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Sri Lanka's Tea Industry

Succeeding in the Global Market

Ridwan Ali
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(Continued on the inside back cover)

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Ridwan Ali
Yusuf A. Choudhry
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The World Bank
Washington, D.C.

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Foreword

It is now widely believed that the tea industry in Sri Lanka, after the deregulation and privatization of public estate plantations, is now in a position to reassert its position in the global tea market. It may, however, take considerable efforts on the part of the new companies, who have just taken over the management of the plantations, to restore Sri Lanka to its former position in world tea export because of the emergence of some very hefty competitors such as Kenya, China and Indonesia. It is necessary for these companies to take a strategic long-term look at the market for tea in terms of future patterns of consumption and import demands and to find the special niche where they could be their best.

This study is a follow up of the report "Sri Lanka Tree Crops Strategy" (Agriculture Operations Division, Country Department III, South Asia Region, July 5, 1994). It identifies some of the major strengths and weaknesses of Sri Lanka's tea with respect to other major exporters in the world and examines the strategic options for the Government of Sri Lanka and private tea companies for enhancing the country's competitive position in the global market. It is hoped that this study will assist policy planners to create the necessary environment for the success of the industry and the industry to capitalize on the opportunities that are still available.



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Abstract

The global tea industry reached maturity over a decade ago and is now in a critical period where fundamental changes are taking place in the competitive environment. The slowing of growth is creating more global competition for market share. The transition to maturity should provoke firms and industries in different countries to concentrate on their core markets and defend their position vigorously. This does not seem to have happened with the Sri Lankan tea producers who have and are conceding their global market share to relative new comers. The Sri Lankan tea industry has recently been released from state control and is now in a position to make important strategic moves to restore its competitive ability in the global market. This may require heavy investment in modern facilities and equipment. More importantly, the industry needs to understand the future trend of consumer demand in key markets and provide the products and services desired. The industry has to move away from mass marketing strategies to more focused strategies of differentiation and positioning. Winning the game would require new thinking, new orientation and intelligent moves because the competitors are equally powerful. Sustaining competitive advantage does not only depend upon exploiting the national environment of cheap land and labor, but individual firms in the industry must draw on their own home based resources to extend and upgrade their competitive advantage continuously.

The role of the government is to develop critical resources (like manpower, capital, and skill) for high levels of productivity and to assist innovation and improvement within the industry, thereby creating an environment in which firms can upgrade their competitive advantage. A few of the essential steps that the government of Sri Lanka must take are deregulation of the labor market, removal of unnecessary controls on the industry, and developing the financial market. The government should also assist the industry with overseas promotion and collection of marketing intelligence.

While the government has the above important role in creating the factors that would enhance the industry's competitive advantage, the firms in the tea industry have to assist government in shaping policy and must put their support behind constructive government programs. They should stay clear of quick fixes that in the long run would undermine their competitive ability, as for example subsidies. They must also look for strategic alliances with firms in other countries to fill any resource gap that may be hindering development.

THE GLOBAL MARKET FOR TEA



CHAPTER 1

THE WORLD TEA ECONOMY

Tea is a natural beverage that competes in the world market with other natural beverages like coffee, cocoa, and alcoholic drinks and formulated products like soft drinks. It has two basic forms: black tea and green tea. Its relevant market is thus defined by its product market structure which represents the degree of substitutability that exists among its major competitive alternatives. The prominent alternatives, however, are peculiar to individual countries. For example, in West Germany and Kenya it is generally beer, in the United Kingdom and the United States, coffee and soft drinks. As such, its product-market can not be defined for the world as a whole and one must consider each region or country for its proper definition.

PRODUCTION

The main tea producing countries of the world are in Asia and Africa, of which the six largest are India, China, Sri Lanka, Kenya, Indonesia and Turkey. Other smaller producers are Taiwan, Japan, Malaysia, Vietnam, Laos, Kampuchea, Burma, Thailand, Singapore, Papua New Guinea, Tanzania, Malawi, Mozambique, Uganda, Rwanda, Burundi, Zaire, Zimbabwe, Nigeria, Cameroon, Zambia, Sudan, South Africa, Mauritius, Madagascar, Seychelles, Argentina, and Peru. Although all of them have advanced their production levels over the years, the overall growth has been slow in the last decade, interspersed with a few years of actual decline. In 1992, production declined by about 5

Table 1-1
Tea Production of Major Producing Countries
(in million kgs.)

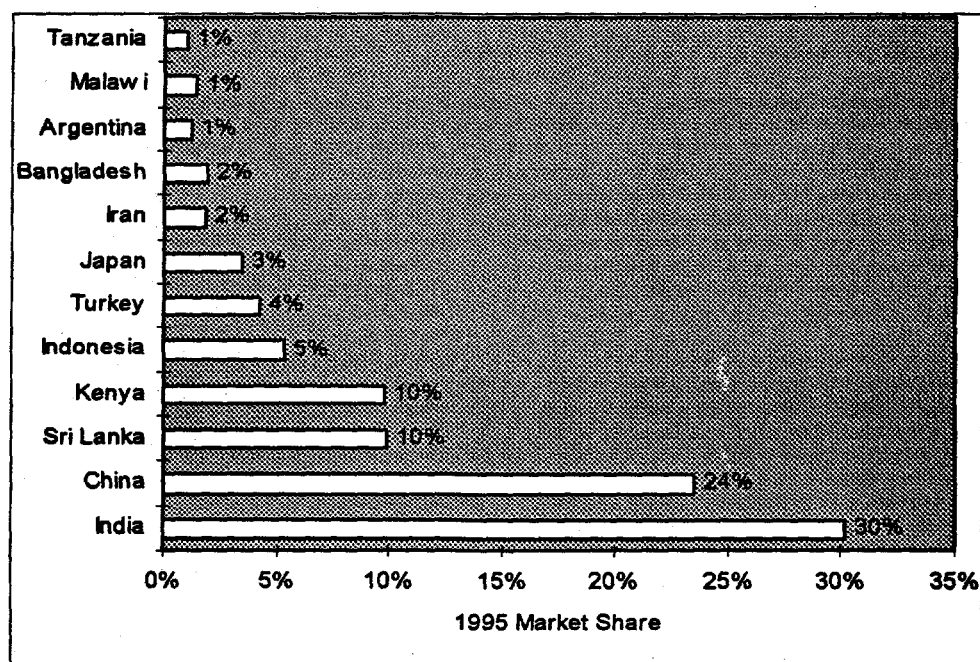
	Argentina	Bangladesh	China	India	Indonesia	Japan	Kenya	Malawi	Sri Lanka	Taiwan	Tanzania	Turkey	USSR/ CIS	World
1986	41	38	460	621	130	94	143	39	213	24	15	148	147	2276
1987	35	41	508	665	126	96	156	32	215	26	15	141	120	2340
1988	35	44	545	700	134	90	164	40	228	24	15	166	117	2476
1989	40	39	535	688	141	91	181	40	208	22	17	142	127	2439
1990	43	46	540	720	145	90	197	39	234	22	18	127	131	2523
1991	44	45	542	754	133	88	204	41	242	21	19	135	116	2559
1992	44	49	560	732	147	92	188	28	179	21	18	156	55	2434
1993	46	51	600	760	142	92	211	40	233	21	23	128	30	2551
1994	42	52	588	744	130	86	209	35	244	21	24	134	18	2503
1995	30	47	588	754	133	85	245	35	246	22	24	105	15	2497
Growth	6%	22%	17%	14%	4%	-6%	44%	-1%	10%	-14%	58%	-19%	-84%	1%

Source: ITC Bulletin 1996

percent over the previous year due to severe droughts in Southeast India, Sri Lanka, and East Africa. Production rebounded in 1993 by about 4.7 percent. The overall growth between 1986-1995 was 1 percent (Table 1-1).¹

The world tea market is dominated by five countries, Sri Lanka, Kenya, China, India, and Indonesia which together export about 80 percent of world tea.² Production of black tea alone has grown by 0.5 percent annually, between 1986 and 1995, to reach a level of 1931 million kgs. at the end of 1995.³ In 1995, India led the world in tea production (30%) followed by China (24%). Sri Lanka and Kenya each produced about 10 percent of the world total (Figure 1-1).

Figure 1-1
1995 Share of World Tea Production



Note: The statistics are rounded to the nearest whole number which is the reason behind some unevenness of the bars.

Source: ITC Bulletin 1996.

¹ The growth was estimated from a smoothed series using a two year moving average.

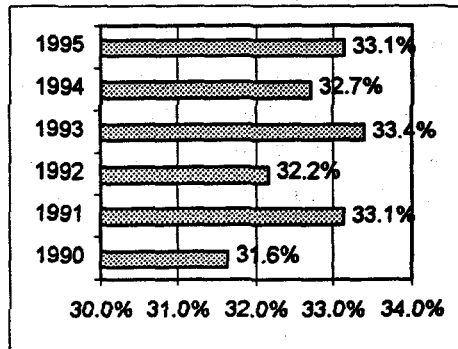
² 1994 figure, ITC Annual Bulletin of Statistics, 1995.

³ ITC Annual Bulletin of Statistics, 1996.

Figure 1-2
Production Share of Five Top
Producers of Tea : 1990-1995

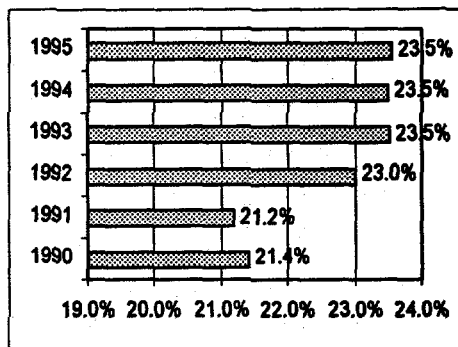
India

There has been relatively little change in the production share of the major tea producing countries in the past five years. For example, India's production has declined 2 percentage point, from 31 percent of world production in 1990 to 33 percent in 1995.



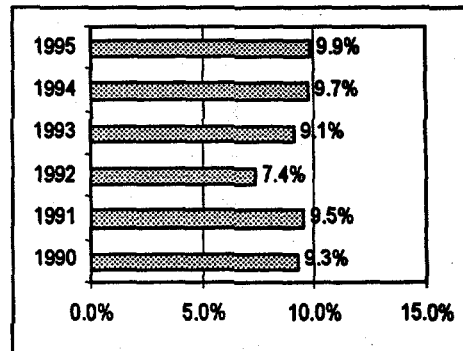
China

China's production share has gone up 3 percentage point, from 21 percent in 1990 to 24 percent in 1995.



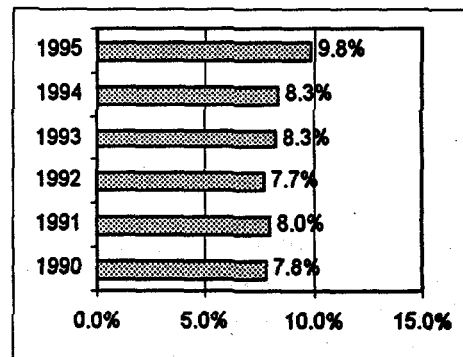
Sri Lanka

Sri Lanka's production share increased 1 percentage point, from 9 percent in 1990 to 10 percent in 1995.



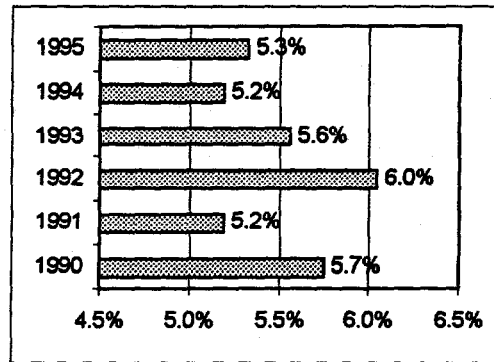
Kenya

Kenya's production share has increased by 2 percentage points in the past five years, from about 8 percent in 1990 to 10 percent in 1995.



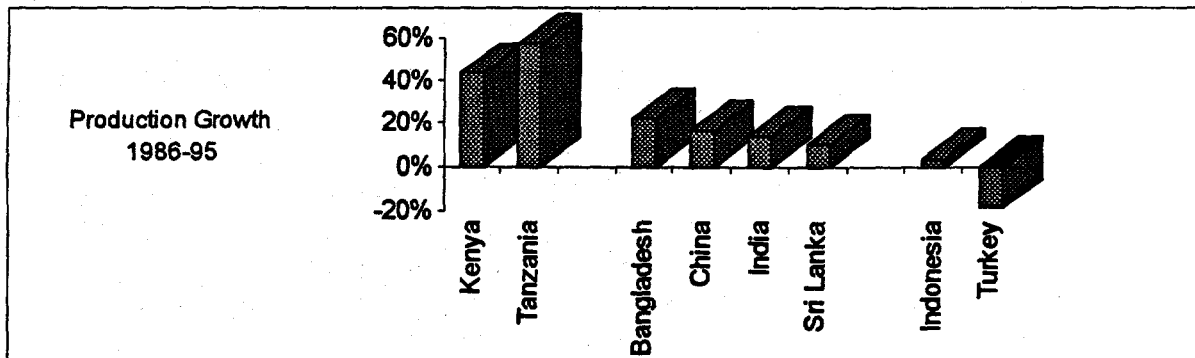
Indonesia

Indonesia, the fourth largest producer of tea in the world decreased its production share by approximately 1 percentage point, going down from 6 percent in 1990 to 5 percent in 1995.



Asia, represented by three giants, India, China, and Sri Lanka has dominated the production of tea for over a hundred years. But there has been a decline in its share of production in recent years as the relatively newer producers of Africa entered the market with production economies that surpassed the Asians'. Between 1986 and 1995, Kenya's tea production increased 44 percent and Tanzania expanded its production by 58 percent (Table 1-1). In comparison, India the giant of Asia, increased production by 14 percent and China, the second largest producer in the world, had an increase of 17 percent. China has the maximum potential for the future and both its production volume and production growth rate are high. The third largest producer, Sri Lanka, had a low increase of growth in the past ten years— about 10 percent -- and Indonesia, the fourth largest, only 4 percent. Among the important Asian producers of tea, only Bangladesh had an impressive 22 percent growth. Outside Asia, Turkey is an important producer of tea. Its production, however declined by 19 percent between 1986-95. The comparative expansion of world tea production in the major tea producing countries of the world in the past ten years is shown in Figure 1-3.

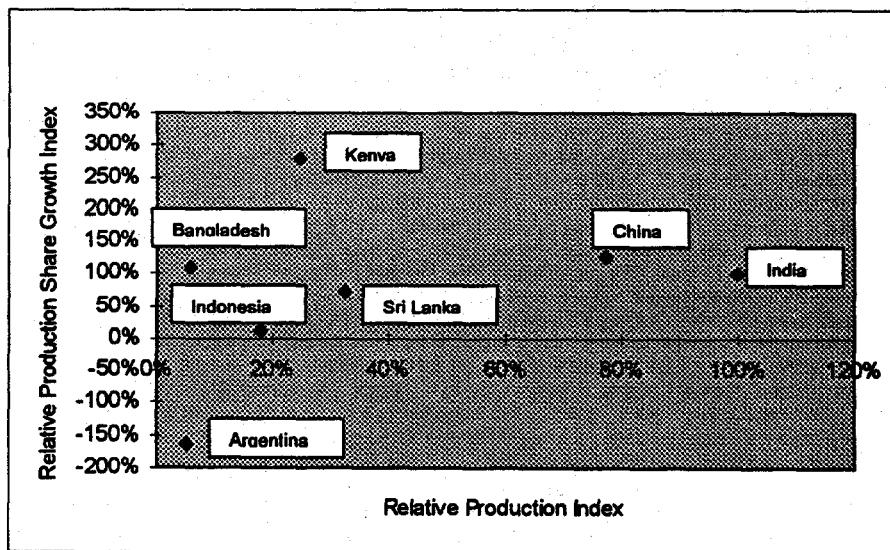
Figure 1-3
World Tea Production
Production Growth 1986-1995



Source: ITC Bulletin 1996.

The relative production and production growth rate indices for the six major tea producers of tea in the world are shown in Figure 1-4. These indices measure the relative position of a country by production and production growth rate vis-à-vis the world's largest producer (India) in the past ten years. Kenya, which produces only 25 percent of the extent of tea produced by India, achieved a growth of 279 percent with respect to India between 1986-1995. China, with a relative production ratio of 77 percent had a growth of 126 percent relative to India. Bangladesh, with a relatively low production ratio (6%), showed a growth of 111% compared to India. Sri Lanka with about 32 percent of India's production volume, lagged behind India in growth with just about 74 percent of the latter's growth rate. Indonesia's position was relatively weak, with 18 percent of India's output and 11 percent of its growth. Argentina had the worst position with only about 5 percent of India's volume and 163 percent less growth.

Figure 1-4
Relative Production Volume and Production Growth Rate
of Major Tea Producers (1986-1995)



	Argentina	Bangladesh	China	India	Indonesia	Kenya	Sri Lanka
Relative Production	5%	6%	77%	100%	18%	25%	32%
Relative Production Growth	-163%	111%	126%	100%	11%	279%	74%

Note: Relative Production Index is the ratio of production in the country relative to the largest producer in the industry. Relative Production growth rate is the ratio of production growth in a country relative to the growth rate of the largest producer in the industry.

Source: Authors' estimation

CONSUMPTION

There are pronounced differences in the consumption of tea worldwide. Many of the producing nations consume very little of the product while other countries import large quantities for domestic consumption. Some countries, like the United Kingdom and the Netherlands, also import tea for value addition and re-export. Tea is an important beverage in certain Western countries like the United Kingdom, the United States, Germany, the Netherlands, and Canada. But it is the developing countries of Asia, Africa, Middle-East and East Europe where its demand and future prospects of growth are maximum. Tea is the national drink of countries that have some two-thirds of the world population. The geographical separation of principal production and consumption areas provides the greatest potential for future trading.

Measurement of tea consumption worldwide is a difficult process involving consumer surveys which are not often available from secondary sources. Under this circumstance, consumption may be imputed from data on production adjusted for import.

Table 1-2 shows the world consumption of tea between 1986 and 1995. The highest consumption in 1995 took place in Asia (27%), followed by Africa (16%), the CIS (15%) and U.K. and Ireland (14%). The major tea producing countries of the world consumed only 5 percent of the world tea output (Figure 1-5). This was in spite of an average ten-year (1986-95) growth of over 49 percent there.

Table 1-2
World Tea Consumption
(Million Kilograms)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
UK & Ireland	182	154	173	174	153	157	156	172	160	147
Rest of W. Europe	54	52	54	52	57	58	59	60	58	56
USSR/CIS	110	135	134	215	239	166	76	192	127	161
Rest of E. Europe	36	39	41	41	29	21	28	42	40	40
N America/W. Indies	108	93	105	101	92	98	106	100	112	98
Latin America	12	13	12	13	13	14	14	14	16	16
Asia	248	245	272	264	279	319	299	296	275	282
Africa	149	148	173	143	175	163	182	155	155	170
Oceania	28	25	26	24	23	24	22	23	23	22
Major Prod Nations	35	30	36	36	39	47	52	52	55	57
TOTAL	962	934	1026	1063	1099	1067	994	1106	1019	1049

Source: ITC Bulletin, 1996.

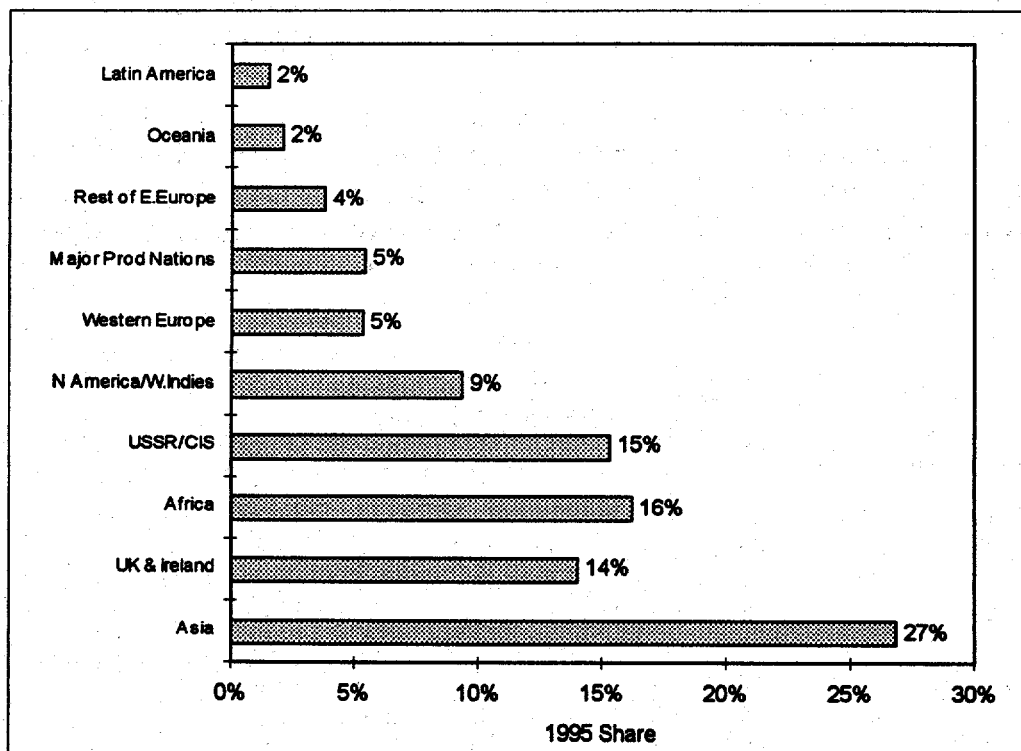
World tea consumption grew by 9 percent in the past ten years, from 962 million kgs. in 1986 to 1,049 million kgs. in 1995.⁴ However, there were considerable variations in the regional growths. Asia led the regional growth followed by the former USSR/CIS

⁴ Growth rate estimated through a three year moving average of production from 1986-1995.

countries. It is important to note that while the regional patterns hide considerable intra country variations, they do indicate major blocs of potential growth areas.

The strongest consumption growth was within the major tea producing countries themselves (India, China, Sri Lanka, Kenya, South Africa, Tanzania, Uganda and Japan), which grew by almost 50 percent in the past ten years (Figure 1-6).⁵ Asia and Latin America each had 16 percent growth, Africa 10 percent and Western Europe without U.K. and Ireland about 10 percent. Growth in the CIS countries was 7 percent. The disappointing picture was in such traditional tea countries as the U.K and Ireland where consumption declined 3 percent. Consumption in the rest of Eastern Europe also declined by over 2 percent.

