World Market

Looking at the poor performance of India's tea export in recent past; rising domestic demand, slow increase in yield, slow expansion of area under tea cultivation and inability to compete with major tea exporting countries, the prospects for Indian tea export seems to be very weak. However, tea being income elastic, and high elasticity for developing countries, in recent years, the import share of developing countries in world import is increasing. India's share of export to these developing countries is also increasing. India's prospects for tea are therefore optimistic.

Since 1986, the major importing countries, Russian Federation, Pakistan, UAE, Poland, Canada and France, (Appendix Figures) have shown increasing trend. India's share in import of these countries is very low. For instance in countries like Pakistan, France and Canada (Table-14), India's share in their import is less than 3 per cent. Pakistan is India's immediate neighbor, India's share in tea import of Pakistan is just 2.86 per cent during 2004 (Table-14); on the other hand, Kenya's share in import of Pakistan is 66 per cent during 2003 (Asopa 2007). Since Pakistan is fellow member of SAARC (South Asian Association for Regional Co-operation) and SAFTA (South Asian Free Trade Area), as SAFTA is expected to move progressively, and India with gradually improving its relations with Pakistan, India has brighter prospects in Pakistan. If India can get a strong foothold in the Pakistani market, that would offset its loss of the Egyptian market to Kenya. Both Kenya and Egypt are members of COMESA (Common Market for Eastern and Southern Africa), another regional agreement. As we know from the Table –14 that, India's share in tea import of Egypt during 1986 was 16.26 per cent reduced to 0.56 per cent during 2001 and in 2004 share is virtually nil.

Table- 14 India's Percentage Share in Import of Major Tea Importing Countries of the World

Country/ Year	1986	1991	1996	2001	2004
U.K	21.04	16.70	12.77	12.40	14.37
USA	3.40	2.77	4.69	7.63	9.77
Pakistan	0.88	0.48	0.11	1.79	2.86
Russian Fed	N.A	N.A	36.66	42.86	17.22
Japan	4.76	5.22	3.76	3.87	7.00
Egypt	16.26	9.58	9.55	0.56	N.A
UAE	41.56	30.16	36.32	51.84	33.44
S.Arabia	14.28	15.35	18.72	3.41	10.26
Iran	35.85	37.68	10.57	17.54	77.08
Germany	N.A	27.76	11.17	19.22	21.99
Poland	18.50	N.A	21.88	58.50	10.29
France	1.65	1.70	2.28	1.97	1.18
Canada	5.00	1.94	1.85	2.13	2.62

Source: computation based on data from www.fao.org

The Russian Federation has witnessed increasing trend in tea import during the last 10 years (Appendix Fig-3), which is quite high and makes Russia biggest importer of tea in the world (Table –10). India lost considerable share in Russian Federation in recent years. For instance, India's percentage share in import of tea in Russian federation during 1996 and 2001 was 36.66 per cent and 42.86 per cent respectively, declined to 17.22 per cent during 2004 (Table-14). The main reason for this down turn may be that the Indian exporters were supplying poor quality tea in response to low prices offered by the Russian Federation under special Rupee- Rubles rate trade (Economic Times, Feb 11, 2007). In the process consumer behavior shifted as their income increased over a period of time and started giving preference for tea from other exporting countries. It is well known fact that, when an economy expands, more money comes to people, they seek wider choice and the market shifts in favor of better quality and convenience. India can bounce back, by exporting quality tea to Russian federation.

In recent years Iran lifted import ban on tea; import of tea in Germany, Iraq and Kazakhastan is expanding. There are prospects for India's tea in these countries also. With these developments one may infer, India's prospects for tea are optimistic, provided India improves its export strategy and makes more availability of export surplus by improving its yield.

VII Summary and Policy Suggestions

This study examined the performance of India's tea exports and identified the underlying factors. Prospects of India's tea exports are also discussed. Comparison is also made with the other major tea exporting countries. The study also looked at Tea exports and production response in major tea exporting countries under WTO regime.

Tea which was major exportable commodity in India's' agricultural exports is declining steadily. India's export performance of tea from 1981 to 2004 shows that, the percentage share of India's tea export in total agricultural exports is declined drastically. During 1981-90 the share was 20.16 per cent, declined to 5.78 in 2001-04. The export of tea in post-liberalization and post- WTO period has not benefited the Indian tea economy. The major factors responsible for poor performance of India's tea exports which are identified in the present study are, rising domestic demand, slow increase in yield, slow expansion of area under tea cultivation, unable to compete with major tea exporting countries, increase in world

supply of tea compared to world demand, lost of traditional tea market and more attraction towards domestic market compared to international market.