Figure 1-5
World Share of Tea Consumption, 1995

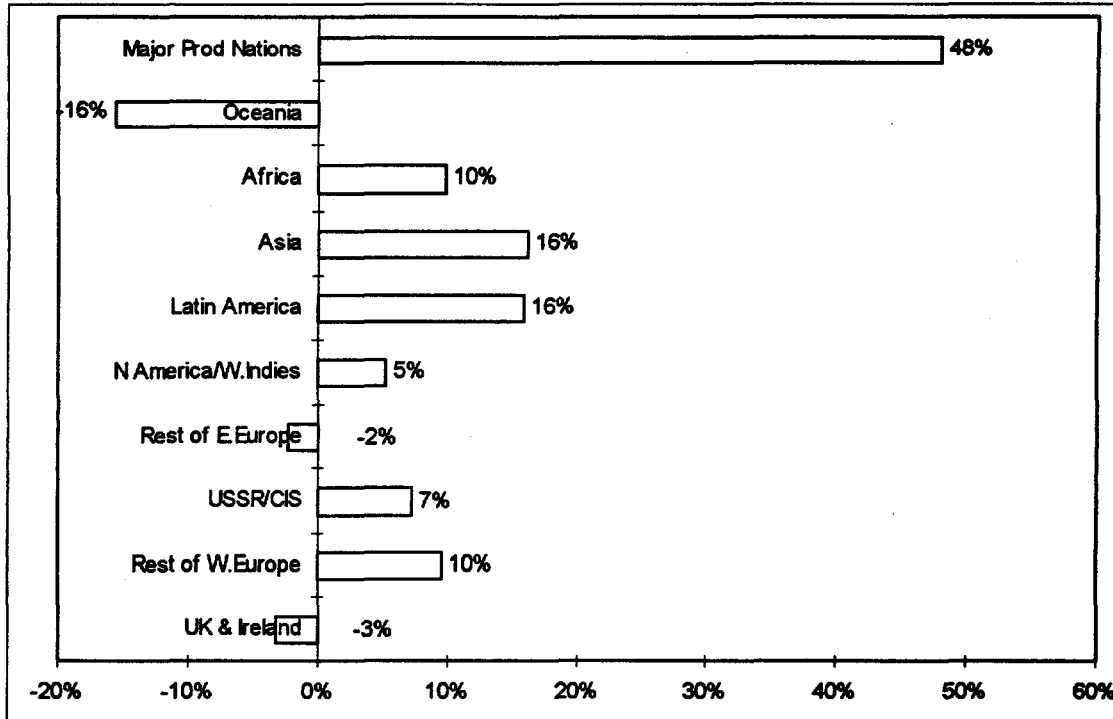


Source: ITC Bulletin, 1996.

Pakistan is the largest consumer in West Asia, taking about 41 percent of this region's consumption in 1995. Iraq and Iran are also major consumers in this region, although Iraq's consumption have not been directly reported after the Gulf war. In East and South Asia, the largest consumption of the region took place in India (51%) and in China (36%). After the Asian countries, the second highest consuming region in the world

⁵ The combined regional consumption growth rate indicate the ten year period growth and includes both green and black teas. The growth in China and Japan was mainly in green tea.

Figure 1-6
Regional Pattern of Consumption Growth (1985-1994)



Source: ITC Bulletin, 1995.

is Western Europe, where the U.K. alone consumed 67 percent of the total in 1995. The Eastern European region is third, with the CIS filling 80 percent of the entire regions consumption. In Africa, the highest consumption takes place in Egypt (39%). In North America, the United States leads with over 85 percent of the regions consumption.

Per Capita Consumption

The trend of tea consumption worldwide becomes clearer if we look at per capita consumption changes in the past ten years. In Western Europe, the heaviest per capita consumption is in the Republic of Ireland and the United Kingdom, where it grew by a paltry 1 percent and declined by 7 percent, respectively, in the last decade. In two other important countries, Germany and the Netherlands consumption declined by 19 percent and 16 percent, respectively. France, although not a heavy user of tea, had a very encouraging growth of 28 percent. In Eastern Europe, data from the former USSR and CIS countries are not available in disaggregated form to draw reliable conclusion, but Poland showed a decline in per capita consumption of 14 percent. In North America, per capita consumption in the United States went up 13 percent, but in Canada it declined by 23 percent.

Among the heavy Middle Eastern and Asian users, the United Arab Emirate showed a remarkable per capita consumption increase of 71 percent. Jordan's increase

was even more phenomenal, around 541 percent. However, this is partially explained by the fact that most of Jordan's sudden jump of tea import after 1990 was really destined for the U.N. embargoed Iraq and consisted of perhaps a more moderate growth in its own consumption. Iraq's changing consumption pattern cannot be examined because of lack of interpretable data, but this country has traditionally been a heavy consumer and is not likely to change very much in the future. Among the Asian countries, Pakistan is a moderately heavy consumer of black tea. However, its per capita consumption in the past ten years shows a decline of 6 percent. Asian countries that produce tea have generally not only been rather light users but also a majority of them have declining per capita consumption. Countries where per capita consumption have declined significantly are Kenya (39 percent), Sri Lanka (12 percent), Uganda (59 percent) and Tanzania (52 percent). Only China and India have shown increase in per capita consumption - 20 percent and 19 percent, respectively. Among African countries, Egypt -- a medium user of black tea -- has shown a decline in per capita consumption of 39 percent between 1986-95. Sudan also had a decline of 41 percent during the same period.

THE WORLD TEA TRADE

Prior to 1933, the Netherlands and the United Kingdom dominated the supply of black tea in the world market because of their control of the major production areas in the Netherlands, East Indies, India, and Ceylon (Forrest 1985). Most of the exports came to the London market as "clean common" tea. As early as 1928, an oversupply of tea caused a slump in the price which resulted in an agreement in 1930 among the producers' association to voluntarily restrict production. But the agreement subsequently failed, and a new agreement (the first International Tea Agreement) was concluded in 1933 among the three producing countries for mandatory controls through export quotas to be administered by the International Tea Committee. This measure did have some effect in regulating supplies and pushing prices back up. But in time, new growers like Kenya, Uganda, and Malaya made considerable inroads into the market and boosted overall world production. The original Tea Agreement lasted until about 1948. Later, initiatives from the FAO and UNCTAD tried to develop a program for stabilizing tea prices in the world market with no serious consequences. Intermittent negotiations have since taken place generally under the forum of FAO's Intergovernmental Group on Tea. The United Kingdom has taken leads to evolve an International Tea Agreement, but nothing tangible has evolved as yet.

The world trend for tea export and import between 1986-95 are shown in Table 1-3. The almost parallel growth of import and export is due to the fact that most of the tea produced in a year is also sold in the same year because of its low shelf life in the unpacked state. The overall growth during this period was 8.6 percent.

Table 1-3
Trend in World Tea Trade, 1986-95
(Million Kgs.)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Import	852.2	933.1	1025.6	1063.2	1098.6	1066.2	993.7	1104.6	1018.5	1047.5
Export	972.4	973.2	1036.7	1124.7	1134.5	1077.7	1015.9	1151.5	1020.1	1079.7

Source: ITC Bulletin, 1995.

The Major Exporters of Tea

The top five exporters of tea in 1995 were Kenya (22%), Sri Lanka (22%), China (16%), India (15%), and Indonesia (7%) which together exported close to 80 percent of the world tea (Table 1-4). India, in spite of its large production volume exported only 28 percent of its tea and consumed the rest internally. In comparison, Sri Lanka exported nearly 88 percent. The other major exporters are China which exports about 36 percent of its own production, Kenya which exported nearly 91 percent, and Indonesia about 88 percent.⁶ The total value of India's tea export in 1995 was U.S. \$352.98 million. In comparison, Sri Lanka's export earnings were U.S. \$462.60 million; Kenya's export earning was U.S. \$365.71 million; and Indonesia's export earning was U.S. \$87.7 million.

Table 1-4
Major Importers and Exporters of Tea, 1995

	IMPORT		EXPORT			
	Volume (Mn.Kgs.)	Percentage	Volume (Mn.Kgs.)	Percentage	Value (Mn.\$)	
Asia	282	27%	Sri Lanka	235	22%	462.6
U.K. & Ireland	147	14%	Kenya	237.5	22%	365.7
Africa	170.3	16%	China (PRC)	168.5	16%	N.A
N. America/W. Indies	97.6	9%	India	162.8	15%	353.0
Russian Federation	140.6	13%	Indonesia	79.2	7%	87.7
Western Europe Major Prod.Nations	55.8	5%	Argentina	41.1	4%	31.6
USSR/CIS	56.9	5%	All Others	155.6	14%	
	20	2%	<i>World Total</i>	<i>1079.7</i>	<i>100%</i>	
Rest E. Europe	39.8	4%				
Oceania	21.5	2%				
Latin America	16	2%				
World Total	1047.5	100%				

Source: ITC Bulletin, 1995

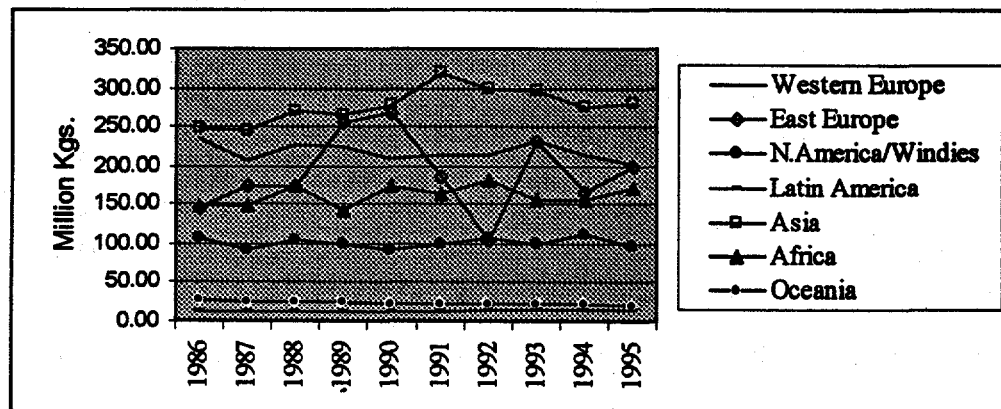
⁶ 1994 figure, ITC Annual Bulletin of Statistics, 1995.

The Major Importers of Tea

The largest import in 1995 was also made by Asia (27%), with Pakistan importing 115.7 million kilograms, Iran 30 million kgs., Jordan 28 million kg., Syria 20 million kgs., Afghanistan 19.5 million kgs., and Saudi Arabia 13 million kgs. The second highest import was in the United Kingdom and Ireland (14%), with the former importing 136 million kg. and the latter 11 million kgs. Africa was close with 16 percent of the world import, with over 67 million kgs. going to Egypt and 37 million kgs. to Morocco. In comparison, imports by other Western and Eastern European countries were small (4%-5%). However, import by the Russian Federation, however, was up considerably after a long period of low demand.

The past ten year regional import trend shows that import by the Asian countries are increasing much faster than Europe and elsewhere (Figure 1-7). The growth of income in the Asian nations is a major factor behind this growth. Combined import of the former USSR and the new CIS countries also showed considerable growth in the past ten years, but this was not consistent from year to year due to the instability of the currency.

Figure 1-7
Regional Import Trends for Tea 1986-95

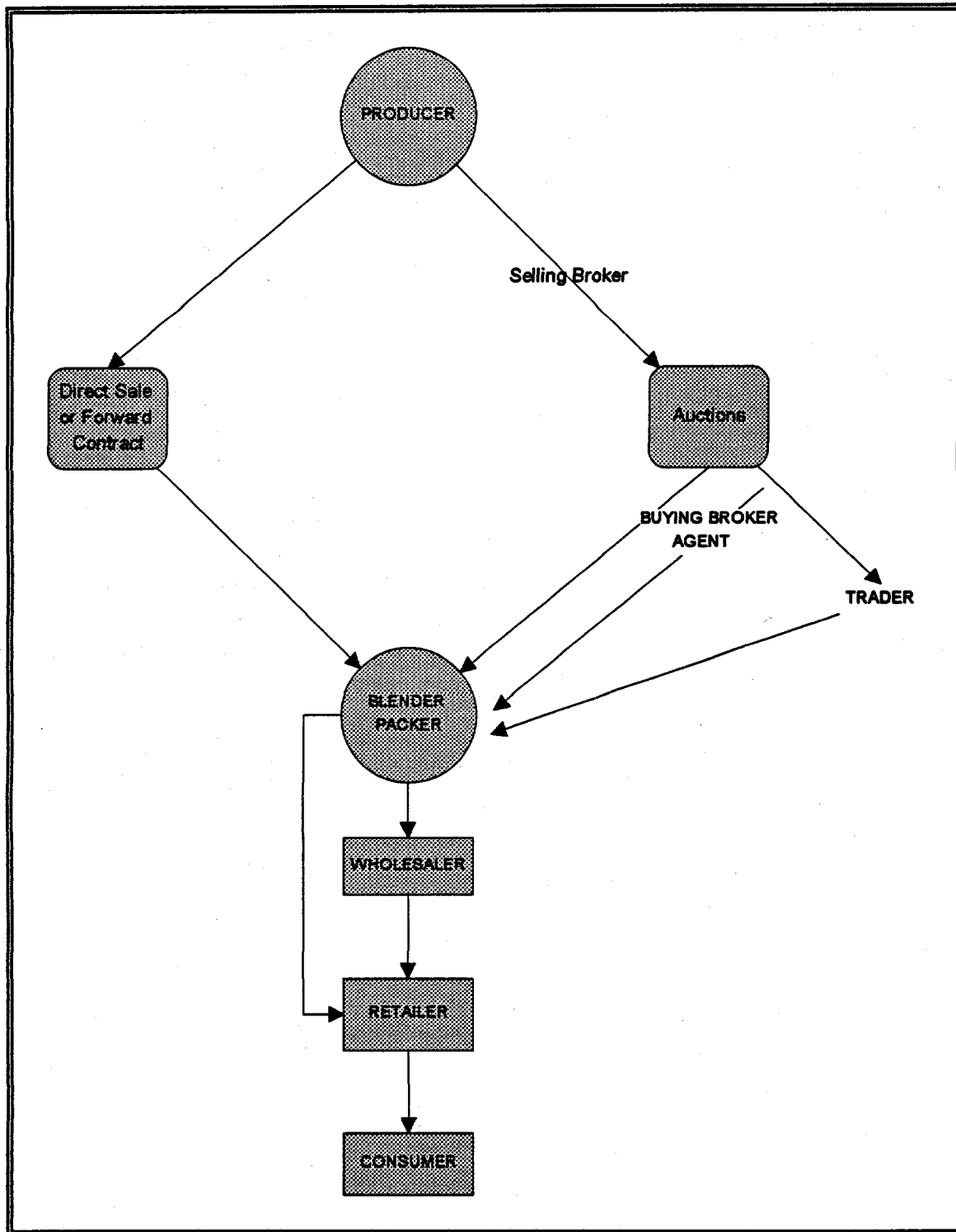


Source: ITC Bulletin, 1996.

DISTRIBUTION

The principal distribution channel for tea is shown in Figure 1-8. Predominantly, tea is disposed off in auction markets through tea brokers. Either brokers or agents appointed by tea buyers or independent traders bid in these auctions for the lowest price. The bought tea is shipped to blenders and packers either in the home country or in countries overseas (like the UK or the Netherlands). The blenders combine tea from various sources, according to their markets' needs, and pack them for sale to the ultimate

Figure 1-8
The Tea Distribution Chain



Source: UNCTAD 1984.

consumer. Thereafter, the product moves through the standard wholesaling and retailing chain to the consumers.

The auction system has some advantages and some disadvantages for the producers of tea. Its principal benefit is that it is an effective mechanism for clearing the market. However, this efficiency is up to question. The market is imperfect, dominated by a few large buyers' brokers, and there have been allegations in the past of collusion and price fixation by these intermediaries (UNCTAD 1984). The auction system also does not provide much incentive for value addition by producers, which has long-term effects on profitability. Just a small proportion of made tea is sold directly by producers to blenders and packers outside the auction system. An even smaller proportion is marketed directly to retailers.

The Tea Auctions

Among the auction centers of the world, London has traditionally been large and until 1963 accounted for 30 percent of world tea sales annually. The volume of tea auctioned in London started declining from the 1970's as more and more producing countries started building up sales through their own auction centers. Between 1982 and 1993 the total quantity of tea sold at the London auction declined almost 49 percent, from a little over 59 million kilograms to about 29 million kilograms. Indian and Sri Lankan producers shifted their trade to the Calcutta and Colombo auctions mainly. Only Kenya, among the major exporting countries, maintained steady trading through London. In comparison, the Colombo auction center went from handling 180.6 million kilograms in 1982 to 215.1 million kilograms in 1993. The Calcutta auction center also increased its share of Indian tea handling substantially. Both Colombo and Calcutta centers handle only locally produced teas, whereas Mombasa handles tea from a number of different countries. The diversion of sales from London to their own national centers have saved producing nations a considerable amount of foreign exchange and also enhanced their bargaining power because they can easily withdraw from the market if prices are not favorable. However, the London auction, because of its handling of tea of many origins, reflects the relative prices more accurately.

Tea Brokers

Two types of brokers are involved in the tea auction system, the seller's broker and the buyer's broker or agent. During each auction period, the seller's broker receives samples of every tea lot in the seller's warehouse for testing and appraising before printing in the broker's catalogue. The broker may also send samples to prospective buyers or their agents. At the auction, if the bids received do not meet the expectations of the seller, he has the discretion of withdrawing from the auction. The tea may then be "reprinted," or offered at a later auction after a statutory period of about two to three weeks (UNCTAD 1984, op. cit.). The producer may also sell the tea through private sale or the broker may try to secure buyers who previously did not receive the samples. The brokers may also advise the producer on manufacturing and on price trends in other auction centers. In

recent years brokers have also become involved in helping producers sell tea outside the auction. Finally, the brokers guarantee payment to the sellers even in the case of buyer's default. The brokerage fee for all these services are generally between 1 percent to 1.25 percent charged to the seller. The contractual relationship between brokers, sellers/producers and buyers/blenders vary from place to place. In Mombasa and Calcutta, the same broker represents both the parties, which has raised questions about conflict of interest. In London, however, separate brokers handle the seller's and the buyer's business. Sometimes there are corporate links between the selling brokers and the tea producers in the form of interlocking directorships (UNCTAD 1984, op.cit.). There are also connections sometimes between the buying brokers and producers in many countries.

Tea Buyers/Blenders/Packers

The concentration of buyers in most auction centers has traditionally been very high and there have been restrictions on auction participation, as well, even though they are open to public. Brokers generally do not take bids from new buyers with whom they are not familiar as it increases their risk. Also, new buyers are disadvantaged by the fact that the tea has to go to blending and packaging plants most of which are owned by the same companies who compete with them in the auction. A study by the United Nations Conference on Trade and Development (1977) found that about two dozen companies controlled tea buying in the major auction centers of London, Colombo and Mombasa and even a smaller number of firms controlled the market for particular types of tea such as CTC.⁷ Most of the larger firms were integrated with producers and/or retailers. In 11 of the 20 major importing countries that the study examined, four firms alone accounted for 80 percent of the sale of tea. These firms were also the market leaders of tea worldwide including Brooke Bonds, Lipton, Lyon-Tetley, and Twinning. There have also been links among brokers through their association, although the effect of such links have not been studied thoroughly. The auction centers in India were a little different because of the participation of buyers' representatives from countries with whom India had bilateral trade agreements, such as the USSR, Poland and Iraq.

In recent years private sales and forward contracts have added new dimensions to the distribution of tea. For example, in Sri Lanka about 6 percent of tea sales now take place through direct channels. In Kenya it is around 10 percent. These modes of sale are preferred by individual producers because they get their payments faster, have less uncertainty about sales and prices, and can avoid warehousing and other costs associated with the auctions. The cost savings could be substantial. In one estimate the cost of selling tea in India through the ex-garden tea sale was 70 percent less than the sale in the Calcutta auction (UNCTAD, *ibid.*). Of course, there is the possibility of the producer getting a lesser negotiated price through the direct ex-farm sale than he could perhaps get at the auction. But this depends upon the development of the system which could become fairly efficient if many competing direct buyers enter the market, which in recent years seems to be happening in many countries. The system is attractive to buyers also because it

⁷ Cut, tear, and curl — a method of processing tea.

guarantees faster delivery and thus better quality of the product received. In the past, governments in exporting countries had feared that direct sales encourage undervaluation by unscrupulous exporters and the transfer pricing mechanism allows the subsidiary of a foreign multinational to transfer products at lower values and thus avoid payment of appropriate duties. Since the markets have been liberalized and foreign exchange restrictions removed in most countries, these apprehensions are no longer material.

Previously most of the tea buying in developing countries was done by state corporations. There is now a trend towards decentralization of this function to smaller privately owned importers, for example, in Egypt, Syria, Iran and a few East European countries. Most of these private buying companies are either subsidiaries of multinationals, or they buy from multinationals. To illustrate, in Egypt the market leader is the Blue Tea Pot brand which belongs to Uni-Lever. Similarly, the Lipton brand is becoming strong in the East European market.

The final processing, blending and packaging of tea was traditionally done in developed countries by a number of small and medium-sized companies such as Brook Bonds, Tetley, Premier Brands, Lipton, Redco, Ridgeway and Twining (Abeywickrama Associates 1991). In recent years this pattern has changed, as large multinationals have acquired many of these companies. The British Uni-Lever Group, today controls about 35 percent of the world trade in tea with acquisitions like Lipton (USA), Brooke Bond (UK), Salada (Canada), Bushells (Australia), Quality packers (New Zealand), etc. (Government of Sri Lanka 1991). Another big conglomerate is the Allied Brewery Group whose control of Lyons Tetley in the UK and Cadbury Schweppes in Australia has given it sizable market share in Canada and Spain. Also, Premier Brands in the UK is an example of a merger of many smaller companies to form a single large company.

Another intermediary group has developed to service the needs of small and medium sized importers in the West. Operating mainly from Hamburg and Rotterdam, they purchase lots from tea auctions in producing countries and after blending and repackaging, sell them to importers in the United States and Europe. This gives small importers convenience and cost savings because they can buy in small lots on a frequent basis from close by distributors rather than going to far off auctions and making bulk purchases.

As a result of these dynamics, the world market for tea has become much more consolidated, with dominant shares held by a few multinational corporations. In New Zealand, the Bell Tea Company and the Uni-Lever Group control about 75% of the market. The Australian market, likewise, is dominated by the Uni-Lever Group and Lyons Tetley. The rest of the market share is accounted for by supermarket chains and regional brands, which find it economical to buy blended packaged tea either from the multinationals or blenders in Germany.

Tea Retailers

Tea is sold through four principal outlets: supermarkets/grocery stores, specialty stores, department stores and institutional supply houses. The changing trend in the retail food industry towards supermarkets and grocery chains in Europe and America has considerably changed the character of tea buying. It has created centralization of buying, heavier buying by individual buyers, and bypassing of the wholesalers through direct links of the buyers with tea packers. Vertical integration of the channel developed as a consequence with blenders integrating into the retail system. Typical examples of this were the Co-operative Wholesale Society in the United Kingdom, Albert Heijn in the Netherlands, Irma in Denmark, and Kooperativ Forbundet in Sweden. Some blenders integrated with catering organizations, such as Lyons-Tetley and J.L. Catering Limited. There were instances of less involving links such as the retail organization owning a part of the processing company or having interlocking directorships (UNCTAD, 1984, op.cit.). Many of the tea producing countries see this as a major obstacle to developing their own channels because the large companies, that are often part of a giant food conglomerate, have the power of creating effective barriers to entry for new entrants by undercutting them in price virtually anywhere or overcoming them with massive advertising. For example, U.K.'s Twinning Group of Tea companies which controls over 25 percent of the French market has been merchandising its "quality blends" at fashionable hotels and resorts, notably in the south of France (Clairmonte and Cavanagh, op.cit.). The fast growth of conglomerates like this, backed by heavy advertising and branded products, has made the entry of small firms very difficult in the industry. In fact, the entire beverage industry of the world is now controlled by 50 transnational conglomerates and the future of the industry is tied to the marketing strategies of these firms.

PROMOTION

Studies on the international market promotion of tea show that the leading tea packers advertise quite heavily in the western markets (UNCTAD, *ibid.*). In Japan the advertising expenditure was about 8 percent, compared to 7 percent in Italy, 4 percent in the United States and 2.5 percent in the United Kingdom. A lot of trade promotion, such as trade discounts and price promotions also takes place in the industry. Smaller companies, on the other hand, rely more on trade discounts than advertising, often offering price discounts to chain stores for carrying their brand. Retailers usually add very small margins on tea compared to other products and make it through margin allowances from the packers. Only packers who have very high volume of turnover can afford to provide the discounts over long periods of time. Recently, promotion by the industry has intensified particularly in the U.K., Canada and the U.S. The health aspect of tea, supported by medical research, is being strongly promoted to the health conscious consumers of the Western world.

THE STANDARDS FOR TEA

In general, the judgment about a tea's quality is made by tea tasters in different countries whose evaluation criteria may depend upon the use to which the tea will be put, such as component for a blend or tea bags, etc. Consumers' taste also vary from country to country and somewhere the consumer may like a strong liquoring tea while in another the consumer may prefer a light aromatic blend, etc. Thus it is not easy to set a uniform quality standard for tea globally. The development of a set of standards for tea have been discussed over many years now and may emerge in the future. However, the immediate concern for both the producing and the consuming countries is the setting of minimum standards for tea, which will ensure adequate quality and increase consumers' satisfaction and demand (FAO 1995-e). The FAO's Intergovernmental Group on Tea supports a minimum standard for black tea based on water extract percentage, crude fiber content, moisture content, and the allowable percentage of certain chemicals like caffeine and theaflavin.

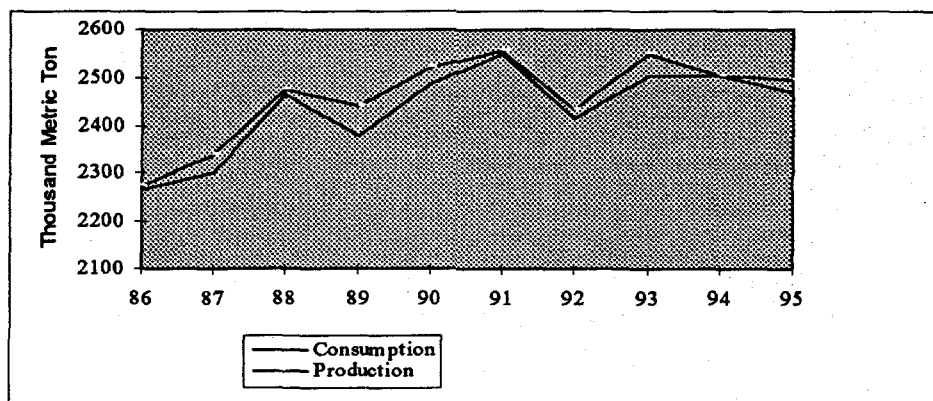
The tea trade has traditionally used tea tasters to distinguish between different qualities, but it has been an extremely subjective evaluation. Research done in the United Kingdom and various tea research institutes around the world have found a number of factors related to the quality of tea (UNCTAD 1981, Ellis and Cloughley 1981). A number of countries follow the International Organization for Standardization (ISO) standard for tea approved in 1977 (ISO 3720), although it does not necessarily mean that they have made it a law. These include producing countries like India, Sri Lanka, Kenya, Turkey, and Iran and importing countries like Australia, Germany, France, Egypt, Poland, Mexico, and South Africa. The United Kingdom has voluntarily imposed the ISO standard since April 1981, but only for tea sold in the London auctions. Some of the large exporters of low priced tea such as Argentina, Malawi, and China and large importers like the United States have not adopted this standard. Traders in a few countries like the United Kingdom and Canada have voluntarily introduced a tea grading system for the catering industry to encourage its adoption of quality teas. This does help countries that are trying to establish high-quality high-value added segments for tea in the world market.

THE DEMAND SUPPLY BALANCE

Over the past twenty five years the characteristics of the world tea supply have changed considerably with the entry of many new producers in the market like Kenya, Malawi, and Turkey. They have added to the production base and some have pursued growth aggressively. Possession of resources like land, cheaper labor and modern technology have given these countries sufficient competitive resources to cut deeply into the markets of traditional suppliers like India and Sri Lanka. In the 1940's India and Sri Lanka produced over 80 percent of the World tea, but in the 1990's this share declined to less than 40 percent (Tea Board of India, 1995).

World tea production grew approximately 6 percent between 1986-1995, and consumption remained below that in most of the years with resultant excess supply in all the years but 1995 (Figure 1-9).⁸ The demand-supply balance is generally in equilibrium because tea does not have a long shelf-life and the market is cleared mainly through the auction process where any imbalance between demand and supply has an immediate impact on the price.

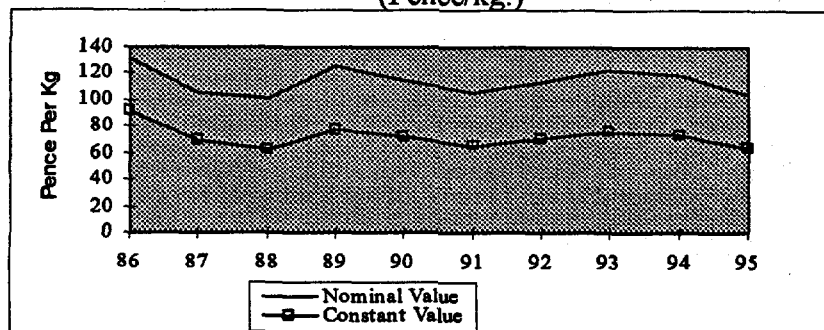
Figure 1-9
World Supply and Consumption of Tea, 1986-95



Source: ITC Bulletin, 1995.

Figure 1-10 shows the price trend for tea at the London auctions between 1986-95. In real terms, world tea prices have fallen steadily since the mid 1980s and 1990s. The average London auction prices for tea during this period in real terms have been their lowest in 1988 and then again in 1995. The main cause of this decline has been the continuing increase in world output with stagnant or declining import demand (World Bank 1992). Between 1986 and 1995, world tea production increased by 221 million kgs. India's production increased by 133 million kg., China's by 128 million kg., Kenya's by 102 million kg. and Sri Lanka's by 33 million kg. In contrast, world imports increased only 84 million kgs.

Figure 1-10
Annual Average Tea Prices at London Auctions, 1986-95
(Pence/kg.)



Source: ITC Annual Bulletin, 1995.

⁸ Consumption calculated from net tea imported for consumption and tea retained by producing countries.

Why has tea production increased steadily in spite of declining prices? The answer partially lies in the depreciation of the real exchange rate of many producing countries like India, Sri Lanka, and Kenya, which kept the producer price up in these countries. Also, investment in plantation crops is a long-term commitment and it is difficult for producers to fine tune output to meet market demand requirements on a yearly basis. Most producers have concentrated on increasing output and the efficiency of production, which have again resulted in more intense price competition in the auction markets.

The average London auction prices for tea in real terms hit their lowest level since 1980 in 1995 (FAO 1996-a). In July 1995, the average London auction price was 20 percent below the same period price in 1994. Even though prices in different auction centers varied because of local demand and supply conditions, on the average prices in all the auction markets were 1.7 percent lower in 1995 than in 1994. The fundamental factors behind these declines was increased production of the major tea exporting countries and reduced demand from some traditional big importers. For example, India's production went up by 88,000 tons between 1985 and 1994, Sri Lanka's by 30,000 tons and Kenya's by 60,000 tons. Tea output of other East African countries have also shown considerable increases. In particular, Malawi's production in 1993 was up by 40 percent compared to 1992 and Tanzania was up by 28 percent. At the same time, imports by major consuming countries declined. For example, imports by U.K. dropped by 7,000 tons, the Netherlands dropped 1,129 tons, and Germany dropped 2,667 tons between 1986 and 1995. Imports by USSR/CIS declined by 19,700 tons between 1986 and 1992, but have since started picking up. Due to the U.N. trade embargo, Iraq's direct import also plummeted by over 17,000 tons. There are many reasons for the decline of demand in many western markets, but the primary causes seem to be changes in lifestyle on top of heavy competition by other beverages such as soft drinks.

Price movements in respective national markets differ depending upon quality differentials and variety. In 1995, the average auction market price for tea all over the world was 1.7 percent below its 1994 level. But in the Indian markets it was higher by 9 to 20 percent (depending on location) because of increased demand from the Russian Federation and the CIS countries. Increased demand from these countries also pushed the price of Sri Lankan tea by 7 percent in spite of a slight increase in production there. In contrast, Kenya experienced a sharp drop of 17 percent in price in 1995 due to record production of tea in that country.

LONG TERM MARKET PROJECTION

Supply

World tea production in 1995 was expected to grow 2 percent reaching 2,590,000 tons - an increase of 48,000 tons over the previous year (FAO 1996- b). Rise of production in Kenya (17 percent), Indonesia (16 percent), India (1 percent), and Sri Lanka (2 percent) will fuel this growth. Harvest in other African countries such as Zimbabwe and

Tanzania have also been very good. The rising production trend is expected to continue over the next few years as expanded areas under tea since 1991 come into bearing. The intermediate to long-term projection indicates a fair growth from 2.9 billion kilograms in the year 2000 to 3.2 billion kilograms in 2005 with India, China, Kenya, Sri Lanka, and Indonesia becoming the largest producers in that order.

Demand

The overall demand for tea continued to weaken through 1995 as declines in import by the U.K and USA more than offset increase in import by Pakistan, Russia, and other CIS countries. The U.K. imports fell by 8 percent over the previous year and in the U.S. imports went down 16 percent. The silver linings were Pakistan, whose imports jumped 16 percent over 1994 in spite of a 7 percent devaluation and 10 percent import duty, and the Russian Federation plus some CIS countries, where improved economic conditions and favorable trading terms provided by exporting countries raised the level of demand by 20 percent. The global consumption of tea is projected to rise from 1.1 billion kilograms in 1993 to 1.2 billion kilograms in 2000 and to 1,300 million kilograms in 2005 (Government of Kenya 1995). Developing countries are likely to account for most of the prospective growth and their share of imported tea is projected to grow from 43 percent in 1990 to 51 percent in year 2000 (FAO 1992-a). Their net import requirement for black tea is projected to reach 626 million kgs., up 52 percent from 1990. Import requirements of developed countries are projected to be 601 million kgs. in the year 2000, or about 9 percent more than imports in 1990. The biggest increase in consumption is expected to be in Eastern Europe, from 238 million kgs. in 1993 to 297 million kgs. in 2000 and 355 million kgs. in 2005. Much of this projected increase may in effect take place if the Russian economy continues to strengthen and the country returns to the world market as a large buyer. Other significant increase areas are Pakistan, Iran, Morocco and Libya. Small import increases are expected in Western Europe. However, consumption is likely to fall in the UK from 160 million kgs. in 1993 to 131 million kgs. in the year 2000 and 119 million kgs. in 2005 (Government of Kenya, op.cit.). Other countries that are also expected to decline are USA and Canada, South Africa, and Saudi Arabia. The expected increase in other traditional tea importers, such as Ireland, Australia, New Zealand and Canada, are projected to remain around their 1990 level (FAO 1996-a).

Demand for tea is heavily influenced by the variety and quality of products and these are also likely to impact on future trade flows and prices. For example, preference for black orthodox tea by Russia and CIS countries is likely to keep demand high for Sri Lanka's products. But demand from U.K, Pakistan, and Egypt will impact CTC tea produced by Kenya and others. Similarly, the North American market's preference for light-liquoring and low-priced tea will affect the demand for these types. The quality factor has assisted the export tea from many countries such as Sri Lanka and Kenya. To some extent, this offsets the loss of demand due to other factors. For example, Kenya's exports increased substantially in 1995 spurred by its high quality products, but its revenue increase was much less because of a sharp fall in prices as demand for CTC tea waned in Europe.

Price

On the whole, the downward price pressure on tea is likely to continue for some time due to weak demand and supply increases in a number of tea exporting countries (FAO 1996, op.cit.). A reversal of this trend will depend upon the return of Russia and other CIS countries to the market on a substantial scale as well as the increase of domestic consumption in India, China, and other producing countries. On the supply side, there could be some downward adjustment in production in response to the overall weak prices. However, given the expansion in world tea acreage and the time frame of 5 years for new tea bushes to reach economic yields, full scale adjustments are not foreseeable in the near future.

The future for CTC tea, at least in the European market, does not appear too bright at the moment. Reduced demand and large production increases in the main CTC producing countries, Kenya and India, have depressed prices for this type of tea. Orthodox tea, however, seems to hold better promise due to renewed demand from Russia and increasing buying by Egypt, Pakistan, and Saudi Arabia. These recent developments suggest that orthodox tea prices could stay high relative to CTC tea prices (World Bank 1966-a). Countries like India and Sri Lanka are likely to be the principal gainers if this holds true.

Possible Effects of the Uruguay Round of Agreement on Global Tea Trade

The global tea trade is relatively free. Many of the major tea importers, like the United Kingdom and the United States, have no tariff or other restrictions on tea import. However, many of the developing countries that import tea levy substantial tariffs on both bulk and packaged tea. Under the Uruguay Round Agreement signed in April 1994, it was agreed that the signatory countries would convert all import barriers such as quotas, variable levies, and minimum import prices into tariff equivalents and then reduce them by certain specified percentage every year (Table 1-5). This action is likely to increase the consumption of tea in countries with significant trade barriers. The FAO's projected world demand for tea in 2005 is 1,355 million kgs. at an average annual increase of 5.6 percent compared with actual black tea imports during the period from 1991 to 1993 (FAO 1995-c). Projected import demand in developing countries is 716 million kgs. with an annual increase of 3.5 percent. Demand in developed countries is likely to increase by 1.5 percent per year to reach 639 million kgs. by 2005. Reduction in tariffs, however, would add an additional 2.9 percent per annum taking demand to 1,393 million kgs. by 2005 (Table 1-6). Developing countries would account for 82 percent of the net increase due to trade liberalization.

Table 1-5
Expected Tariff Change on Tea after the Uruguay Round

Country	Current Rate of Duty (%)	Bound Rate of Duty (%)
Argentina	50.00	38.00
Brazil	15.00	11.40
Canada	0.00	0.00
Chile	11.00	8.36
U.K.	0.00	0.00
Netherlands	5.00	0.00
Egypt	45.00	35.00
India	10.00	7.60
Indonesia	100.00	40.00
Japan	14.00	8.96
Kenya	50.00	38.00
Republic of Korea	40.00	30.40
Malaysia	30.00	22.80
Mexico	20.00	15.20
Pakistan	45.00	34.20
Syria	20.00	15.20
United States	0.00	0.00

Source: FAO, 1995.

Pakistan would have the largest prospective increase in import making it the leading black tea importer by 2005. Tariff reduction would also increase imports into Egypt, Iraq, Iran and other Near East countries.

Table 1-6
Projected Import Demand for Black Tea After the Uruguay Round
(million kgs.)

Country	Normal projection Year 2005	Revised Projection Year 2005
Pakistan	228	237.3
Egypt	110	115.1
Iran	57	60.3
Iraq	54	57.1
Canada	13	13.0
U.S.A	92	92.0
France	16	16.7
Germany	28	28.7
Netherlands	16	16.5
U.K	135	135.0
CIS	195	195.0
WORLD	1,355	1,393.0

Source: FAO 1995.

On the supply side, the net export availability is projected to reach 1,415 million kgs. by the year 2005, an annual increase of 2.9 percent, without trade liberalization. About 68 percent of this increase will come from China, India, Sri Lanka, Kenya and Indonesia (Table 1-7). The projections show that the total export availability will increase by 1.2 percent due to the Uruguay agreement to 1,453 million kgs. Thus, a relatively small increase in price may happen due to a net demand increase. The projected export of India after trade liberalization would be 250 million kgs. Similarly, export availability from Sri Lanka would be 263 million kgs, from China 195 million kgs., and Kenya 257 million kgs.

Table 1-7
Projected Export Supply of Black Tea After the Uruguay Round
(million kgs.)

Country	Normal projection	Revised Projection
	Year 2005	Year 2005
India	245.8	249.8
Sri Lanka	261.5	262.6
Indonesia	200.0	201.2
China	192.0	195.4
Kenya	254.0	256.8
WORLD	1436	1453

Source: FAO 1995

Major Competitors

The major competitors in the global tea market are India, China, Sri Lanka, Kenya and Indonesia. Their current and projected export shares of the world market in 2005 is shown in Table 1-8. If the projection for the year 2005 holds true, Sri Lanka and Kenya will still be vying for leadership, although Sri Lanka may have a slight edge. India will be a close third followed by Indonesia which will displace China as the fourth largest exporter of black tea.

Table 1-8
Black Tea Production, Export and Market Shares, 1995 and 2005
(million kgs.)

Country	Export 1995	Share 1995	Export 2005	Share 2005
India	162.8	15.1%	249.8	17.2%
China	168.5	15.6%	195.4	13.5%
Sri Lanka	235	21.8%	262.6	18.1%
Kenya	237.5	22.0%	256.8	17.7%
Indonesia	79.2	7.3%	201.2	13.9%
World Total	1,079.8		1,452.7	

Source: FAO 1995.

INDUSTRY PRODUCTIVITY AND PROFITABILITY

The productivity of tea varies from country to country. Among the major four producers in the world, the highest productivity have been achieved by the tea estates of Kenya. Green leaf yields in some of the estates have been around 3,500 kg/ha. (FAO 1995-d). Zimbabwe, even though it is a very small producer of tea, has shown even more spectacular performance with a green leaf yield of 7,800 kg/ha. Other small African producers like Uganda and Tanzania have also achieved impressive yields of over 2,500 kg/ha. However, productivity in the larger tea producing countries like India and Sri Lanka have been poor in comparison. For example, the highest productivity reached in Sri Lanka's private estates recently have been about 2,500 kg/ha. and in India the highest yields obtained in South India have been around 2,382 kg/ha. Differences in productivity and the cost of production have given rise to widely varying degree of profitability for the industry world wide. Among the major countries, the highest profitability has been obtained by Kenya (over \$2000/ha), followed by India (over \$1400/ha), and the lowest by Sri Lanka (about \$1100/ha).

FORCES DRIVING INDUSTRY COMPETITION

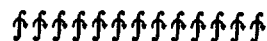
Tea competes mainly with soft drinks in the world market. Normally, product sales depend on three factors: consumer demography, income, and the willingness to buy. Demographic factors such as geographical location, occupation, ethnicity and age have been found to correlate strongly with the consumption of tea. A study done in the United States in the mid 1990s showed that tea consumption was significantly higher in urban areas and in regions that had a majority of Asian and Pacific origin people (FAO 1995-e). Professionals were also found to be much higher consumers of tea than non-professionals. However, income was found to have little effect on consumption. The willingness-to-buy factor is a little more complex. Consumers' values and lifestyle (VALS) and perceived value of the product seem to have a strong influence on choice. For example, people on the go who eat outside home more frequently are more likely to prefer ready-made drinks over tea because they require no preparation. Conversely, health conscious people may tend to prefer tea that has significant health benefits compared to many other drinks. Thus, the perceived value of tea in the minds of consumers could be evaluated in terms of benefits (such as health), convenience (such as ready to drink), and economic value (such as price). The U.S. study did find significant influence of the first two on consumers' choice, but did not find any significant impact of price on people's decision whether to drink tea or not. However, the study found that among people who choose to drink tea, both price and income influence the allocation of expenditure between tea and other beverages. The cross-price elasticity of tea with respect to milk, fruit, and vegetable juices suggests that these beverages are complimentary to tea. The cross-price elasticity of soft drinks with respect to tea, however, indicates that soft drinks are a strong substitute for tea and consumers will shift from tea consumption to soft drinks if the price of soft drinks declined more than that of tea. Tea and coffee are neither substitute nor complimentary to one another and the change in coffee price has little effect on tea consumption. Statistics

show that coffee prices have almost tripled in the last two years, but world tea prices have remained unchanged and even declined in this period. The elasticity of expenditure on tea was found positive and less than unity, which suggests that a relatively small proportion of additional beverage expenditure is spent on tea compared to soft drinks and juices. Also, tea consumption is a general habit and no dramatic short-term achievement could be expected from promotion. Rather, a progressive building of a solid consumption base over the long-term would be more beneficial.

Health concerns are also strong positive influence on the choice of tea as a drink, particularly in the United States. A concerted effort is being made by the tea industries in all consuming countries to promote the health benefits of tea to increase its acceptance among consumers all over the world. The United Nations has provided 1.7 million dollars through its Common Fund for Commodities (CFC) to research and promote the health aspects of tea. The tea trade of three consuming countries: the United Kingdom, the United States and Canada, have contributed an additional 1.9 million dollars and 700,000 dollars have been committed by four major tea producers: India, Sri Lanka, Kenya, and Indonesia - to support the project.

The major forces driving competition in the tea industry are productivity, quality and price levels which are all interlinked. Higher productivity countries like Kenya are able to lower their cost of production and thus hold a better competitive price position. Quality differentials between different producers are responsible for larger or smaller market shares. Tea buyers are particularly sensitive to the quality factor. Price is also determined by the quality of the tea, as there is a premium paid in the world market for quality teas. The highest price received in the London auction in 1995 was for Indian tea (127 pence/kg.), followed by Kenyan tea (109 pence/kg.) and Sri Lankan tea (95 pence/kg.). There are other important factors that raise the price for a country's exported tea such as value addition. Tea in consumers' preferred form such as packaged tea and tea bags, as well as in preferred type such as instant tea and flavored tea, also bring premium prices.