The export of tea in major exporting countries (Srilanka, Kenya, China, Indonesia and India) has not economically benefited in both periods 1986-95 and 1995-04.Increase in global supply of tea, decline in import by major developed countries of the world and price war between major exporting countries are responsible for poor export performance of tea in these countries.

Looking at the poor performance of India's tea export in recent past, the prospects for Indian tea export seems to be very weak. However, tea being income elastic, and high elasticity for developing countries and in recent years, the import share of developing countries in world import is increasing. India's share of export in these developing countries is also increasing. With these developments one may infer, India's prospects for tea are optimistic, provided if India improves its export strategy and makes more availability of export surplus by improving its yield.

In order to encourage the India's export of tea, relative profitability of sale in the international market to that of sale in domestic market must be enhanced. This could be done by removing existing burden on tea export but also giving some sort of export rebate that are permissible under WTO. India has to look for emerging major tea importing countries like Pakistan, Iraq, Kazakhstan, Russian Federation, UAE, Canada and France by improving the quality to suit their taste and preference. In recent years, Pakistan has emerged as a major tea importer of the world. Its tea import increased from 139 million dollars during 1991 to 190.20 million dollars in 2004, which is 50.34 per cent of India's total tea export. India exported around 5.5 million dollars to Pakistan during 2004 that is less than 2 per cent of India's total tea export. Pakistan is India's neighbor and relationships are progressively improving and Pakistan is also member of SAFTA (South Asian Free Trade Area). For India, it is an opportunity to get hold of Pakistan tea market and this would offset India's lost of former USSR and Egyptian tea market.

Appendix Tables and Figures

Table- 1 Comparative Analysis of Tea Production, Area and Yields in Major Exporting Countries.

Year	India			China			Indonesia			Kenya			Sri Lanka		
	Prodn	Area	Yield	Prodn	Area	Yield	Prodn	Area	Yield	Prodn	Area	Yield	Prodn	Area	Yield
1981	559.6	384.2	1456.3	368.2	1087.5	338.6	109.1	85.0	1283.6	90.9	78.9	1152.7	210.1	244.9	858.0
1982	560.7	395.0	1419.6	421.1	1123.0	374.9	92.7	86.0	1078.3	95.6	81.1	1179.1	187.8	242.1	775.7
1983	581.5	396.1	1468.2	424.9	1131.1	375.6	110.3	89.0	1239.5	119.3	82.1	1452.4	179.3	242.1	740.5
1984	639.9	398.5	1605.9	438.4	1103.9	397.1	126.4	60.1	2103.6	116.2	83.4	1394.1	208.1	227.9	913.0
1985	656.2	399.9	1640.7	455.5	834.3	546.0	127.5	61.9	2060.7	147.1	83.7	1757.1	214.1	231.7	924.2
1986	620.8	411.7	1508.0	484.4	819.2	591.3	129.5	97.8	1324.3	143.3	84.4	1698.1	211.3	222.9	947.8
1987	620.8	411.7	1507.9	534.6	832.7	642.0	126.1	98.5	1280.6	155.8	85.4	1824.5	213.3	221.5	963.1
1988	674.3	414.2	1628.0	569.0	843.4	674.6	133.8	87.1	1536.8	164.0	86.8	1889.8	227.0	221.7	1023.8
1989	701.1	414.3	1692.3	557.0	847.3	657.4	141.4	89.9	1572.0	180.6	87.5	2064.7	207.0	222.1	931.9
1990	688.1	415.0	1658.1	562.4	842.7	667.4	155.9	94.5	1649.8	197.0	97.0	2031.3	233.2	221.8	1051.4
1991	720.3	421.0	1710.9	563.0	851.4	661.2	139.5	94.6	1474.1	203.6	100.6	2023.2	240.7	221.7	1086.0
1992	754.2	444.0	1698.7	580.0	861.1	673.5	153.7	94.7	1623.6	188.1	101.8	1846.6	178.9	221.8	806.3
1993	703.9	448.0	1571.2	620.5	900.7	688.9	165.0	102.5	1609.0	211.2	104.9	2013.7	231.9	197.2	1175.6
1994	753.0	426.0	1767.6	613.0	903.7	678.3	139.2	109.9	1266.4	209.4	110.2	1900.0	242.2	187.3	1293.1
1995	753.9	428.0	1761.5	609.4	888.1	686.2	154.0	113.4	1357.8	244.5	112.6	2172.5	246.0	189.0	1301.6
1996	761.0	427.0	1782.2	616.5	891.4	691.6	166.3	114.6	1450.9	257.2	113.7	2262.1	258.4	187.6	1377.8
1997	787.0	431.0	1826.0	636.9	888.6	716.7	153.6	114.3	1344.0	220.7	113.9	1938.0	276.9	190.5	1453.5
1998	836.0	434.0	1926.3	687.7	879.0	782.4	166.8	109.7	1519.9	294.2	118.7	2479.3	280.1	189.0	1482.0
1999	855.0	436.0	1961.0	697.0	928.5	750.6	161.0	110.0	1463.6	248.7	118.5	2098.0	283.8	195.5	1451.8
2000	836.8	500.0	1673.6	703.7	898.0	783.6	162.6	121.2	1341.5	236.3	120.4	1962.7	305.8	189.0	1618.5
2001	848.4	500.0	1696.8	721.5	905.7	796.7	163.1	115.4	1412.9	294.6	124.3	2370.4	295.1	189.0	1561.6
2002	847.4	500.0	1694.8	765.7	913.1	838.6	162.2	115.8	1400.6	287.0	131.5	2183.7	310.0	210.6	1471.9
2003	846.0	500.0	1692.0	788.8	943.4	836.1	169.8	116.2	1461.4	293.7	131.5	2234.1	303.2	210.6	1439.7
2004	850.5	500.0	1701.0	855.2	988.5	865.2	164.8	116.2	1418.4	324.6	136.7	2374.5	308.1	210.6	1462.8
2005	830.7	500.0	1661.4	955.5	1058.5	902.7	171.4	116.2	1475.1	328.5	141.3	2324.8	317.2	222.0	1429.0