The processing and distribution of tea in the world market is controlled by four vertically integrated United Kingdom corporations, Unilever/Brooke Bond, Cadbury Schweppes, Allied-Lyons, and Associated British Foods (Clairmonte and Cavanagh 1990). These four have over four-fifths of the tea market in many countries. The market strength of the Unilever group in the tea industry is comparable to Coca Cola's strength in the soft drink industry. It supplies over 30 million tea bags in 120 countries daily. Allied-Lyons is even bigger than Unilever/Lipton/Brooke Bond and has a very diversified product line in the countries of its operation. Associated British Foods is the parent company for Twining Tea which puts out more than 120 blends of tea and coffee for export to more than 90 countries.



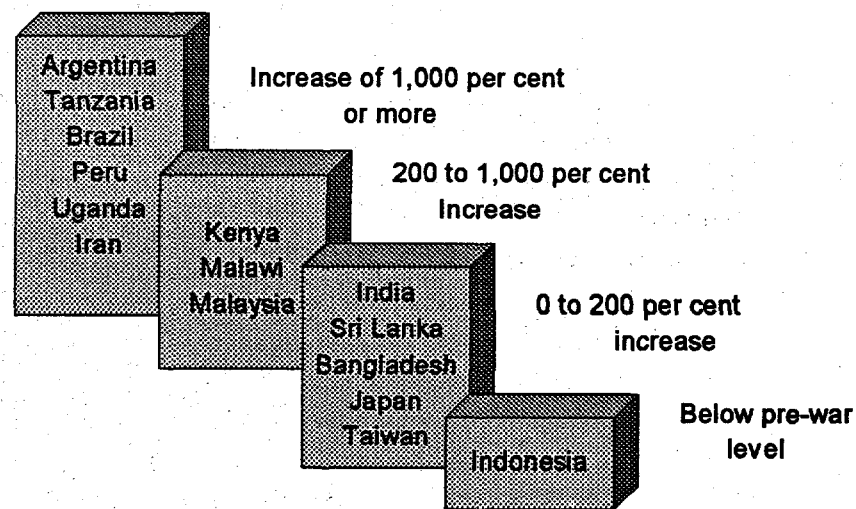


CHAPTER 2

MAJOR COMPETITORS IN THE GLOBAL TEA MARKET

The major tea producing countries in the world are concentrated in central, south, and southeast Asia and East Africa. There have been considerable changes in the geography of production since World War II. The relative growth of tea production in various countries is presented in Figure 2-1.

Figure 2-1
Changes in the Geography of Tea Production
1949-1967



Source: Adapted from Sarkar 1972.

Production of tea rose more than 1,000 percent above the pre-World War II levels in countries like Argentina, Tanzania, Brazil, Iran, Uganda, and Peru, between 1949 and 1967 (Sarkar 1972). Kenya, Malawi, and Malaysia also experienced an increase over 200 percent. The more traditional areas like India, Sri Lanka, Bangladesh, etc. had more modest increases of 0 to 200 percent. Thus, there was a significant difference in post-World War II increases in tea output among the Asian, African and Latin American

regions. The characteristics of each region are distinct, which sets them apart from one another in many different ways.

Traditionally, tea has been produced in plantations, both state owned and private. However, there is a prominent small holder sector in many tea producing countries, such as Kenya and India. In private plantations, it is quite common to find holding interests of large multinational companies because the final blending and marketing of tea takes place within a very concentrated industry group. These corporate entities run the entire operation including land development, planting, plucking, and processing by means of expatriate and national managers, and local labor. The tea estates are also mostly monocultures with tea as the only crop, although in Sri Lanka one might find some intercrossing with rubber, pepper, and spices. This is primarily because of the scale economies that large single crop plantations provide. Also, harvested tea requires immediate processing and plantations with their own factories can take care of this need much better than growers who do not have their own factory. Nevertheless, small holder tea has gained prominence in the last forty years or so and governments in many countries have had to provide institutions for collectivization of the individual efforts.

Among the three major producers of black tea in the world today are India, Sri Lanka and Kenya. Their production, export, and marketing characteristics are examined in the following sections.

INDIA

Production Areas

India's two main tea growing regions are the Northeast and the South consisting of Assam, West Bengal, the foothills of the Himalayas in the North, and the plateaus of the Western Ghats in the South. Climatic and soil variations of these areas account for differences in productivity and cultivation culture. In Northeast India the principal areas are the Assam Valley, the Surma Valley or Cachar, Tripura, Darjeeling, Dooars, and Terai. The Assam Valley has one of the largest concentrations of tea in the world with nearly ideal growing conditions. Assam tea sets the standard for quality in the world. The land is almost a flat valley through which the Brahmaputra river makes its way slowly from the Himalayas to the Bay of Bengal. The seven districts of Darrang, Goalpara, Kamrup, Lakhimpur, Dibrugarh, Nowgong and Sibsagar have some 168,000 high yielding hectares under tea on some 655 estates (Forrest 1985). Together, these areas produce half of India's tea.

Tea cultivation in the Surma Valley is mostly in a long narrow area called Cachar that runs to the Barak or Surma river. The tea bearing *teelas* or jungle hillocks of this area consist of some 31,700 hectares. This area does not have the optimal conditions for tea as in Assam, and a large portion of the gardens are left empty. Most of the bushes are also over 50 years old. Almost all of the tea produced here is CTC and its auction price is

lower than tea from other parts of the country. The Tripura growing region is a continuation of the Surma Valley with similar terrain but much tougher climatic conditions and droughts are frequent.

The Darjeeling tea areas in the province of West Bengal are in the high hills bordering Sikkim at altitude between 1,000 and 6,000 feet. The tea is legendary in quality with the "first flush" coming in March or early spring and the still more prestigious 'second flush' in May or June, followed by the choice 'autumnal flush' in October (Forrest, *ibid.*). The unique flavor and aroma of Darjeeling tea is mostly due to the particular China/Assam hybrid and its slow growth at high elevation (Harler 1964). However, it has never been easy to work the 18,000 hectares of Darjeeling's 100 tea estates. The weather is often hostile and a large proportion of the bushes are very old. The yields are the lowest in North India.

The Dooars and Terai, further south, are in a narrow strip adjacent to the Himalayas intersected by a number of hill streams. The 61,000 hectares of tea land are in a favorable agro-climatic zone and the 150 or so estates there are highly productive. The CTC tea that Dooars produces is full bodied and very suitable for blending. The Terai region has about 11,000 hectares of high yielding tea in 46 estates.

There are a few other smaller tea areas in Northern India, namely the Bihar tea gardens in Chota Nagpur, the Dehra Dun tea gardens between the Himalayas and the Siwalik Hills and the Kangra Valley at the foothill of the Himalayas in Himachal Pradesh.

South India follows the Assam in the production of black tea in India. The main growing area extends from Karnataka in the North through western Tamil Nadu into Kerala in the South and the hills of the Western Ghats. Tamil Nadu and Kerala have approximately the same amount of tea land - about 36,000 hectares each. But the former has almost twice the output. The Nilgiri hills are very well known for high quality tea and some of the best high grown tea in the world comes from the famous Kana Devan Range in Kerala, about 5000 feet above sea level. About half the tea planted here is the Assam seed type and the other half is old China hybrid. Both CTC and orthodox tea are produced from these plantings. In addition to the high-grown tea, Kerala also has low-grown tea in the central and southern regions. Wynaad on the slopes of the Western Ghats also has some 12,000 hectares of tea.

Existing acreage of tea land in India is not sufficient for meeting its expanding needs. However, there are sufficient potentials for new development. There is substantial land for growing tea in the Northeast - e.g., Terai of West Bengal and the states bordering Assam. In the traditional areas there may be limitations for establishing large new estates, but there are plenty of undeveloped government land that could be put into tea production. Also, if tea is designated as a forest crop, additional forest land could be allocated to its culture. The domestic consumption is 75 percent of its annual production of about 744 million kgs. and it is increasing at a rate of eight percent per annum. By the year 2000 its domestic demand is expected to exceed 700 million kgs. However, the

extent of land under tea cultivation is growing only at a rate of about 0.8 percent per annum (Tea Board 1995, op.cit.), which would leave the country with a probable shortage by the turn of the century unless either land or productivity, or both, is increased substantially. Industry assessment indicates that approximately 23,000 hectares of new land in the existing tea estates could be planted and an additional 26,000 hectares could be reclaimed and developed for tea. Some 45,000 hectares of forest land could also be converted to tea plantation with additional investment. The net addition in this way could approximately be 94,000 hectares or about 22 percent of the existing base. Besides, in the non-traditional areas of tea, adjoining Assam, over 60,000 hectares may be available, which if developed would add another 14 percent to the production base. With 36 percent potential new acreage, and assuming the same average productivity of 1752 kg/ha., a net addition of 270 million kilograms of new tea could be expected with land development alone. This could boost production capacity from 744 million kgs. to 1014 million kgs.

Production-Consumption and Export Trend

In the last forty years there has been significant growth in the area under production (Table 2-1) the volume, and the yield of tea in India (Government of India 1996). The growth of production (171 percent) outpaced the expansion of area over five times. Most of the growth came from productivity enhancement which stood at 105 percent. Domestic consumption also grew at a dizzy pace to over 1000 percent in 40 years, far outstripping the production growth, with a resultant fall in export which actually declined 28 percent.

Table 2-1
India's Tea Production and Consumption
1953-1993

<u>Year</u>	<u>Area (ha)</u>	<u>Production (Million kg.)</u>	<u>Yield (kg/ha)</u>	<u>Export (Million kg.)</u>	<u>Domestic (Million kg.)</u>
1953	318,642	278.7	875	227	51.7
1995	421,910	753.9	1795	163.7	595.1
% Increase	32%	171%	105%	-28%	1051%

Source: Tea Board of India, 1996.

In spite of its impressive internal demand growth, India has still one of the lowest per capita consumption rates among the leading tea producing countries. The estimated Indian consumption is 0.62 kg. per year, much below Kenya's 0.82 kg., Japan's 0.97 kg. and Sri Lanka's 1.41 kg.

The compound growth rate of production and internal consumption in the last 43 years (1951-1995) are estimated at 2.23 percent and 4.88 percent, respectively (Tea Board of India, 1995, op.cit.). Assuming this rate to be consistent in the coming 15 years, the estimated production and consumption will be 910 million kg. and 756 million kg.

respectively, in the year 2000. By the year 2010, these will change to 1174 million kg. and 1150 million kg., respectively.

The Tea Board of India's projections show that the future per-capita consumption rate is not likely to increase at the same pace as before, due to changing socio-economic conditions and competition from other beverages – it will probably stay at around 0.69 kg. per year by the year 2000. The total production of black tea is also likely to be 1224 million kg. by 2105 after taking into account all available land for expansion and increase in productivity. These estimates show that India's production-consumption gap is likely to narrow sufficiently to wipe out any surplus for export in the next 20 years, after which the country may very likely become a net importer of black tea.

India produces some of the world's finest tea. The low temperature in the hills of Darjeeling aids production of the famous Darjeeling tea. High grown tea of South India is also of excellent quality. Other areas, with their diverse agroclimatic conditions, produce a medley of tea suited to many different tastes. Assam teas are well known for their strong, brisk and full bodied liquor and the Nilgiri teas are famous for their delicate flavor, strength, and brightness.

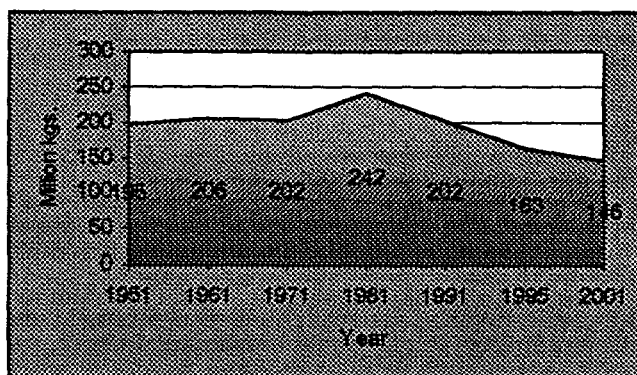
India's tea export declined from 195 million kg. in 1951 to 163 million kgs. in 1995 (Table 2-2). The decline was persistent from 1981 to 1995. On this basis, predicted export in 2001 is 146 million kgs. (Figure 2-2).⁹

Table 2-2
India's Tea Export 1951-1995
(Mn.kg.)

	1951	1961	1971	1981	1991	1995
Export	195	206	202	242	202	163

Source: Government of India, 1996.

Figure 2-2
India's Tea Export: Prediction for 2001



Source: Government of India, 1996.

⁹ Estimated on the basis of exponential growth rate between 1991 and 1995.

Industry Structure

Organization: The tea industry in India was not the outgrowth of indigenous farming efforts. It was pioneered by the British – both individuals and companies, who developed the industry in comparatively large units or plantations. Plantations generally require large investments with long pay-back periods as the trees have to grow and mature before yielding results. The areas of the tea estates in India vary in size but there are also very large small holdings in many areas. The estates are broadly classified into five major groups:

1. Small holdings ranging from ½ to 10 hectares owned by proprietors.
2. Small gardens below 200 hectares under sole proprietorship of partnership firms with or without processing factories.
3. Estates owned by private or public limited companies.
4. Estates owned by FERA companies.
5. Estates owned by government agencies.

Productivity: The average tea yield in India has gone up in the past 40 years. But there is a considerable variation across different tea growing regions (Table 2-3). In North India, certain areas like Lakhimpur and Darjeeling have shown very low productivity growth. There is ample scope for increasing productivity in many regions of India such as Kamrup, Naogaon, Karbi, Anglong, North Kachar, Barak Valley and Tripura (Government of India 1996, *ibid.*). There are also substantial yield gaps within different areas of particular tea estates also, because of the age and quality of bushes, soil conditions, etc.

Table 2-3
India's Tea Yields, 1961-1995
(kg./ha)

Region	1961	1971	1981	1991	1993	1995
Assam	1,123	1,227	1,503	1,717	1,770	1,701
Assam Valley	1,224	1,328	1,616	1,818	1,812	1,792
West Bengal	1,043	1,176	1,365	1,523	1,619	1,593
North India	1,064	1,175	1,416	1,631	1,697	1,643
South India	1,091	1,398	1,645	2,541	2,373	2,443
ALL INDIA	1,070	1,221	1,461	1,794	1,819	1,787

Source: Government of India, 1996.

Profitability and Margins: The industry's profitability has declined since 1994 mainly due to a fall in tea prices and the loss of the former USSR market (Government of India 1996, *ibid.*). However, sales of value-added tea have increased both in the domestic and export markets. Today, about 36 percent of domestic sales are in value-added form, an increase of 9 percent from 1991. Value-added tea also constitutes 35 percent of tea exports. The trend is thus favorable for future profitability growth.

The projected cost of tea production in 1996 was Rs. 60.20 per kg. At an expected income of Rs. 64.58 per kg., the pre-tax margin would be Rs. 4.38 per kg. The cost of production varies from region to region. Broad estimates of these costs are given in Table 2-4. The highest cost of production is in Darjeeling – almost four times the cost elsewhere. Darjeeling tea, however, is the premium Indian variety and fetches a high price in the world market. The lowest costs are encountered in South India, Terai and the Cachar districts.

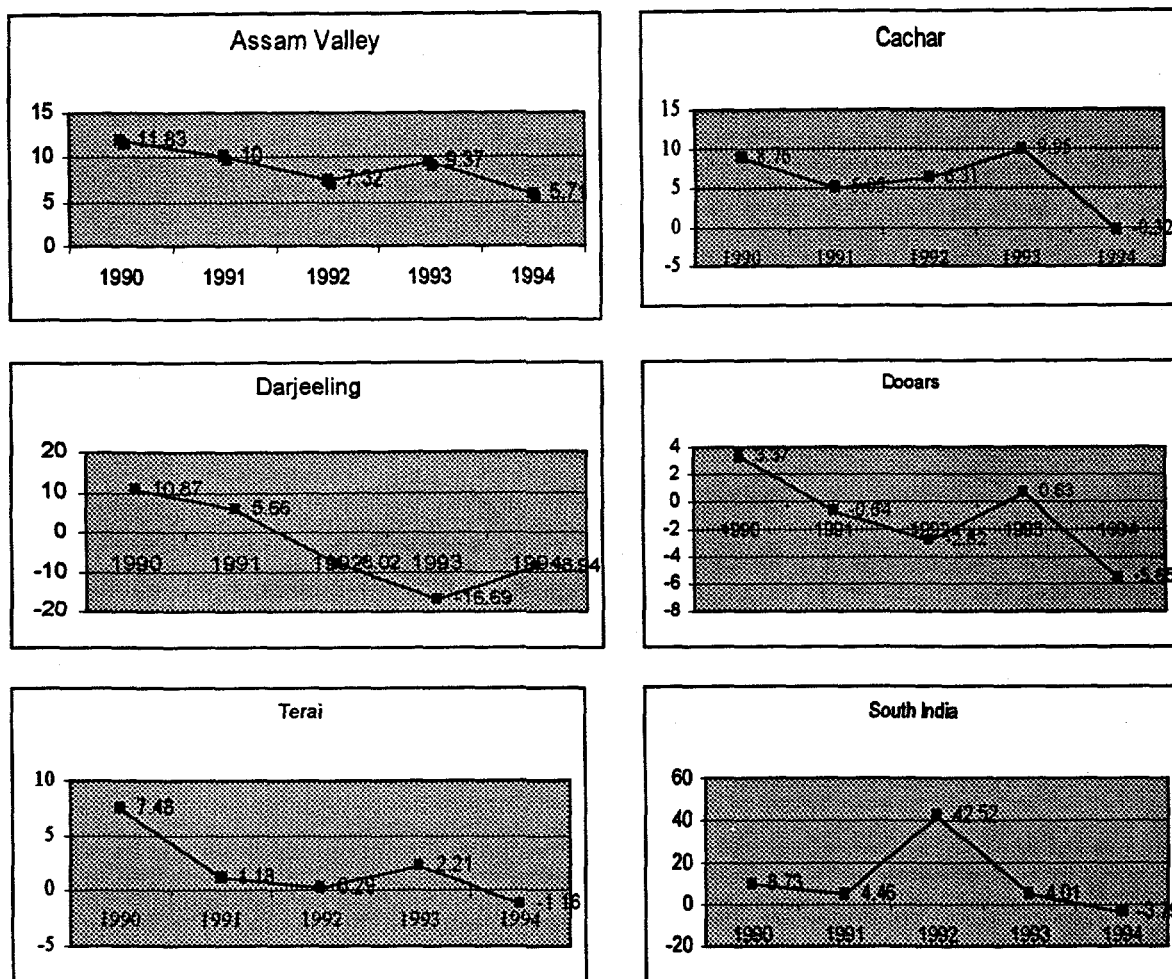
Producers' margins on tea grown in different parts of India also varies. The best is obtained in Assam valley where the margins have been between 10 to 25 percent of sales in the years 1990-94 (Table 2-4). The margins in the other prominent areas of tea production have not been very strong, even going into negative territory in a number of years (Figure 2-3).

Table 2-4
Indian Tea: Cost of Production and Producer Margin, 1990-94
(Rs./kg.)

Region	1990	1991	1992	1993	1994
<i>Assam Valley</i>					
Cost	35.12	40.17	47.34	51.42	51.07
Income	46.95	50.17	54.66	60.79	56.78
Margin	11.83	10.00	7.32	9.37	5.71
<i>Cachar</i>					
Cost	27.30	29.91	34.05	47.02	40.97
Income	36.06	34.96	40.36	56.97	40.65
Margin	8.76	5.05	6.31	9.95	(0.32)
<i>Darjeeling</i>					
Cost	91.77	105.35	123.00	127.38	154.41
Income	102.64	111.01	114.98	110.69	145.47
Margin	10.87	5.66	(8.02)	(16.69)	(8.94)
<i>Dooars</i>					
Cost	35.80	38.20	43.74	46.11	46.08
Income	39.17	37.56	40.92	46.74	40.43
Margin	3.37	(0.64)	(2.82)	0.63	(5.65)
<i>Terai</i>					
Cost	30.88	34.56	41.04	44.11	41.06
Income	38.36	35.74	41.33	46.32	39.90
Margin	7.48	1.18	0.29	2.21	(1.16)
<i>South India</i>					
Cost	35.05	38.19	46.28	43.40	41.83
Income	43.78	42.65	88.80	47.41	38.04
Margin	8.73	4.46	42.52	4.01	(3.79)

Source: Government of India, 1996.

Figure 2-3
 Producer's Margin in Different Tea Regions of India, 1990-1994



Source: Government of India, 1996.

Taxes and Subsidies

The Indian tea industry is subjected to a number of direct and indirect taxes on production and marketing of tea (Government of India 1996-II). These come in the form of central and state governments' levies on tea. The central government charges a tea cess on the production and sale of tea. The state governments charge green leaf cess, land revenue, sales taxes and octroi duty. The central tea cess varies in amount from Rs. 0.08 to 0.15 per kg. depending upon the administrative district. Central excise duties on loose tea, packet tea and tea bags, were abolished in 1993, but instant tea still has an excise duty of 25 percent ad valorem. Certain establishments, such as cooperatives, have a much reduced tax structure. Tea exported, both in bulk forms and in value-added form, receive a number of rebates.

Each state taxes tea on the basis of its own schedule. In West Bengal the sales tax on tea varies from 1 to 4 percent. The Assam government has a flat 2 percent sale tax on tea sold through the Gouhati Auctions. Private sales are assessed at a rate of 7 percent. In Tamil Nadu, the basic sales tax rate is 5 percent. There are some additional surcharges, also.

Marketing

One of India's major problems in tea marketing is the lack of an adequate transportation infrastructure. The tea estates of Assam and Cachar do not have easy access to the sea port of Calcutta. A sea route down the Brahmaputra is not possible because of the absence of transit rights from Bangladesh. Most of the shipments reach Calcutta by road. In South India as well, transportation is hampered due to a lack of inland waterways and inadequacy of land roads.

The major tea auction center of India is Calcutta whose development followed the need of British investors in the early days of the empire to establish managing agents in India who would supervise the production and disposal of the crop on behalf of their U.K. principals. The most important of these agency houses, as they are called, are Messrs. Gillanders Arbuthnot, Balmer Lawrie, Begg Dunlop, Duncan Brothers, Shaw Wallace, etc. After the independence of India in 1947, the Calcutta auction center became prominent as an Indian institution and slowly took over much of the auction trade from London. The other auction centers of India in the North are in Gouhati and Siliguri, the former mainly for Assam tea and the latter for Dooar tea. Auction centers in the South are Cochin, Coonor, and Coimbatore.

Government Regulations

Quite a few laws and regulations govern the tea industry in India. The Tea Distribution and Export Control Order of 1957 regulated the export of tea through an Export License and a Shipping License, presumably to ensure quality requirements. The shipment license was done away in 1995. The Tea Waste (Control) Order of 1959 was instituted to prevent the mixing of tea waste with good tea by merchants and to make sufficient quantity of denatured and undenatured tea waste available for manufacturing caffeine and instant tea, respectively. The Tea (Marketing) Control order of 1984 regulates the sales in auctions. The tea producers are lobbying to repeal this order against opposition from the tea buyers and exporters. The Tea Warehousing Licensing Order of 1989 requires the identification of bailees of tea prior to taking the tea to the public auctions. Besides these pieces of legislation, a host of broader laws, such as the Essential Commodities Act, Minimum Wages Act, and Plantation Labor Act, also affect the tea business in India.