Source: www.fao.com

Note: Production 000' tonnes, Area in 000' hectares and Yield in K.G/hectares

Table-2 World and India Tea Trade

Year	India's Agri Export in mn $*	World Tea Import in mn $*	India Tea export in mn $**
1986	2466.4	2270.827	452.765
1987	2335.8	2342.153	457.53
1988	2179.4	2662.672	415.898
1989	2654.8	2659.855	543.408
1990	3078.2	3117.257	594.191
1991	3048.4	2845.637	490.292
1992	2947.1	2563.537	360.933
1993	3357.4	2583.919	331.845
1994	3239.5	2461.552	308.399
1995	5493.7	2623.72	359.054
1996	5849.5	2654.659	282.579
1997	5656.4	2860.209	497.239
1998	5225.3	3086.150	518.258
1999	4642	2873.918	406.1057
2000	4951	3002.622	431.596
2001	5233.9	2823.712	367.207
2002	5521.6	2815.203	326.629
2003	6504.4	2657.914	333.408
2004	7058	3059.002	377.742

Source: * FAO Trade Year Book, 1986, 1989, 1992, 1995,1997,2001,2003 and statistical year book, 2005
** www.fao.org

Table-4 Comparative Analysis of Tea Export of Major Exporting Countries (in quantity and value)

Year	India		China		Indonesia		Kenya		Srilanka	
	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
1986	192.98	449.90	172.08	334.87	79.02	99.09	133.14	233.04	207.65	331.45
1987	205.62	457.53	179.00	408.62	90.42	118.74	150.43	220.37	201.08	360.67
1988	193.20	415.90	217.28	465.20	92.72	125.31	155.34	225.86	219.73	380.03
1989	209.08	543.41	221.09	472.71	114.64	159.03	143.86	266.87	203.77	379.63
1990	199.04	594.20	211.29	461.87	110.96	181.02	166.41	276.76	216.04	493.90
1991	215.40	490.29	205.89	441.35	110.21	143.13	175.63	274.86	282.35	563.84
1992	166.95	360.94	201.22	444.03	121.25	140.83	172.06	297.78	181.30	339.18
1993	153.28	331.85	223.89	425.20	123.93	155.70	199.38	347.44	134.76	261.00
1994	150.93	308.40	201.89	365.32	84.92	96.18	176.96	302.59	115.10	207.45
1995	158.34	359.06	183.33	337.21	79.23	87.72	258.56	373.21	178.03	369.02
1996	138.36	282.58	185.04	346.34	101.55	112.35	261.82	396.86	218.79	544.96
1997	191.47	497.24	215.39	387.76	66.86	88.84	199.23	410.19	267.73	716.64
1998	201.80	518.26	227.51	413.00	67.22	113.21	263.69	627.14	270.94	747.81
1999	177.51	406.10	209.53	381.29	97.85	97.14	245.72	459.02	268.33	605.35
2000	200.87	431.60	238.11	391.37	105.58	112.10	217.29	461.94	287.00	683.16
2001	177.60	367.21	258.64	379.48	99.80	99.97	207.24	448.68	293.53	679.95
2002	181.67	326.63	259.04	361.59	100.19	103.43	88.37	140.93	290.57	650.96
2003	174.25	333.41	266.22	396.31	88.18	95.82	293.75	481.48	297.01	672.51
2004	174.90	377.74	285.69	464.93	98.58	116.14	284.32	463.73	298.91	732.51
2005	159.15	372.64	291.21	508.49	102.30	121.50	313.20		177.32	

Source: www.fao.com
Note: Export in quantity in 000' tonnes and Export in value in million dollars

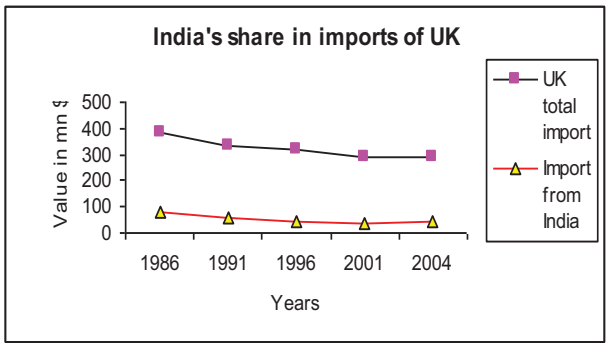
Table-5 Average export unit value of major exporting countries (US $ per ton)

Year	India	China	Indonesia	Kenya	Sri lanka
1990	3010.35	2195.64	1631.4	1663.12	2294.22
1991	2295.29	2149.19	1294	1565.36	2018.97
1992	2207.95	2216.87	1159.57	1730.78	1885.62
1993	2196.85	1918.88	1251.97	1742.77	1960.8
1994	2061.08	1834.47	1131.11	1730.25	1826.96
1995	2286.79	1863.56	1106.18	1444.26	2090.43
1996	2080.83	1892.59	1105.76	1521.52	N.A
1997	2615.38	1828.15	1321.75	2077.74	2692.58
1998	N.A	1838	1675.58	2396.3	2774.17
1999	2311.99	1843.39	992.81	1885.33	2273.5
2000	2174.83	1670.72	1061.18	2144.75	2398.13
2001	2125.95	1478.44	994.32	2175.23	2336.97
2002	1854.83	1405.78	1002.71	1734.97	2260.89
2003	1978.34	1516.35	1052.19	1656.96	2289.5
2004	2254.14	1680.54	1146.58	1651.13	2474.69

Source: WWW.fao.org

Appendix Figures

Fig-1



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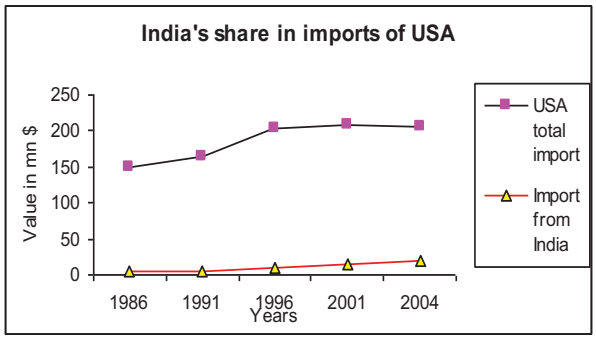