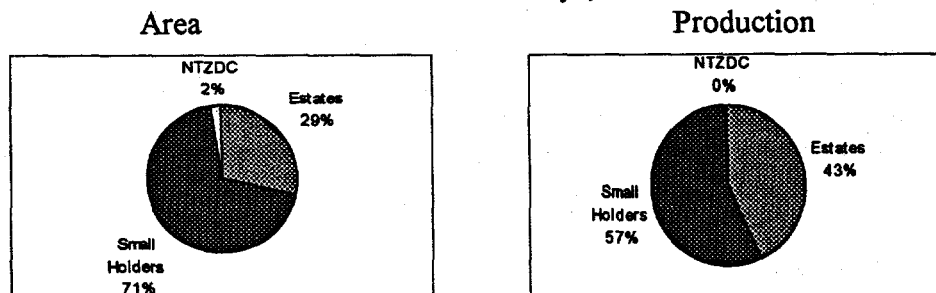
Imported tea processing and packaging machinery are taxed at rates varying between 5 percent and 20 percent. The duty on tea bagging machines is 15 percent ad valorem. The import duty on tea packaging is between 25 percent and 30 percent.

KENYA

Main Production Areas

Tea was first introduced in Kenya in 1903, and by 1945 about 4,500 hectares of land were developed for tea on large-scale commercial estates around Limuru and Kericho. Today, most of Kenya's tea is grown in the seven districts east of the Rift Valley including Kirinyaga, Embu, and Nyeri, and eight districts west of the Rift Valley including Trans-Nzoia, Kakamega, and Kisii. Three types of organizations are involved in its production, large private estates organized as the Kenya Tea Growers Association (KTGA), small holder farms under the supervision of the Kenya Tea Development Authority (KTDA), and government run estates known as the 'Nyayo Tea Zones' run by the Nyayo Tea Zones Development Corporation (NTZDC). Large estates dominate production west of the Rift Valley, while small holders dominate the area east of the Rift Valley (Government of Kenya 1995). In 1990, 26 percent of the total land area under tea was held in the west by large estates and another 26 percent by the small holders in the west.

Figure 2-4
Share of Total Area and Production
of Tea in Kenya, 1995



Source: *The Tea Board of Kenya, 1996.*

In the east, only 5 percent of the land was held by the estates, but a hefty 43 percent by the small holders (World Bank 1996-II). The share of area under tea in 1995 was 29 percent for the large tea estates, 71 percent for the small holders and 2 percent for the government owned NTZDC (Figure 2-4 and Table 2-5). Tea produced in the estates accounted for 43 percent of the production, and small holder tea 57 percent. The Western estates, where the yields per hectare are much higher than the Eastern estates, have contributed significantly to the growth of Kenyan tea.

There is abundant land in Kenya for the expansion of tea. Current utilization of land under tea is only about 10 percent (Government of Kenya 1992). The total tea area has been expanding steadily and is expected to rise from 76,751 ha. In 1994 to 84,000 ha. in 2004 (Government of Kenya 1995, op.cit.). Most of the tea is grown at an altitude above 6,000 feet where there are not many possibilities of growing other types of crops. Tea growers also obtain much higher return from tea than any other crop in these areas and the incentive to expand cultivation is high (USDA 1995). Credit facilities to the

Table 2-5
Changes in Kenya's Tea Production, 1990-95

Cultivated Area (ha)	1990	1991	1992	1993	1994	1995	1995 (%)
Estates	29,980	31,000	31,340	31,750	32,070	32,360	29%
Small holders	67,040	68,800	72,160	73,110	73,840	78,960	71%
Total	97,020	99,800	103,500	104,860	105,910	111,320	100%
Production (tons)							
Estates	87,012	90,900	88,260	98,630	90,340	105,580	43%
Small holders	109,997	112,700	99,810	112,530	119,080	138,950	57%
Total	197,009	203,600	188,070	211,160	209,420	244,530	100%
Yield (kg. per ha)							
Estates	2,902	3,184	3,033	3,339	3,013	3,404	
Small holders	1,641	1,982	1,730	1,942	1,776	1,996	
Average	2,031	2583	2382	2641	2395	2700	

Source: (i) Kenya Central Bureau of Statistics - Economic Survey, 1996; (ii) World Bank, Kenya Agricultural Sector Review: Tea Industry, 1995.

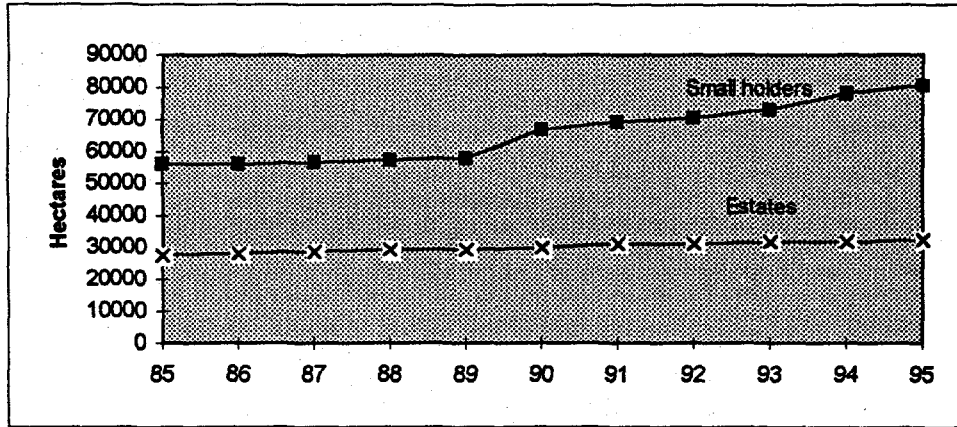
smallholders provided by the Kenya Commercial Bank (KCB) is facilitating new development. West of the Rift Valley, where the large estates are concentrated, ideal weather and soil conditions facilitate the growing of tea in large scale. The tea areas in this region are between altitudes of 1,700 meters and 2,300 meters with well distributed rainfall averaging about 1,200 millimeters per year. The soil is deep, free draining, and acidic of volcanic origin, which is perfect for tea. Topography and climate thus give Kenya a big advantage in the cultivation of tea. The terrain and weather conditions which make plucking easy, add to the productivity and give the country additional advantage over the tea growers in India and Sri Lanka.

Production-Consumption and Export Trend

The total area under tea in 1995 was 111,320 hectares, which is only 17 percent of the potential 664,103 hectares suitable for tea (Brown 1963). This indicates the tremendous production potential of the country. In 1995, the area under the large estates was 32,201 ha. (29%), compared to 80,355 ha. (71%) under small holders (Figure 2-5).

The total area under tea in the small holder sector increased 40 percent, from 56,505 hectares to 80,355 hectares between 1985 and 1995. In comparison, the estate sector tea holdings increased only 19 percent, from 27,332 hectares to 32,201 hectares in the same period. The small holders today, however, control over 71 percent of the total land area (112,556 ha) under tea in Kenya and 56 percent of the output. The NTZDC have also expanded their tea hectares to over 3000 hectares since 1986.

Figure 2-5
Estate and Small Holder Areas Under Tea: 1985-95

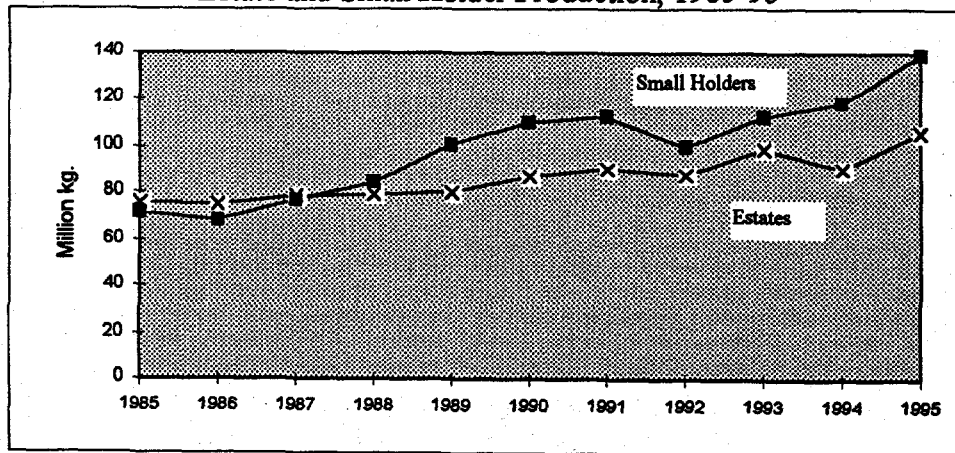


Source: The Tea Board of Kenya, 1996.

Production has grown rapidly in the last 10 years, rising 67 percent (from 147 million kilograms to 245 million kilograms) between 1985 and 1995. The large estates dominated production until 1987 when the small holders surpassed them (Figure 2-6). Even with a lesser area the estate sector produced 105.58 million kilograms of tea in 1995, compared to the small holders' 138.95 million kilograms, due to higher yields.

Productivity: Productivity in Kenya's large tea estates is among the highest in the world. Estate sector yield is around 3279 kg/ha compared to the small holders' yield of 1729 kg/ha. (Figure 2-7). The estates are managed by some of the best tea companies in the world, such as Unilever and George Williamson, which are very good at maximizing the use of resources.

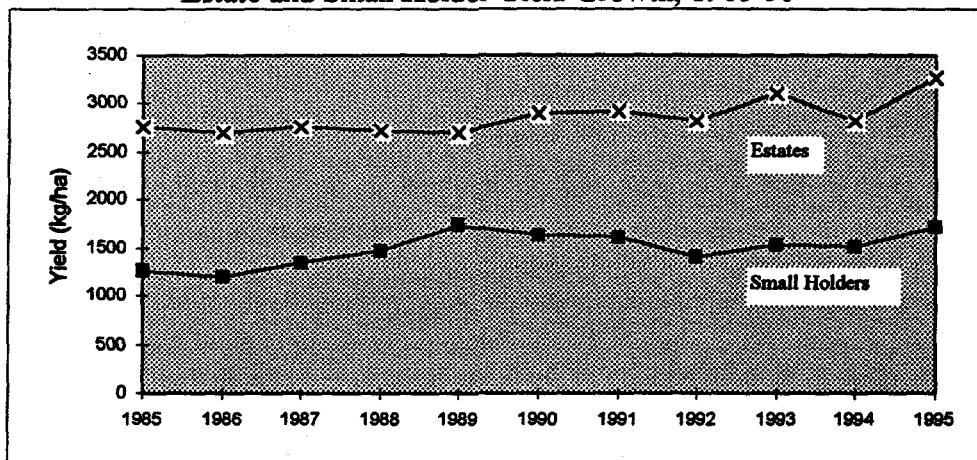
Figure 2-6
Estate and Small Holder Production, 1985-95



Source: Kenya Tea Board 1996.

The small-holder sector, managed by the Kenya Tea Development Authority (KTDA) has not yet reached their level of productivity yet, although they have shown quite impressive productivity growth in recent years. For example, in 1984, they could only achieve 35 percent of the yields obtained in the estates. In 1994, they narrowed the gap substantially to reach 59 percent of the estate yields (Government of Kenya, op.cit.). They have also grown in size by over 40 percent in the last ten years, and are presently producing above 56 percent of Kenya's tea. Both the yield and land area in the estates have grown by 2.8 percent annually between 1984 and 1994. But yield growth in the small holder sector in this period has been faster than the growth in tea area. The country's 5.6 percent per year production growth was thus predominantly led by yield growth rather than area growth.

Figure 2-7
Estate and Small Holder Yield Growth, 1985-95



Source: Kenya Tea Board 1996.

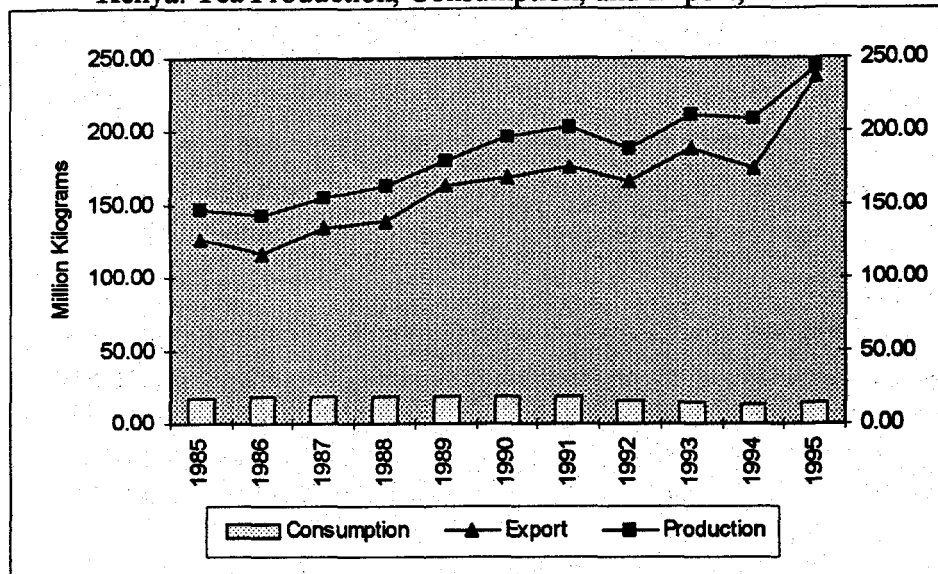
Consumption: Kenya's domestic tea consumption rose from 17.01 million kilograms in 1985 to 17.88 million kilograms in 1990. But it declined quite steeply thereafter to 14.34 million kilograms in 1995 (Figure 2-8). Most of the decline has taken place after the decontrol of prices and the trade liberalization of 1992. There are no specific research data on the causes of such low consumption and the respective market shares of all beverages in the market, but consumption is expected to remain low unless aggressive marketing changes consumer preferences.

Export: Tea is the most important export product of Kenya and it accounted for 19.3 percent of the value of all commodities exported in 1995, compared to 16 percent for coffee. But in spite of the rise in the value of exports (6.6 percent) and the quantity exported (24.6 percent) between 1994 and 1995, it experienced a 14.5 percent drop in prices. This compares to only 0.5 percent drop in coffee prices and 7.3 percent drop in all horticulture products, in the same period (Government of Kenya, 1996).¹⁰ To some extent this reflects overproduction by tea producers. But it is also indicative of the dynamics and

¹⁰ Government of Kenya (1996), Economic Survey, Table 7.8., p. 106.

constraints of the international market place and the need for sophisticated marketing of a product that has long been “sold” as a commodity rather than “marketed” as a specialty good. The prices of many agricultural commodities in Kenya are controlled by the government, but tea prices are determined by international market dynamics.

Figure 2-8
Kenya: Tea Production, Consumption, and Export, 1985-95



Source: Kenya Tea Board 1996.

Kenya produces high quality teas, though not on the same scale as India or Sri Lanka. The fetish for high quality in the KTDA has forced small tea growers of tea in Kenya to maintain the quality of their picking by staying with the two leaf and a bud practice. Estate farms have also strived for higher quality in the past to maintain their position in the quality tea segments of Europe. However, the push for higher and higher production levels has extended the picking to coarser leaf and eroded the quality of Kenyan tea (USDA, op.cit.). Two other factors that have contributed to the fall in quality of Kenyan tea are inadequate factory capacity and poor road and transport conditions. The industry's inability to handle the ever increasing production coupled with delays in leaf delivery to the factories have lowered quality of the final product.

Industry Structure

Organization: As discussed earlier, the Kenyan tea is produced in three types of farms, large private estates, smallholder farms and government run estates. The Kenya Tea Growers Association represents the private estates while the small holder interests are looked after by the Kenya Tea Development Authority (KTDA). The government estates are managed by the Nyayo Tea Zone Development Corporation (NTZDC). The private estates own and manage their factories for processing tea and the small holder tea

factories are managed by KTDA. The NTZDC uses KTDA's factories primarily and some private estate factories around Kericho.

The KTDA is a parastatal organization with representation from the government, the Tea Board, elected representatives of small growers, and a representative of the Commonwealth Development Corporation (CDC) in its 20-member Board. The organization is supposed to operate on a commercial basis and as a whole functions with reasonable degree of independence from governmental control. It has evolved with substantial inputs from the small holder farmers it serves. Its management is considerably decentralized at the zonal and factory levels. It has many problems, however. Lack of coordination among different units are often cited. The state's presence inherently takes away a lot of private sector initiatives from it. It also receives hidden or indirect subsidies from the government, tax exemption, and other perks of the government.

The other prominent organizations in the Kenyan tea sector are the Kenya Tea Board, the Kenya Tea Packers Ltd. (KETEPA), the East Africa Tea Trade Association (EATTA), the Tea Brokers Association, and the Tea Buyers Association. The Tea Board is the primary control organ of the tea industry and is responsible for licensing of growers, factories, the regulation of production and processing, marketing and export control, and tea research. The KETEPA is a packer/blender of tea for the domestic market and the largest supplier of packeted tea in the country. The EATTA is an association of all tea operators, individuals and firms, whose purpose is to promote tea trade and foster orderly marketing domestically and internationally. Its membership is extended to other countries like Uganda, Tanzania, Rwanda, Burundi, and other African tea producing countries. The Tea Brokers Association is a group of all tea brokers in Kenya. Brokers are appointed by producer members, the KTGA and KTDA. The Tea Buyers Association is a buyers group with local and overseas members. Their role is to foster the interest of tea buyers.

Profitability and Margins: Profitability from tea in almost all growing regions is high. The gross margin for tea in the East ranges from Kshs 43,433 to Kshs 75,967 per acre/year (Government of Kenya 1995, op.cit.). These margins are exceeded only by coffee and high value horticulture crops such as tomatoes, snow peas and French beans. In the Western districts the gross margin per acre on tea ranges from Kshs 12,288 to Kshs 36,894. Tea ranks first in Trans Nzoia and Kakamega, and second in Kisii (after Bababs) in gross margin per acre. The overall profitability of tea cultivation in Kenya is therefore high.

The net unit profit of tea export from Kenya in 1993 was Kshs 16.51 per kilogram which gave it a profit margin of 16.17 percent (FAO 1995-III, op.cit.). This compares with a 14 percent margin obtained in Tanzania, 12 percent in Zimbabwe, and 1.6 percent in Uganda UTGC. Among factors that affect profitability are international prices obtained for specific types of tea. Quality is a major factor in price determination and there is a premium for high quality tea in the world market. The highest and the lowest prices received for Kenyan tea at the Mombasa auction in 1994 were US \$2.13 and US \$1.54, respectively. On the supply side, Kenya's cost efficiency was a major factor behind profitability of tea export in 1994. Agricultural production cost in Kenya (KTDA) in this

particular year was 25 percent of the total cost of tea export, compared to 28 percent in Zimbabwe, and 36 percent in Tanzania. Manufacturing cost, however, was high in Kenya. This cost, including the cost of collecting green leaf, energy, interest payment, labor, management (overhead expenses), packaging and other manufacturing expenses, was 72 percent. Comparative manufacturing costs in Tanzania and Zimbabwe was 49 percent (FAO 1995, *ibid.*). Finally, marketing costs including transportation of made tea from factories to the auction center, warehouse fees, brokerage commission and other selling expenses was 7.94 percent in Kenya, compared to 14.5 percent in Tanzania and 21.8 percent in Zimbabwe. Overall, the tea export from Kenya is profitable.

Labor Force: There is a shortage of labor in the small holder sector for regular plucking rounds of tea bushes. This is a major factor behind the relatively lower productivity of this sector in comparison to the estate sector. The labor shortage is heightened during the harvesting of normal food crops, which coincides with one of the main plucking flushes. The labor shortage occurs primarily because wages in the small holder tea sector are low. Generally pluckers are paid Kshs. 2 per kg. during flush months and Kshs. 60 per day during low crop months. However, coffee pays much more – as much as Kshs. 15 per can.

Marketing

Kenya's tea is mostly sold through the Mombasa and the London auctions. However, a significant amount of direct sales also takes place to overseas traders and packers (Government of Kenya 1992, *op.cit.*). Kenya's principal export markets in 1995 are as follows:

<u>Importing Country</u>	<u>Export (Mn.kg.)</u>	<u>% of Total Export</u>
United Kingdom	76.27	32.1%
Pakistan	72.41	30.5%
Egypt	42.29	17.8%
Afghanistan	7.39	3.1%
Sudan	6.71	2.8%
All others	32.53	13.7%
Total	237.50	100%

Source: ITC Bulletin, 1996.

The United Kingdom and Pakistan are the two largest importers of Kenyan tea, totaling over 62 percent of the overall export. Other smaller, but important importers are Egypt, Afghanistan, and Sudan. In the Middle East and the CIS the market is strong for orthodox tea and in the Far East and North Africa the preference is for green tea, neither of which Kenya produces. The total dollar export in 1995 was 365.7 million.

Kenya Tea Packers Limited (KETEPA) is the largest domestic tea marketing agency in Kenya with 75 percent of the market share in 1994 (Government of Kenya 1995, *op.cit.*). There are an additional 20 or so other small tea packers who entered the market

after the market liberalization of 1992 which ended KETEPA's monopoly. But KETEPA still obtains its supplies directly from the Kenya Tea Development Authority and the Kenya Tea Growers Association (KTGA). All other packers have to buy their tea from the auctions paying additional transportation and warehousing charges.

The Tea Board of Kenya (KTB), which is the major agency for promoting export, also does some local promotion in the market. This is quite small and has fallen over the years. For example, the total promotional budget of KTB dropped from 38.49 million shillings in 1992-93 to only 2.03 million shillings in 1993-94. Domestic market promotion also dropped from 369,320 shillings to 214,729 shillings in the same period (Tea Board of Kenya 1994). The Tea Board canceled its membership to the USA, Canada, U.K, and German Tea Councils in 1993. Some promotional efforts were made in 1995 towards the markets of Sudan, Egypt, and the United Arab Emirates.

The major channel of distribution for Kenya's tea is the Mombasa tea auction which supplies both the domestic and the export markets. The agent for smallholder tea distribution and sale in the auctions is KTDA which operates through a number of appointed tea brokers. The larger tea estates also market most of their output through their own brokers in the auction. A certain percentage of tea is also sold privately to buyers abroad or to local dealers.

SRI LANKA

Production Area

The tea growing areas of Sri Lanka are characterized by their height, with low-grown areas up to 2,000 feet above sea level, mid-grown areas from 2,000 feet to 4,000 feet over sea level and high-grown areas over 4,000 feet. The high-grown areas of central Sri Lanka, consisting of such areas as Dimbula, Dickoya, and Nuwara Elia are the second largest of the three with about 37 percent of the total tea area, compared to 38 percent of the area for mid-grown and 25 percent for low-grown. The output of low-grown tea areas is the largest of the three (118 million kilograms in 1994), followed by high-grown (77 million kilograms) and mid-grown (47 million kilograms). The high-grown tea was the leader prior to 1983, when the rising demand from the Middle East (Iraq and neighboring countries) for heavy liquoring teas grown in the low areas surpassed the demand for the former.