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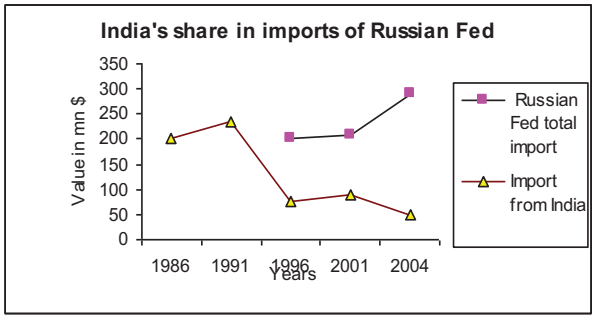

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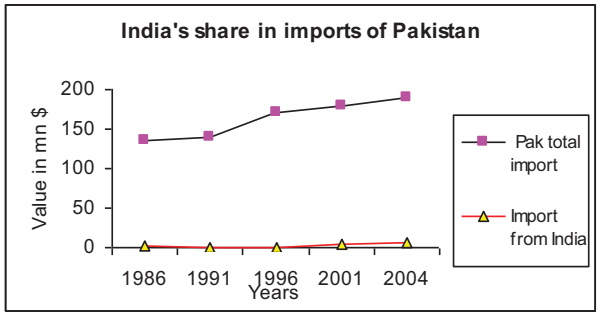
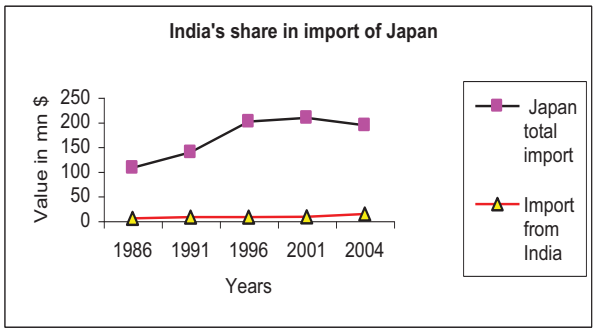


Fig-5

Fig- 6



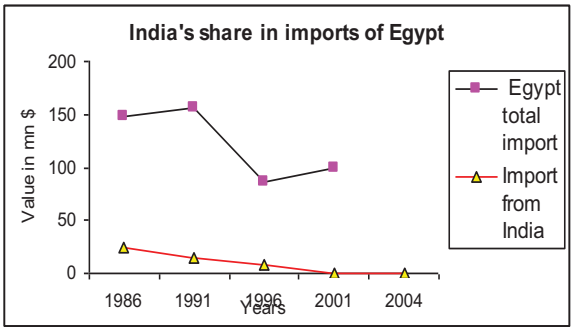
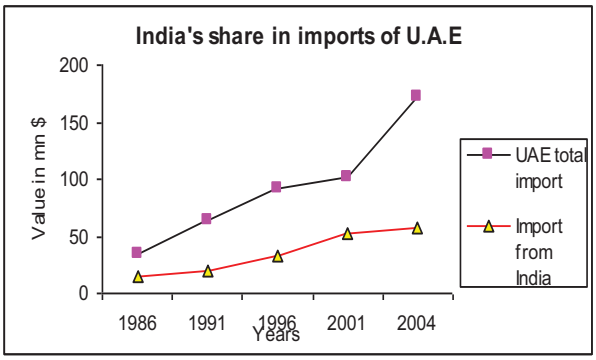
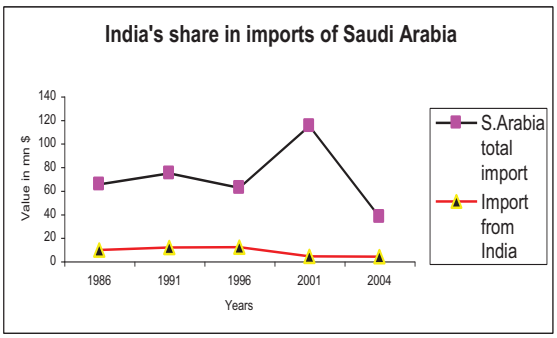


Fig- 7

Fig-8





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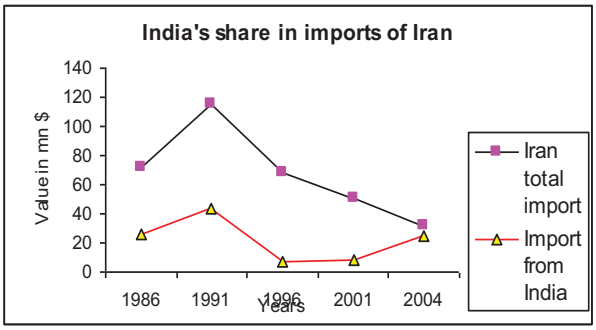