Most of the tea growing regions of the west depend on the south-west monsoons between May and September. This has been rather erratic in the recent years leading to periods of severe drought and loss of production. In the east, the Uva and the Pussellawa areas generally are served by the north-east monsoon during October to January and produce a variety of extremely mellow flavor tea (Forrest, op.cit.). The soil, however, is not extremely fertile in Sri Lanka and demand a considerable amount of fertilization for

bearing good yields. Coupled with the prevalence of considerable amount of old tea bushes, it is a major retardant to high productivity.

The total area under tea in Sri Lanka in 1992 stood at 221,836 hectares, of which 61,371 hectares (28%) are small holdings of less than 20 hectares. The rest (160,465 hectares or 72%), is in the tea estates, either owned by private corporations or operated by the newly formed management companies (ITC, 1995). There has been almost no expansion in the total cropped area in the last ten years, although the smallholder sector has grown marginally (Table 2-6). Most of the tea processing facilities and storage warehouses are owned by the estates.

The area planted with tea has gone down over the years in Sri Lanka. For instance, in 1970 the total area under tea was 242,000 hectares with 237,000 hectares in private holdings and 5000 hectares under the state. In 1993, the area under tea stood at 193,000 hectares with 88,000 hectares under the private sector and 105,000 hectares owned by the government. Much of the area is planted with the older seedling tea. Since 1989, some replanting has replaced the older tea with the newer vegetatively-propagated (VP) tea. In

Table 2-6

Sri Lanka: Area Under Tea

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Estates	175,384	165,659	163,482	163,060	162,853	161,883	161,018	160,465
Small Holders	56,266	57,246	58,016	58,623	59,257	59,875	60,673	61,371
Total	231,650	222,905	221,498	221,683	222,110	221,758	221,691	221,836

Source: ITC Bulletin 1995.

1989, about 1,141 new hectares of tea were added and about 2,090 hectares replanted. At the same time a certain amount of derelict tea lands were abandoned. Since then, new planting and replanting efforts have been consistent through 1994.

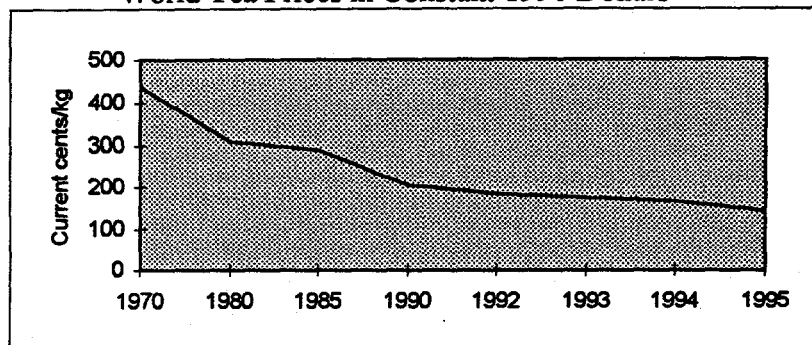
Sri Lanka is endowed with some very favorable agroclimatic zones that produce high quality teas. High grown areas of Sri Lanka produce many famous varieties of tea like the Best Western, Uva and Nuwara Eliyas. Some good quality "leafy" tea is also grown in the lower regions. Sri Lanka's concentration on the production of orthodox tea also enhances its quality image, as most quality teas are produced by the orthodox method. All these give Sri Lanka a strong position in the quality segment of the world market.

Production-Consumption and Export Trend

The shrinkage of the global market demand from the seventies through the early nineties has been quite traumatic for Sri Lanka. Tea has long been the main source of its foreign exchange earnings. It provided 26 percent of the country's total export earning in 1987. In 1995, however, this amounted to only 12.6 percent. (Central Bank of Sri Lanka 1995). Over the period from 1970 to 1995, the world prices for tea, in real terms, also fell

over 67 percent (Figure 2-9). This took a heavy toll on Sri Lanka's export earnings and the tea industry as a whole (World

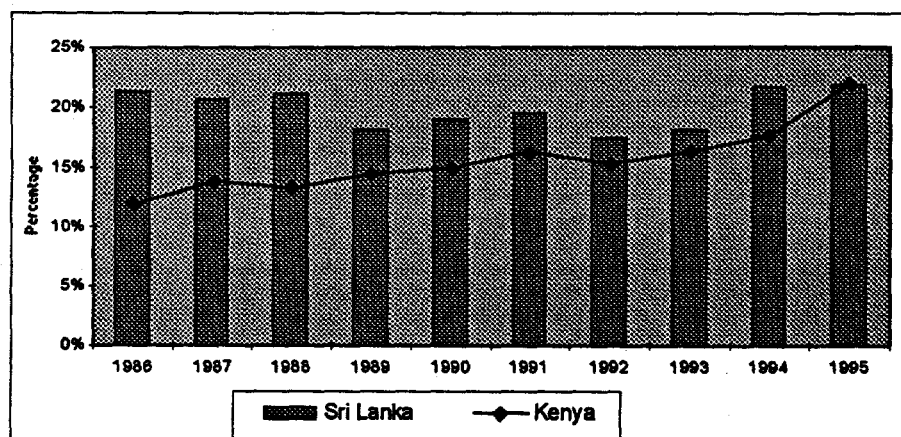
Figure 2-9
World Tea Prices in Constant 1990 Dollars



Source: World Bank, 1996.

Bank 1996, op.cit.). This situation was worsened by the harsh macroeconomic policies adopted by the country, which paralyzed the tea sector and ended with a gradual loss of competitiveness to other producers in Asia and Africa. The global market share of Sri Lanka fell from 40 percent in 1970 to 20 percent in 1990. Some recovery took place after the privatization of management of state owned plantations in 1993 raising this level to 21.8 percent in 1995. But for the most part of the decade (1986-1995) the share has remained relatively flat, in sharp contrast to Sri Lanka's biggest competitor Kenya whose share in the same period rose prominently from 12 percent to 22 percent (Figure 2-10). Kenya, thus became the largest tea exporting country in the world in 1995 overtaking Sri Lanka by 0.2 percent of the market.

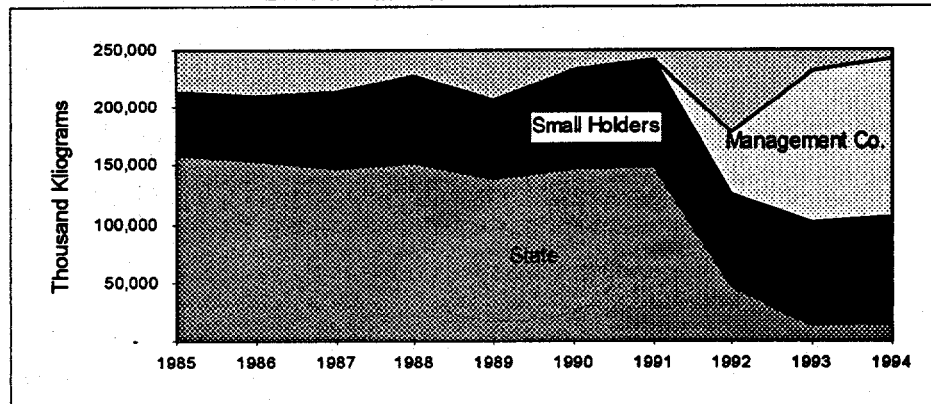
Figure 2-10
Changing Global Market Share of Sri Lanka in Comparison to Kenya
1986-1995



Source: ITC Bulletin, 1996.

After staying many years below the 215 million kilogram level, Sri Lanka's tea output rose to almost 227 million kilograms in 1988 (Figure 2-11). There was a slump the following year and then a steady rise to 240.7 million kilograms in 1991. Another slump, created by wide spread drought, pushed output to its lowest level in over a decade (179 million kilograms).

Figure 2-11
Sri Lanka: Tea Production 1985-94

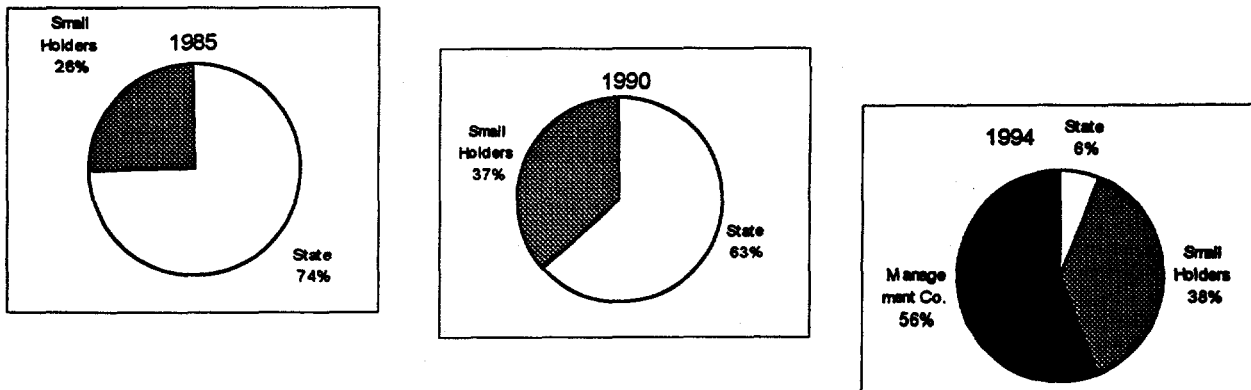


Source: Government of Sri Lanka, Plantation Sector Statistical Pocket Book, 1995.

In 1993, the country made a significant recovery after the previous year's drought and increased production by 30 percent to 232 million kilograms, aided by private management, trade liberalization, and favorable weather conditions (FAO 1995-II, op.cit.). Again in 1994, Sri Lanka achieved a record crop of over 242 million kilograms under the momentum generated by the private management companies. Production increased by 2 percent over the previous year to hit a high of 246 million kilograms in 1995 (FAO 1996, *ibid*).

Of the total area of 221,836 hectares under tea cultivation in Sri Lanka, 61,371 hectares (28 percent) was under small holders of less than 20 hectares in 1992. The remaining 160,465 hectares (72 percent) was owned by the state. The state lands produced 74 percent of the tea in 1985 and the small holders 26 percent (Figure 2-12). This pattern has changed over time and in 1990 the contribution of the state sector declined to 63 percent, and the balance 37 percent was produced by the small holder sector. In 1992, most of the government estates were leased out to private management companies, who produced 56 percent of the output in 1994, compared to 38 percent by the smallholders and only 6 percent by the state. Small holder tea has thus made gradual inroads into the overall production base.

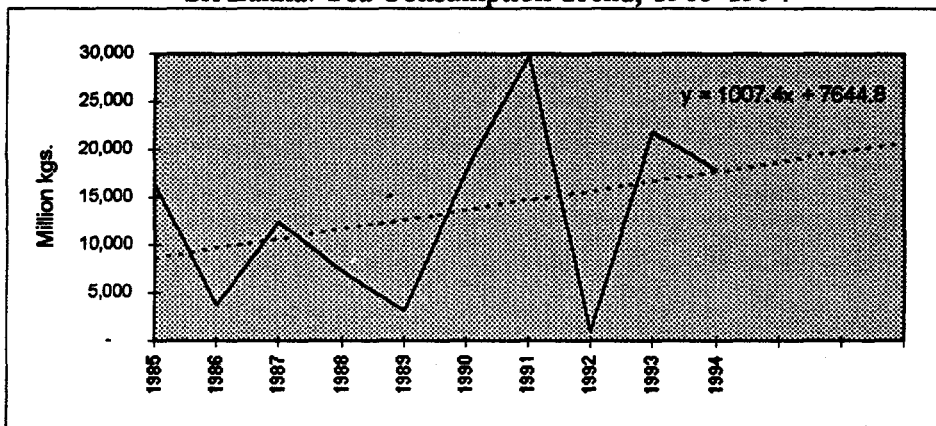
Figure 2-12
Tea Production in State, Small Holder and Management Co. Estates
1985-1994



Source: Government of Sri Lanka: Plantation Sector Statistical Pocket Book, 1995.

It is difficult to estimate the extent of domestic tea consumption without data on inventory holdings each year. Under the assumption that the amount retained after export was consumed internally, the average consumption of tea between 1985-1994 was 13 million kilograms per year, or about 5 percent of gross output. This amounts to a per capita consumption rate of about 0.72 kilograms per year. Future growth trend (Figure 2-13) also shows only a modest increase of about a million kilograms per year.¹¹

Figure 2-13
Sri Lanka: Tea Consumption Trend, 1985-1994



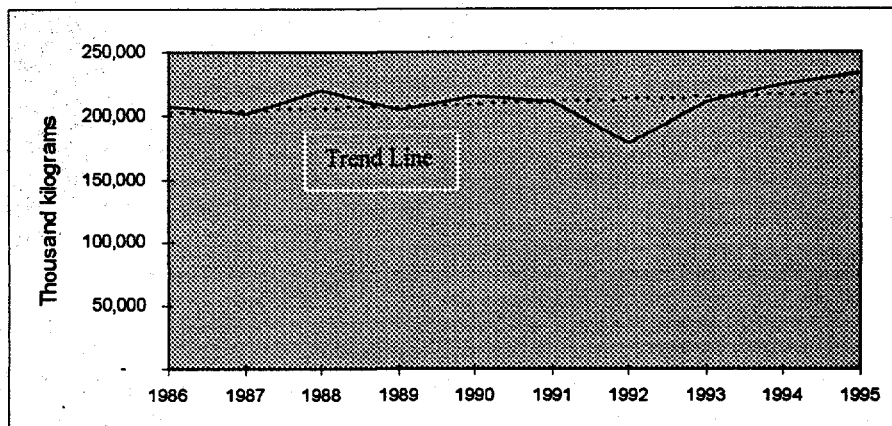
Source: Sri Lanka Plantation Sector Statistical Pocket Book, 1995.

Sri Lanka's tea export trend has been relatively flat in the last decade, hovering around the 220 million kilogram mark (Figure 2-14). The year 1992, however, was a disastrous year for Sri Lanka's tea. The industry was hit with a severe draught for the

¹¹ Forecast based on linear regression trend between 1985-94.

greater part of the year which reduced output by almost 30 percent (Forbes and Walker 1992). Projections in June 1992 indicated a drop from 53,800 tons recorded in 1991 to 37,66 tons in 1992 (FAO 1992). The drought also affected many other tea exporting countries, like India, Kenya, and Malawi.

Figure 2-14
Sri Lanka's Tea Export Trend 1986-95



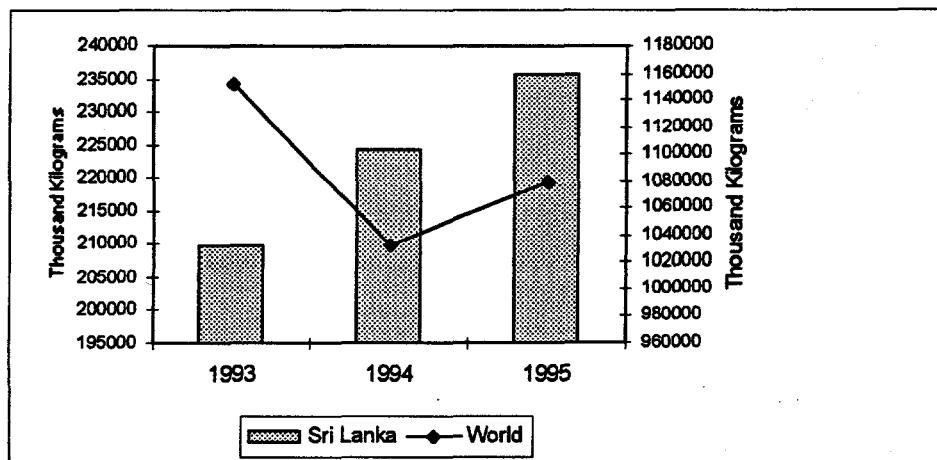
Source: Sri Lanka Plantation Sector Statistical Pocket Book, 1995.

The world demand for tea also fell in 1992. Changes in the former Soviet Union (FSU), in particular, affected Sri Lanka's export quite adversely. Russia used to buy substantial amount of high quality tea from Sri Lanka. But after its disintegration and mounting economic problems, it diverted its purchase to lower grade tea from other sources. Shipment to the FSU totaled only 5,000 tons in 1991, down markedly from the 14,100 tons recorded during 1990. Iraq, another large buyer of Sri Lankan tea, was absent from the market in 1992 – due to the UN trade embargo – and ended up buying low priced tea through Jordan. Many large Middle East buyers also cut back their purchases in 1992. Iran, one of the biggest buyers of Sri Lankan tea, cut back almost 7 million kilograms. Jordan, the biggest buyer of Sri Lankan tea in 1991, went down from 31.4 million kilograms to about 21.8 million kilograms and the United Arab Emirates, which had purchased nearly 10 million kilograms in 1991, bought only about 4 million kilograms in 1992.

Export recovered in 1993, rising by 18 percent to 210 million kilograms. However, the slump in world price produced a decline in the nominal export unit value of 8.3 percent (FAO 1995, op.cit.). The overall volume of the world tea trade declined by about 10 percent in 1994. In spite of the sluggish market, however, Sri Lanka's export continued to increase, reaching a record of 224 million kilograms – about 7 percent higher than the previous year. The weak import demand world-wide continued in 1995 but Sri Lanka experienced increases in both volume and prices of export resulting in higher export revenues. This increase, however, came mainly from export to one particular area – the CIS, which increased its import of Sri Lankan tea from 12.7 million kg. in 1994 to 37.99

million kg. in 1995. From the past three year's perspectives, therefore, Sri Lanka has performed quite well in the declining world market (Figure 2-15).

Figure 2-15
Sri Lanka's Tea Export Relative to World Export, 1993-95



Source: FAO, *Tea Market Development Report 1996* and ITC *Bulletin 1996*.

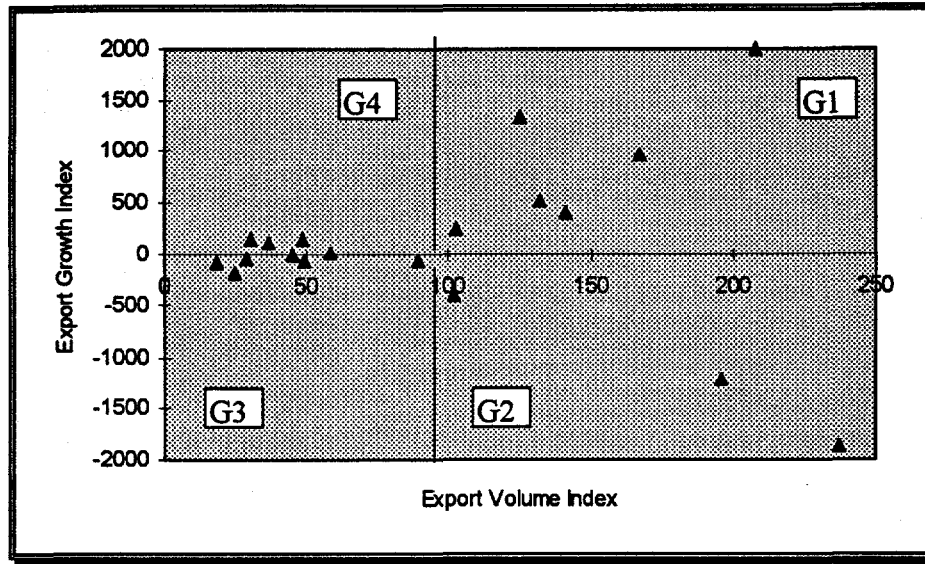
The direction of trade from 1989 to 1994 shows strong export performance by Sri Lanka in countries like the USSR/CIS, Jordan, the United Kingdom, Saudi Arabia, Syria, and the United Arab Emirates (labeled G-1 countries). Both the tea export growth index¹² and the tea export volume index¹³ for all these countries have been positive and strong, respectively (Figure 2-16). Not only have the imports of tea of these countries from Sri Lanka been high, but the imports have shown positive growth over the years. In the country group (labeled G-2) consisting of Egypt, Iran and Pakistan, the export volume has been high but the growth rate negative. Export performance in the third country group (labeled G-3) consisting of Canada, USA, Italy, Libya, Kuwait, and Yemen has been poor both in terms of volume and growth. The fourth group (labeled G-4) consisting of Germany, the Netherlands, Japan, and Australia have shown positive import growth, although their volumes of import of Sri Lankan tea have been small.

The composition of tea exported from Sri Lanka have slowly shifted from bulk tea to more value added forms. In 1980, bulk tea accounted for 83 percent of its total export. In 1994, this figure declined to 68 percent (Figure 2-17). At the same time, export of packet tea went up from 17 percent to 27 percent. The export of tea bags also went up from less than 0.1 percent in 1980 to 3 percent of total tea export in 1994.

¹² The export growth index is the annual export growth to a country determined through a linear regression trend line respective to the average annual export growth to the top 20 importers. Index = (Export growth to country X / Average export growth to 20 top importers of Sri Lankan tea) x 100.

¹³ The export volume index is the volume of imports of a country respective to the average imports of the twenty top importers of tea from Sri Lanka. Index = (Export to country X / Average exports to 20 major importers from Sri Lanka) x 100.

Figure 2-16
Relative Export Volume and Export Growth of Major Sri Lankan Tea Importers

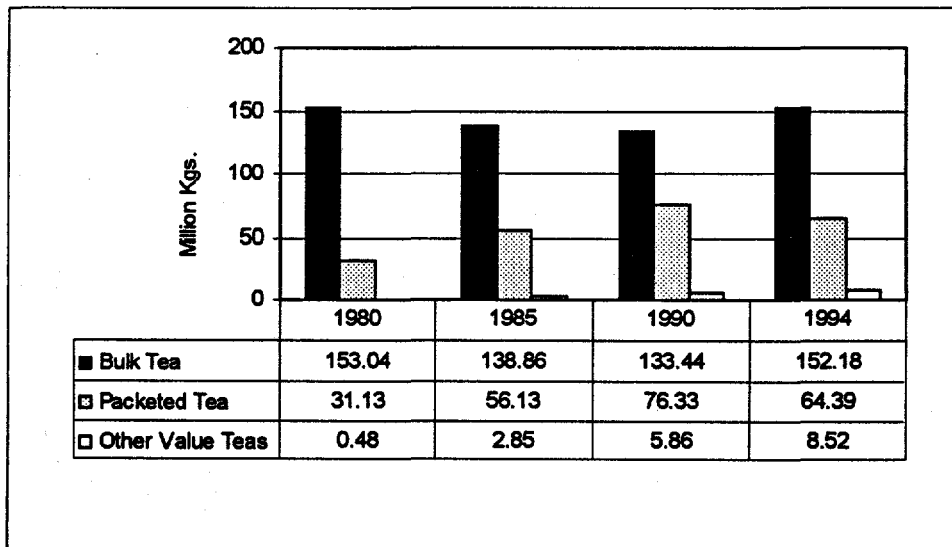


	G-1						G-2		
	USSR/CIS	Jordan	U.K	S'Arabia	Syria	UAE	Egypt	Iran	Pakistan
Volume Index	132	208	141	102	167	125	237	196	102
Growth Index	510	1996	398	248	959	1342	-1862	-1228	-399

	G-3						G-4			
	Canada	U.S	Italy	Libya	Kuwait	Yemen	Germany	N'lands	Japan	Australia
Volume Index	25	45	29	89	19	49	48	36	58	30
Growth Index	-184	-9	-46	-60	-95	-69	152	98	11	136

Source: Authors' estimate.

Figure 2-17
Composition of Tea Exported from Sri Lanka, 1980-1994



Source: Sri Lanka Plantation Sector Statistical Pocketbook, 1995

Industry Structure

Institutions and Environment: Tea was one of the major agricultural commodities that spurred Sri Lanka's economic growth after independence in 1948. However, the path of its development has been somewhat like that of a roller coaster, rising and falling according to changes in the political ideology at home and economic forces in the international market for most of the period that followed. The first downturn started with the decline of prices in the world market for tea and rubber in the mid-fifties, which considerably weakened its economic and financial performance. A second series of events, covering most of the seventies, culminated in an ideological move towards tight state control which created a huge government bureaucracy that almost choked off any development of the tea industry.

Except for a brief period of liberalization from 1968 to 1970, the government's intervention in the production and marketing of tea was pervasive until about 1977. The Land Reform Laws of 1971 and 1975 limited private holdings to a maximum of 20 ha. and led the government to takeover more than 500 tea, rubber, and coconut estates from private landowners. It placed 532 of these estates under two state corporations, the Janatha Estate Development Board (JEDB) and the Sri Lanka State Plantation Corporation (SLSPC), which together controlled 110,000 ha. of tea (50% of the total) as well as more than 400 factories. The tea industry thus broke up into two segments: the state plantation segment consisting of all the nationalized tea estates over 20 hectares and the small holder segment consisting of producers with less than 20 hectare (nearly 160,000 individual holdings). The nationalization placed just over half the tea land under state control, and its powerful influence shaped the industry dynamics for the next two decades. Between 1972 and 1992, misdirected sectoral planning and policies, combined with total government control over production and marketing of tree crops, left the sub-sector completely without direction for future growth and international competitiveness. Under these conditions, neither the state nor the private sector could function efficiently. In 1985, a Medium Term Investment Program, co-financed by the International Development Association (IDA) and the Asian Development Bank (ADB), was implemented to rehabilitate and improve the declining productivity of the public estates. Under this program, the Fourth Tree Crops Project was completed in 1992. A similar project, titled the Tea Small Holder Development Project and targeted towards the private sector, was started by the ADB in 1989.

In 1992, 449 Government tea, rubber and coconut estates were detached from the two State Corporations that managed them and consolidated into 22 government owned regional joint stock companies, each holding 20-25 estates. Taking a 99 year lease of the land, these companies started operating in June 1992 with a six-member Board of Directors appointed by the Government. Simultaneously, the staff and facilities of 11 of the 12 Regional Boards of JEDB and SLSPC were transferred to these companies. The management of these companies were in turn contracted out to 22 private companies under a profit-sharing plan. The initial contract period was for 4 1/2 years expiring in December 1997. The intent behind this restructuring program was to begin the

privatization of the sector in stages, starting with management contracts and eventually moving towards full divestiture (Government of Sri Lanka).

After the break up, the two state corporations were also left with 52 non-viable estates, covering 19,288 hectares. These estates were considered non-viable because they had losses in each of the previous 5 years and the yields of tea and rubber were below 1000 kg/ha in each year during the same period.

The change over to private management did not yield the anticipated improvement on the output and productivity front for the first two years due to a number of constraining factors. The most important constraint was the taking away of the companies' power to deal with labor problems by continuous Government dictation of wages and other employment terms. Labor constitutes 65% of the cost of production in the tree crops industries and increasing wages without productivity enhancement was bound to depress profits and any incentives for new investment. The other major problem was the ambiguity of property rights. The 22 regional companies were fully owned by the state and the managing companies were merely their operating agents, not directly responsible for financing capital development or the ongoing operations. This left the sector without any source for development and maintenance finance outside of Government contribution, which was precarious. The short-term capital requirement of these companies were met from bank overdrafts, which by the end of December 1992 had run up to 640 million rupees.¹⁴ With a lack of access to development capital, nothing outside the bare essential maintenance and daily operations was undertaken in the estates.

In 1995, the government started privatizing the 23 estate firms by selling 51 percent of the shares of the firms through open bids. By May 1997, 14 companies were sold and the stocks of six of these were trading in the stock exchange. The sale of the remaining firms were expected to be completed by the end of 1997.

Productivity: The estates have the best tea producing land in Sri Lanka and they produced 62.5 percent of the country's total output of tea in 1994 (Table 2-7). In spite of this advantage, their average productivity was only 1323 kg/ha compared to the smallholder productivity of 1481 kg/ha, in 1994.

Table 2-7
Estate and Private Sector Output and Productivity

Year	1990 '000 kg	1994 '000 kg	1994 Share	1994 Productivity
Estates	147,200	151,300	62.5 %	1323 kg/ha
Private Small Holdings	85,900	90,900	37.5%	1481 kg/ha
TOTAL	233,100	242,200	100%	

Source: *Plantation Sector Pocket Book, 1995.*

¹⁴ Minutes of Meeting of PRU with World Bank Mission (1993), dated March 11.

Productivity on the scattered tea holdings in Sri Lanka shows extremes. The government estate plantations, located mostly in the upper and middle countries, have much lower productivity than private small holdings in the low country (Table 2-7).¹⁵ The public estates' average yield in 1991 was about half of that of private holdings. The intakes per plucker were also about half. Clearly, estate laborers under public management had performed well below capability. The loss of productivity in the estates, due to many different causes, was quite substantial between 1991 and 1993. After privatization, the estates did show a recovery back to the productivity level of 1991 (1260 kg/ha in JEDB managed estates). The productivity level further increased in 1994 to 1323 kg/ha, but was still below major international competitors. Of course, it must also be understood that the

Table 2-8
Tea Productivity and Profitability, 1991
Sri Lanka and Other Major Producers

	Sri Lanka		N. India	S. India ¹⁶	Kenya ¹⁷	Indonesia	Zimbabwe ¹⁸
	State	Private*					
Yield (kg /ha)	1,268	2,442	1,643	2,443	3,500	1,645	7,800
Intake per man-day	13.52	24.59	26.22	25.24	55	NA	68
Labor per ha	3.21	2.70	2.67	2.50	2.20	NA	NA
COP (\$/kg)	1.8719	1.54	1.52	1.39	1.44	NA	0.64
Labor Cost (as % of COP)	50	NA	39	50	NA	NA	NA
Revenue (\$/ha) ²⁰	2574	4957	4318	4669	4338	NA	NA
Gross Profit (\$/ha)	203	1196	1085	1472	2438	NA	NA

NA = not available. * Low grown only (75% of private production).

Source: FAO 1995-b, Tea Board of India 1995, World Bank Consultant Henderson Report, Table K; FTCP PCR, 1992, Annex-I, Table 18; Plantation Sector Statistical Pocket Book, 1993, USDA Annual Tea Report, 1992.

¹⁵ The low country yields are higher primarily because of predominance of the vegetatively propagated (VP) variety of tea as compared to mostly old seedling variety in the up and mid countries.

¹⁶ Data source: Tea Board of India, 1995 and Government of India 1996.

¹⁷ Based on FAO study of four African tea producers, 1995. The average small holder tea yield in Kenya in 1994 was 1,811 kg/ha (KTDA Restructuring Study 1995).

¹⁸ Ibid.

¹⁹ 1991 state sector COP = Rs. 79.55 = \$ 1.87

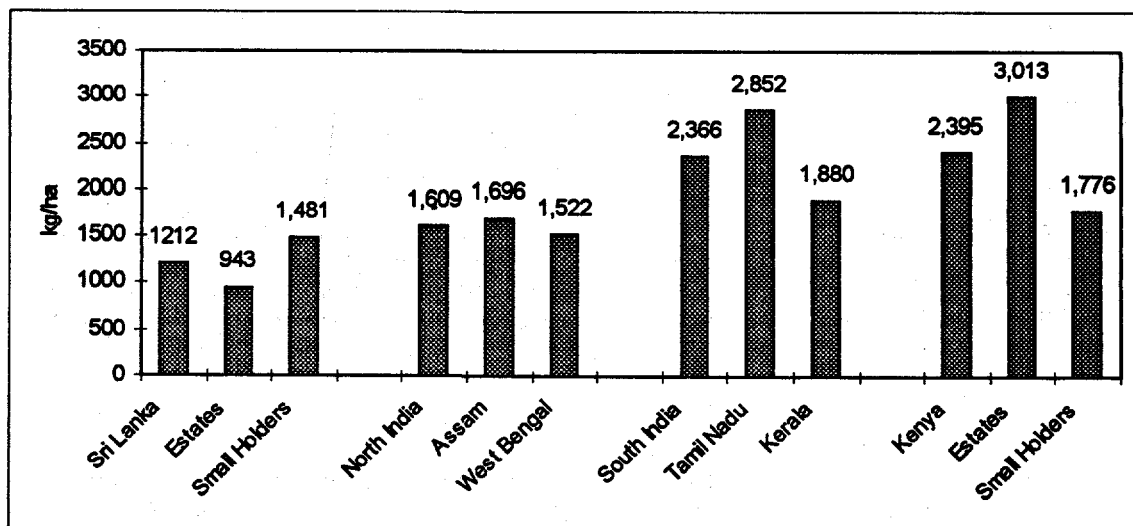
²⁰ FOB price in 1991 was \$2.03/ kg.

average productivity figures hides a lot of variation among different types of plantation land. For instance, the highest yield received in 1994 at the Watawala estates exceeded 2,500 kg/ha, whereas the yield obtained at the Maskeliya Koslande estates was only 348 kg/ha.

Tea yields in Sri Lanka are among the lowest in the world (Table 2-8). However, according to a 1991 study, the yields on some of Sri Lanka's private small holdings have long exceeded those of their closest competitors, India and Kenya (Figure 2-18). For instance, the average estate yield was only 31 percent of the average yield in Kenya's estate sector, 59 percent of the average yield in North India, and 40 percent of the average yield in South India. In comparison, Sri Lanka's small holder yields were 83 percent of the small holder yields of Kenya, 92 percent of the average North Indian yields and 63 percent of the average yields in South India.²¹

The low productivity in the estates is partially due to the nature of their vegetative stock. These plantations are located mostly in the upper and middle countries with a preponderance of the old-seedling variety of tea. Only about 37% of the bushes are of the high-yielding vegetatively-propagated (VP) variety. In contrast, most of the private sector tea lands are in the low country, which have been planted with the VP stock. Other productivity enhancing measures such as timely and proportionate application of fertilizer and proper agronomic care of the tea bushes have also been lacking. Some of these problems are now being addressed by the privatized plantation companies.

Figure 2-18
Tea Productivity in Major Competing Countries, 1994



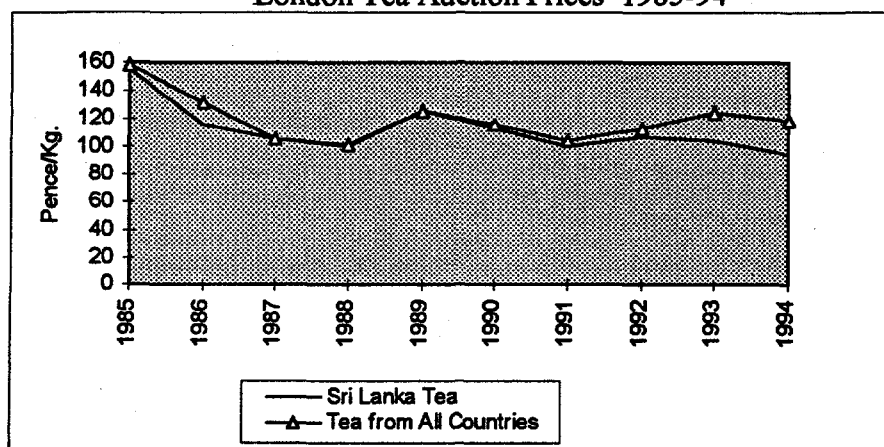
Source: ITC 1995, India Tea Board 1995, KTDA Restructuring Study 1995.

²¹ Data sources: ITC 1995, Tea Board of India 1995, Kenya Tea Development Authority Restructuring Study 1995.

Cost of Production and Profitability

Profitability of Sri Lanka's tea industry is determined by international prices, domestic cost of production, and taxes and tariffs. International prices have been extremely competitive in the past 10 years, due to the emergence of low-cost producers such as Kenya. The average London auction prices for Sri Lankan tea have been lower than the average price of tea from all countries since 1987 (Figure 2-19).

Figure 2-19
London Tea Auction Prices 1985-94



Source: Sri Lanka Plantation Sector Statistical Pocket Book, 1995

Prices for Sri Lanka's volume-traded tea going through the Colombo auction have also been low compared to directly marketed packaged value-added tea (Table 2-9).²²

Table 2-9
Export Price of Different Types of Tea

	1980	1985	1990	1991	1992	1993	1994
Bulk Tea	32	56	87	78	76	84	80
Packeted Tea	41	68	95	89	81	90	96
Tea Bags	78	100	165	180	209	236	245
Instant Tea	103	211	283	299	355	428	427
Green Tea		65	90	63	68	94	116
Other High Value Teas	99	90	75	88	58	143	240

Source: Sri Lanka Plantation Sector Statistical Pocket Book, 1995

The high cost of production is perhaps one of the most critical issues for Sri Lanka's tea industry because it has two profound effects on future prospects. First, it makes the industry non-competitive in the world market. Second, it lowers profitability for the producers and thus deters new investments.

²² See also Section I of the Background Paper for the Sri Lanka Tree Crops Sector Report, SA1AG, World Bank, September 1993

In the period 1980 to 1988, the average cost of production of private and small-holder tea producers was substantially less than the government estate sector (Tables 2-10 and 2-11). For example, in 1988 the private/small holder cost of production (Rs 36.89 per kg) was 32 percent less than the estate sector. The private sector also had positive income margins in most of the years during this period, but the public managed state sector had just the opposite. Thus, despite the general failure of the industry to contain production costs, the private sector did quite well and maintained its competitiveness with the rest of the world.

In the post liberalization period after 1992 when the private management companies took over, they faced the immense problems of rising wages and stalled productivity. Their efforts to increase productivity through changes in planting cultures and better husbandry produced better results, but the cost of production increased due to government interventions in the labor market. After 1992, the net sales averages also improved, but the margins still remained negative. This points to the fact that besides productivity improvements, the plantations have to enhance the sales value of their product, either through better marketing or through better breeding.

To a large extent yield determines the margin of profit obtained from a unit of land, which is important from an investment perspective.²³ Table 2-8 shows the profit from a hectare of land in Sri Lanka compared to India's in 1991. Sri Lanka's estate sector profit per hectare of land was less than one third of India's. After 1992, however, many of the plantations under private management have shown positive profit increases, which indicates that the profit potential of the sector is still good. With appropriate management and infusion of correct technology backed by strong marketing, the sector could be very profitable.

Factors Affecting the Cost of Production

Yields: Increasing yields per hectare lowers the cost of production by reducing the unit overhead cost. Excluding land rent (which is less than 1% of production cost),²⁴ the main fixed cost element on state plantations is indirect labor (around 50% of production costs).²⁵ Since the number of workers and work days in Sri Lanka's tea estates is constant regardless of output, almost all labor has to be treated as fixed. The average cost of production is thus influenced heavily by fixed labor costs. Research done in the past by

²³ Higher yield means higher revenue and higher gross margin per land unit. Since Gross Margin, or the difference between revenue and variable cost, goes to meet fixed costs and profit, if the fixed cost is very low, margin equals profit, and higher margin equals higher profit per unit of land.

²⁴ Estimated land rent, in line with GOSL general practice of charging 4% of the market value of undeveloped land, is Rs. 650 per hectare. See Maxwell Stamp, "Sri Lanka Taxation and Lease Rent Study", SA3AG Division, World Bank, January 1992, p.58. If the output is 1,268 kg/ ha, the cost of land utilization is Rs. 0.51/ kg.

²⁵ Indirect labor, in general accounting terms, is labor used for general purposes not related to a specific output. It is an overhead cost.

Table 2-10
Private-Sector Cost of Production and Margins 1980-88
(Rs/Kg)

Year	Cost of Production	Net Sales Average*	Producer Margin	Difference State vs. Private
1980	12.94	17.73	4.79	>200%
1981	14.03	17.71	3.68	>200%
1982	18.29	22.52	4.23	>200%
1983	21.74	36.96	15.22	30%
1984	29.69	46.45	16.76	70%
1985	31.48	35.39	3.91	166%
1986	31.59	30.28	-1.30	81%
1987	33.95	38.06	4.11	184%
1988	36.89	41.59	4.7	163%

* Net Sales Average is the average sales price of tea from different sources.

Source: ADB, Crop Production Incentive Study, 1990, Chandramani, 1991.

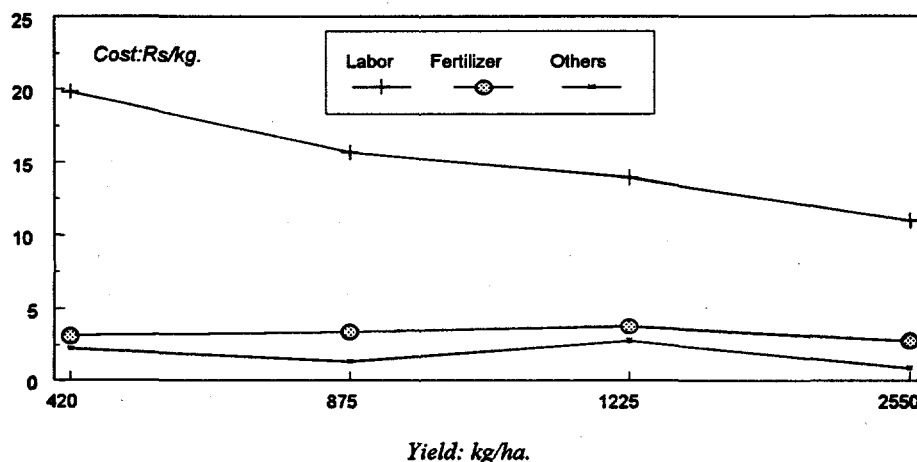
Table 2-11
State-Sector: Cost of Production and Margins, 1980-94
(Rs/Kg)

Year	Cost of Production	Net Sales Average	Producer Margin
State Corporations			
1980	17.94	17.42	-0.52
1981	19.03	17.53	-1.5
1982	23.28	22.85	-0.43
1983	28.41	40.13	11.72
1984	34.45	44.30	9.85
1985	38.32	32.43	-5.89
1986	38.07	31.20	-6.87
1987	42.22	37.38	-4.84
1988	48.83	41.30	-7.53
1989	56.41	57.08	0.67
1990	60.4	62.08	1.62
1991	61.0	56.09	-4.91
Management Companies			
1992	81.63	66.45	-15.18
1993	77.56	66.15	-11.41
1994	74.23	64.40	-9.83

Source: Chandramani, 1991; ADB Crop Production Incentive Study, 1990, Sri Lanka Plantation Sector Statistical Pocket Book, 1995.

the Ministry of Plantation Industries has shown that higher labor output could result in big reductions in the cost of production (Figure 2-20).²⁶ Some yield improvement have brought down the per unit cost of production in the private managed or owned estates in the recent years.²⁷

Figure 2-20
Factor Costs and Yield Relationships in Sri Lanka's Tea Estates
FACTOR COSTS & YIELD RELATIONSHIPS



Source: Authors' estimate.

A comparison of the estate-sector's yields and costs of production between the pre-liberalization period of 1985 to 1992 shows that yield growth declined at 1.63 percent and the cost of production went down by a scant 0.03 percent per annum (Table 2-12). The scenario changed quite a bit after the private management companies went into operation in 1992. Between 1992 and 1994, average yields went up 15 percent and the cost of production declined 14 percent, indicating the effectiveness of the privatization.

Table 2-12
Yields, COP and Labor Productivity in Estate Plantations
1985-1994

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	Growth Rate 1985-1992	Growth Rate 1992-1994
Yield (kg/ha)	1206	1205	1197	1257	1182	1226	1224	960	1271.0	1323.0	-1.626%	15%
Real COP (Rs/kg)	36.0	33.9	33.6	34.5	34.6	32.7	30.5	36.3	30.9	27.3	-0.031%	-14%
Output per Employee(kg)	356.6	357.7	354.7	372.9	338.8	353.1	354.8	280.3	409.1	443.4	-1.968%	22%
Real Wages	24.5	24.3	24.0	27.5	27.4	26.8	25.9	27.5	28.8	29.4	-0.082%	3%

Source: Plantation Sector Statistical Pocket Book, 1995 and Central Bank of Sri Lanka Annual Report, 1995

²⁶ The results are based on a 1986 study of production patterns in the private sector.

²⁷ In the small holder sector, where labor has a large variable cost component, the effect of yields on the cost of production may be less pronounced.

Labor Force: Size and Wages: Between 1985 and 1991, while the plantations were still under state management, the total labor force increased at the rate of 12.8 percent per annum, from 220,296 to 389,549. After 1991, however, when the private managers took over, the number of workers declined by about 6.6 percent per annum to 310,553 in 1994 (GOS 1995).²⁸ Labor wages also went up 3 percent per annum in real terms during the later period and real wage rates for both male and female workers rose Rs. 3.6 per day. In fact, real wage rates have been fairly stable between 1985 to 1994, rising only Rs. 4.9 in the 10-year period. Employee productivity, however, grew at an impressive rate of 22 percent per year (Table 2-12).

Labor Productivity: Relative to a wage increase of 3 percent, the productivity of labor in state plantations rose at a phenomenal rate of 22 percent per annum after privatization. Prior to 1992, the growth rate of output per employee was negative 1.97 percent per annum between 1985-1991. The leaf intake per plucker on state plantations in 1991 was about 13.52 kg per person day, compared to 24.59 kg. for private sector workers (Table 2-8). In 1991, the intake per plucker on Sri Lanka's plantations are about half of that of India and Kenya, as well as the private smallholdings in Sri Lanka itself. This is because the plucking norms were set too low, in a joint agreement between the Ceylon Estates Employers Federation and Labor Unions, with no relations to varying productivity of different estates and no discretion of estate superintendents to adjust these norms. Moreover, a 1987 study showed that only 29% of the standard plucking norm was actually achieved by JEDB.²⁹

Low labor productivity adds to low yields and raises the cost of production. In South India, where the agro-climatic conditions and the productive stock are similar, the average yield is 2,127 kilograms per hectare, compared with Sri Lanka's 1,323 (achieved in 1994). Some of the other reasons are a failure to use sound agricultural practices, poor or improper replenishment of the productive stock (tea bushes), and insufficient investment.³⁰

Yield versus the Cost of Production

The reason behind the difference in estate and private cost of production (COP) is that in the estates most of the labor cost is fixed (indirect labor) due to mandatory employment rules imposed by the government. In the private lands, however, labor cost is mostly variable since the small holders depend mostly upon family labor and only partly upon hired labor for specific cultivation periods.