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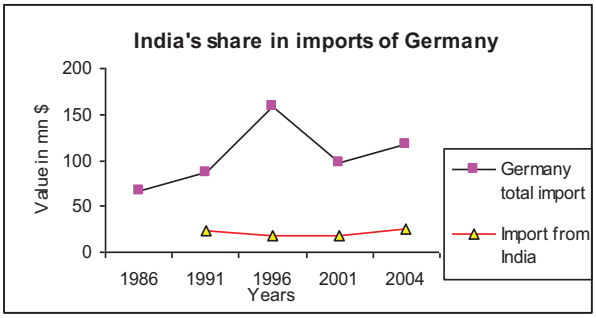

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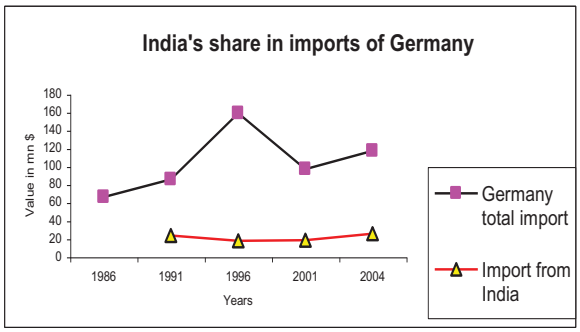

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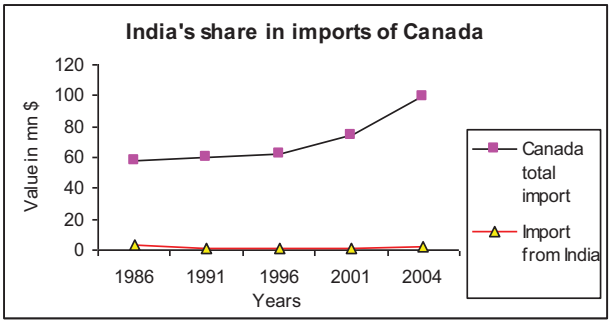

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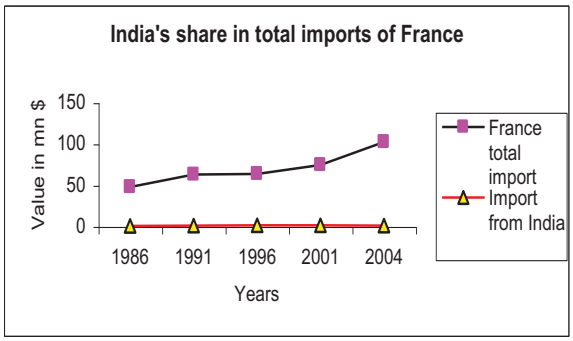

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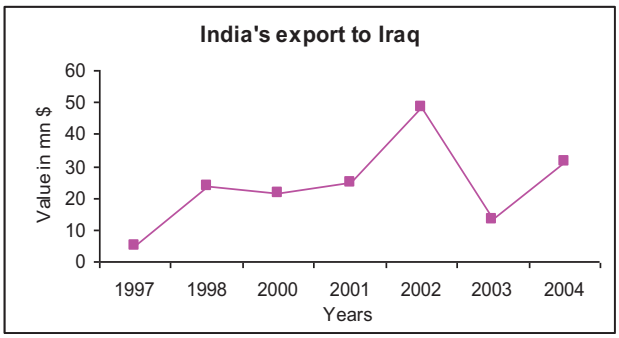

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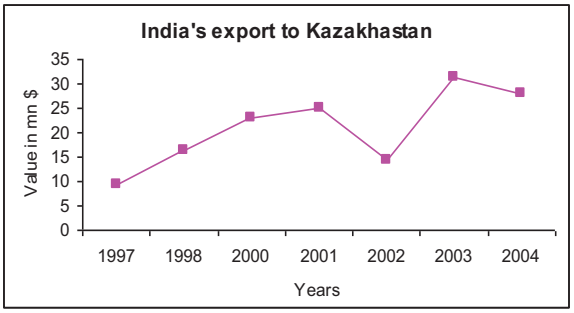

Source : Calculated from WWW.fao.org

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