Since the cost of production decreases with increasing yield, due to the large indirect component of labor cost, it is indicative of a significant scale economy within the

²⁸ Government of Sri Lanka (1995), Ministry of Public Administration, Home Affairs, Plantation Industries and Parliamentary Affairs, Plantation Sector Statistical Pocket Book.

²⁹ Study by R.K. Nathaniel cited in the Core Group's Report (1989).

³⁰ Government of Sri Lanka, Report of the Core Group on Improving the Viability of the Estate Plantations (1989).

industry (ADB 1990, op.cit.). Research done by the Ministry of Plantation Industries in 1986³¹ shows that the maximum reduction in the cost of production is associated with better labor use with higher output. This is shown in Table 2-13 and Figure 2-20. The study confirms that labor cost is not entirely variable in estate plantations.³² This fixed component of labor cost comes from factors like guaranteed six-day weeks, which pays people even if there is no work for them. Depending upon the nature of the estate, its size, and labor force, the cost of production could be decreased significantly with higher yields.

Table 2-13
Relationship Between Yield and Factor Costs

Average Yield Level (kg/ha)	420	875	1225	2550
Labor Cost (Rupees/kg)	19.80	15.65	13.91	10.93
Fertilizer Cost (Rupees/kg)	3.15	3.38	3.73	2.79
Other Cost (Rupees/kg)	2.25	1.31	1.17	0.86

Source: Authors' estimates.

Taxes and Subsidies

Before the abolition of export duty and ad valorem tax in December 1992, the entire tree crop subsector in Sri Lanka bore heavy direct and indirect taxation. Today, the only remaining commodity tax on tea is the tea cess, a levy that producers pay for the government's financing of activities benefiting the sector (R&D, tea promotion, subsidies for replanting, replacement of plant and machinery and administration of the Tea Board). The current cess is Rs 2.35 per kg., levied as the Tea Board cess (Rs.2) and the Medical Aid cess (Rs. 0.35). Some of the cess goes to small holders in the private sector as subsidies. State plantations were not eligible for subsidies because they had access to favorable loans from international financial institutions.

The subsidies fall into four categories (ADB 1995, op.cit).

- Field rehabilitation and development subsidy, for long-term upgrading of production facilities, such as new planting, replanting, and infilling.
- Factory development subsidy, for increasing the efficiency of tea processing and converting from orthodox to CTC varieties.
- Short-term production subsidy to meet, for example, falls in tea price or rises in input costs. These include a tea fertilizer subsidy and one for green leaf supply.

³¹Results are based on a study of production pattern in the private sector.

³²This 'fixed cost' component of labor is apparent from the chart in Table 5-12. The intercept of the labor cost curve with the y-axis is the fixed labor cost.

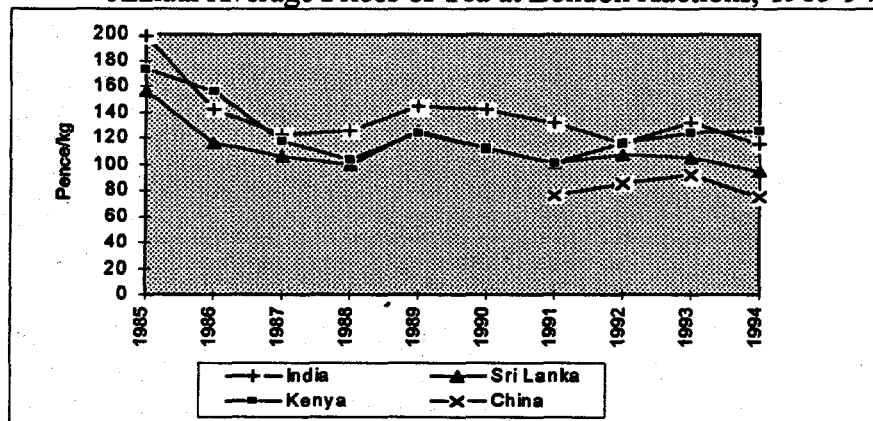
- Marketing subsidies, in the form of tea promotion grants, import duty rebates, Export Development Board grants, and the like.

The subsidy scheme, financed entirely from the cess, is tax neutral since revenues are fed back into the subsector. However, its equity and efficiency are open to question. The cess is collected from all producers but paid out to only those meeting certain criteria. Moreover, the failure to allow the marketplace to allocate resources is an inefficiency in itself. The cess only funds a small part of spending on replanting and factory conversion; the rest comes from the government's budget. Also, the cost of administering the cess-subsidy scheme is high.

International Competitiveness

The average price of Sri Lankan tea in the London auctions has remained well below all major competitors except China during the period 1985 to 1994 (Figure 2-21). The exchange rate of the Sri Lankan Rupee is a major determinant of this price. The Rupee was overvalued by 15 percent against major currencies until October 1989, which amounted to an indirect tax of Rs. 5.50 per kilogram on tea exports (ADB 1990, op.cit.).³³ The Rupee declined in value against the U.S. dollar by 6.4% in 1992 and its effect on competitiveness of tea prices is evident (Table 2-7). Further adjustments in 1993 have brought it closer to the equilibrium rate and the problem is no longer significant.

Figure 2-21
Annual Average Prices of Tea at London Auctions, 1985-94



Source: ITC Bulletin, 1995.

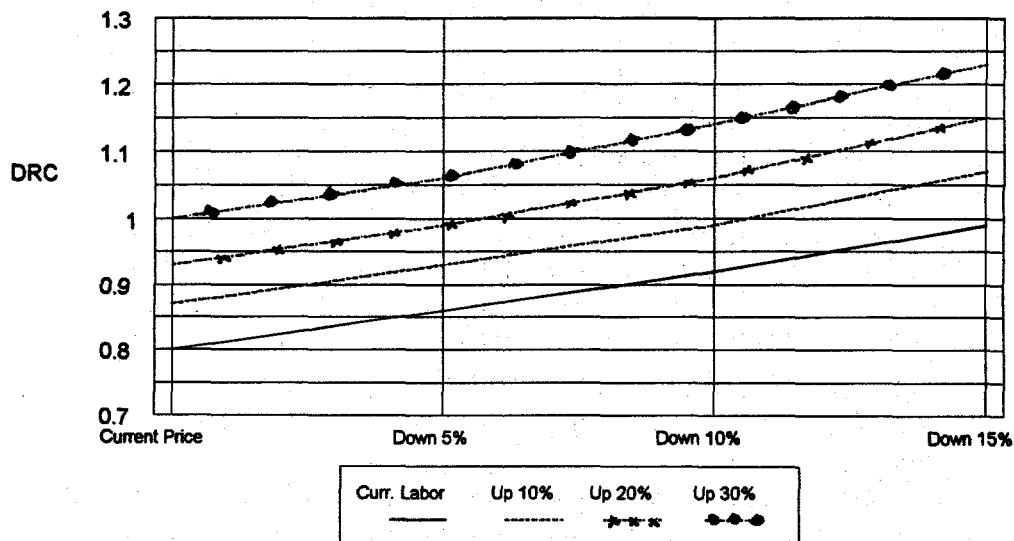
Production costs are the basis for determining the comparative advantage of a particular commodity, as measured by the domestic resource cost (DRC) ratio.³⁴ The

³³ The foreign exchange cost of inputs was about 20%, too small for any substantive benefit of an overvalued currency.

³⁴ The DRC is the economic value (in shadow prices) of domestic resources (primary, not traded factors of production) in the production of a commodity to the domestic value added. Comparative advantage exists only if DRC is less than 1.

DRC ratio for Sri Lanka's state plantations is 0.80 and for private holdings 0.63.³⁵ According to these estimates of DRC, the plantations are operating very close to their threshold of international competitiveness. Any significant movement in prices or wage rates could push the ratio over 1 and make the sector non-competitive. As shown in Figure 2-22, the DRC would approach 1, if prices were to fall 15 percent. The same is likely to happen if prices fall 10 percent and concurrently wages rise 10 percent. The iso-curves in Figure 2-22 show that the DRC ratio is more sensitive to prices than wages.

Figure 2-22
Effect of Price and Wage Changes on the DRC.



Source: Authors' estimates.

Marketing Margins

Tea has been sold for years through international auctions in places such as London, Colombo, Calcutta, and Mombasa. Theoretically, auctions provide the most efficient mechanism for price determination, if the market is efficient and totally free. This is not the case for tea where a few large multinationals control the market through local buying agents. For other small buyers, the transaction costs of participating in auctions are prohibitive. Thus the market is in a state of virtual monopsony with sellers no longer able to get the most efficient price.

This can be seen in the spread between auction prices and export prices of tea at the Colombo auctions from 1980 to 1994 (Table 2-14). The difference between the two prices has been escalating recently and has been as high as 86 percent in the past. Even after making adjustments for export duties,³⁶ the difference is far in excess of the normal downstream margins in many consumer goods industries. The government had further

³⁵ 1994 estimates.

³⁶ The export duty on tea was Rs. 1.50 per kg., at the time of its abolition in December 1992.

encouraged inefficiency in distribution by requiring that most tea be sold at Colombo auctions through authorized brokers. These brokers charge a 1 percent fee for their services, which many sellers do not use or which the brokers do not provide efficiently (Government of Sri Lanka 1991, op.cit.).

Table 2-14
Colombo Auction and Export Prices
(Rs/kg)

Year	Auction Price	F.O.B. Price	Difference	Percentage
1980	18.36	33.48	15.12	82.3 %
1981	18.06	33.54	15.48	85.7 %
1982	23.43	35.02	11.59	49.46 %
1983	43.27	52.60	9.33	21.56 %
1984	62.79	77.21	14.42	22.96 %
1985	39.01	60.72	21.71	55.65 %
1986	30.68	44.53	13.85	45.14 %
1987	39.30	52.97	13.67	34.78 %
1988	42.77	55.95	13.18	30.81 %
1989	54.61	66.91	12.30	22.52 %
1990	70.97	91.82	20.85	29.38 %
1991	58.27	84.03	25.76	44.21 %
1992	61.75	81.57	19.82	32.09%
1993	68.88	91.04	22.16	32.17%
1994	65.12	91.32	26.20	40.23%

Source: *Plantation Sector Statistical Pocket Book, 1995.*

Industry Prospects

The future of Sri Lanka's tea industry depends much on world markets in the 1990s and beyond. World demand for black tea is expected to rise from 1,862,000 tons in 1990 to 2,548,000 tons in 2000 – a growth of 3.2 percent per annum (FAO 1992, op.cit.). The supply of black tea, on the other hand, is expected to grow at about 2%, which holds promises of better prices overall. Sri Lanka's future also depends on the existing strength of the industry and the speed at which it overcomes its weaknesses. In 1990, only 4,500 hectares of tea land (2%) had tea bushes under 5 years of age. Considerable replanting has been planned – about 14,000 hectares from 1987 to 1997. This would increase yields substantially and probably achieve a target growth of 2.5 percent a year. If this is realized, black-tea production is estimated to reach 264,000 tons by the year 2000.³⁷ The narrow surplus of demand over supply, however, could of course disappear if producers cut back fertilizer and other inputs under extreme price competition.

³⁷ Ibid.

The demand growth for black tea is basically going to be in developing countries (4.2% per annum), particularly Egypt, Iraq, and Pakistan. This augurs well for Sri Lanka because these countries have traditionally been its biggest buyers. In June 1996, the average price for all teas in the London auctions was US\$ 1.71 per kilogram. However, orthodox tea was trading at US\$ 1.85 per kilogram around the same time at the Colombo auctions. Demands from Russia particularly have been strong lately. The high price for orthodox tea reflects the high demand from countries like Russia, Egypt, Saudi Arabia, and Pakistan. Recent World Bank projections are good for orthodox tea because demand is likely to stay ahead of supply.

Sri Lanka also grows a considerable amount of high quality tea such as Uva, Nuwara Eliya, and Oolong, which command premium prices in the markets of the west as well as Japan. Excellent packaging, branding, and product differentiation are critical marketing tools for these markets, which offer tremendous opportunity for Sri Lankan producers who want to shift their focus from the Colombo mass auctions to direct marketing of value-added products.³⁸

Tea prices are more difficult to assess in the long term because of volatility of the market, but it is not very bright for traditional bulk tea. Growers and exporters should go for more value added and quality teas, backed by strong promotion of the positive human health aspects of tea consumption.

††††††††††††††††

³⁸ See also the Position Paper on Tree Crop Subsector Strategy for Sri Lanka

**THE PRODUCTION AND MARKETING OF
TEA: STRATEGIC ISSUES**



CHAPTER 3

TEA: PRODUCT-MARKET SYSTEM AND COMPETITIVE DYNAMICS

The worldwide marketing of tea involves many different industries and many different processes that constitute the value chain where specific values are added at each link of the chain. The physical commodity thus flows from the basic stage (green leaf) through the intermediate stages (processed leaf) to the final stage of end product (packed tea). Each of the stage is associated with a particular industry. For example, in the *manufacturing, processing, and marketing of tea as many as eight different channel members may be involved (Figure 1-9)*. At the first level there is the grower who may sell the leaf to a tea factory that would process the green leaf and sell the manufactured tea in the auction to a buyer/blender through brokers or agents. The buyer may then sell the tea to a packer who, after packaging the tea in appropriate packages, may sell the final product through whole sale distributors and retailers to the end consumers. Accompanying the above physical commodity flow, there may be other flows in the production-consumption chain such as information flow, financial resources flow, and ownership rights flow.

Most commodity systems consist of a number of horizontal and vertical structural elements. The former relates to the entry and competitive system prevailing within the industry and the latter relates to the channel that moves the products through the production-processing-distribution system. Coordination of various functions is an important aspect of commodity system management, particularly when it becomes necessary to link various individual units to accomplish a common goal. For example, it is absolutely necessary to link individual tea producers with intermediate factory processors and the marketers (including brokers and exporters) to have a smoothly flowing system with optimal efficiency. In some countries the task of vertical coordination is performed by the government, as for example in the small holder tea sector in Kenya. The form and extent of government involvement may vary across countries. The KTDA, for example, is a quasi-government institution where the small tea producers have a stake in the governance.

INTRINSIC BARRIERS WITHIN A COMMODITY SYSTEM

Commodity systems in developing countries, in general, face a number of intrinsic barriers that produce many adverse effects on the flow of physical, financial and informational resources (Jaffee, Steven and Gordon 1992). The most important of these

barriers and the way they affect the efficient production and marketing of tea are shown in Table 3-1.

Table 3-1
Intrinsic Barriers in the Tea Production-Marketing System

Barriers	Physical Flow	Financial Flow	Informational Flow
<u>Product Characteristics</u>			
Bulkiness	✓		
Perishability	✓		
<u>Production Support Characteristics</u>			
Geographical dispersion	✓	✓	✓
Unstable production	✓	✓	
Long gestation period	✓	✓	
Public goods nature of market and technical information	✓	✓	✓
<u>Processing and Distribution Characteristics</u>			
Public goods nature of transport and communication infrastructure	✓	✓	

Source: Adapted from Jaffee, Steven and Gordon, 1992.

Tea is a highly perishable commodity both before and after processing. The green leaf cannot be stored more than over six hours without adversely affecting its quality. Processed tea has a shelf life of about a year before serious loss of quality. These constraints reduce the marketing strength of the producer in addition to creating risks of product loss or decline in value during transport and storage. Transaction costs also increase with the passage of time because the product may require repeat grading and sorting for maintaining quality differentials.

Tea is grown in many geographically dispersed areas and by a large number of small farmers. This impairs the ability of the marketing system to move the product efficiently in the absence of good transport infrastructure. The cost of agglomeration, sorting, transportation, and distribution is also high when many producers are involved. Underdeveloped financial markets in almost all the producing countries also make it difficult for such small and dispersed enterprises to obtain credit on reasonable terms. Problems of information deficiency and asymmetry are also accentuated in this type of market. Geographically-dispersed producers frequently face the problem of monopsonistic

trade with a limited number of buyers participating in the market. This is quite common in the tea markets of most developing countries.

Like most agricultural crops, the production of tea is significantly affected by climatic and weather conditions. In Kenya, Sri Lanka, and India, occasional droughts have affected tea yields substantially and increased the financial risk of investment. Instability of production is heightened by the difficulty of maintaining control over production and inventory over shorter time horizons. The long gestation periods for bringing new tea bushes in the production stream also add to the financial risk of investment.

Some of the infrastructure and information resources needed for effective production-marketing of tea are only available through public investment (thus making them public goods) or through natural monopolies having large economies of scale (Jaffee and Gordon, *ibid.*). For example, new construction of roads for transporting tea from the gardens to the factories will not be undertaken by individual producers unless they have large scale operations and are reasonably assured of keeping the benefits of their investment for themselves. Otherwise, these investments have to be made by the government for the benefit of the industry and the economy as a whole. The same is true for informational flow within the system. Marketing and technical information are not likely to be shared by firms within a system because they are in competition with one another. Industry wide promotion is not popular because of the 'free rider' problem where some traders get the benefit without contributing to the cost.

FORCES INFLUENCING COMPETITION IN THE INDUSTRY

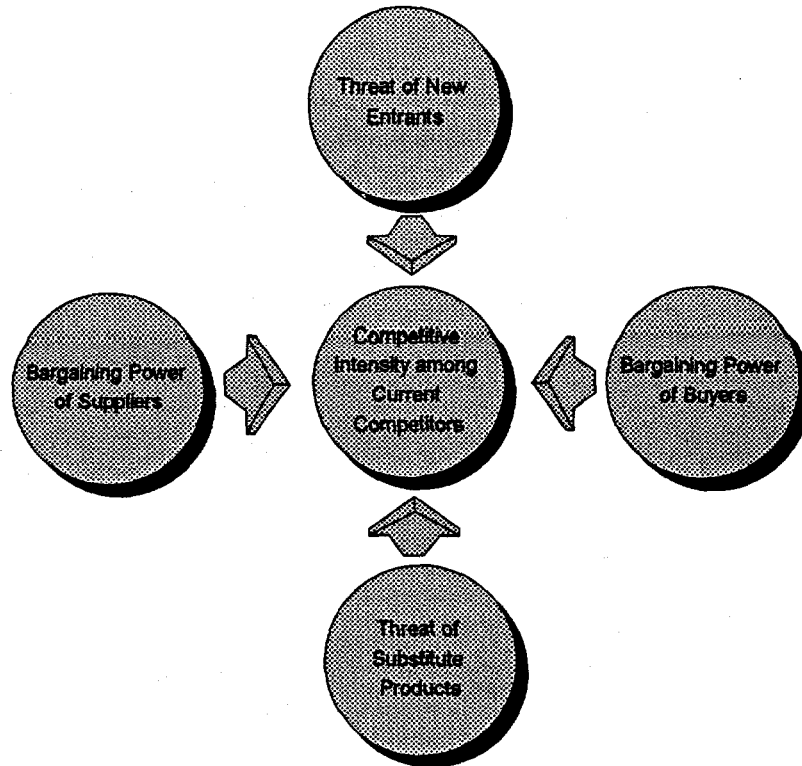
The global market for tea is subjected to a web of underlying forces generated by its characteristic system of production, sale, value adding, and retail distribution. The industry dynamics are influenced by five major forces, illustrated in Figure 3-1 below.

In general, the collective strength of these five forces indicates the intensity of competition and the profit potentials in the industry (Porter 1979).

Threat of New Entrants

New entrants to an industry create additional capacity and come with an urge to gain market share and consumer franchise. In the process, prices are pushed down and margins reduced, resulting in reduced industry profitability in the long-run. In the global tea industry, the large-scale entry of African producers in the 1970s added capacity which has led to the excess being witnessed in the industry today. Some of the producing countries may not have the comparative advantage for producing tea and may actually be pushing the industry towards prolonged recession. How could the traditional producers have discouraged the entry of inefficient producers? Partly by creating entry barriers.

Figure 3-1
Five Forces Shaping Competition in the Global Tea Market



The first entry barrier is economies of scale, through which major competitors in the industry create favorable unit cost economies for themselves not only in production but also in research and development (R&D), marketing and general administration. There is no evidence to suggest that the traditional tea producing countries did any of these to deter new entrants and maintain their competitive positions in the market.

The second major entry barrier is product differentiation through which individual producers of tea can create a perceived uniqueness for their products in the minds of the buyers. There is no evidence yet of any such efforts made by any producer of tea.

Another entry barrier is created by government policies that protect the internal market and provide generous subsidies to domestic producers. This seems to have happened in countries like India, which did not allow tea imports and provided subsidies of many kinds to their local tea industry for a long time. However, the effectiveness of this barrier is reduced if the same policy is adopted in other countries as well. The barrier in itself is economically inefficient since it insulates the industry from global competition, making it vulnerable in other fronts. The tea industry in practically all countries of the world have been supported by government with almost endless funds which has in effect eroded the effectiveness of this entry barrier.

The fourth barrier to entry is termed “brinkmanship” which means major players in the market could send strong signals to a prospective entrant, through price cutting or other means, to caution it about strong retaliation. But since the price of tea is generally determined in the auction markets by the buyers, there was very little that producers could have done in the past to implement this strategy.

Bargaining Power of Buyers

The ultimate aim of buyers in a commodity market is to lower the price as far as will go, to transfer profit from the producers to themselves to the maximum extent possible. In the tea market the bargaining power of buyers has been elevated because of the concentration of a few large buyers in an auction system where prices could easily be fixed by collusive actions. There is a high degree of concentration in the later stages of tea processing and marketing and the producers have no means of breaking out of the system without an extremely heavy investment. The almost undifferentiated or standardized nature of products sold through the auction system has contributed to the bargaining power of the buyers.

Bargaining Power of Suppliers

If the suppliers of a commodity have enough leverage over the distribution system they can control prices and profitability. This usually happens when the suppliers are large, relatively few in numbers, or are in some kind of agreement to limit supply to the market, or the products are in high demand or involve high switching costs. Crude oil was one commodity that fulfilled all these conditions in the 1970s and hence the strong bargaining positions of their suppliers in the seventies and eighties. Tea, on the other hand, has been at a disadvantage in all these aspects. The industry worldwide is characterized by an agglomeration of small producers – all trying to increase output with the expectation of enhancing revenue regardless of the effect on price. In the older producing countries, like Sri Lanka and India, substantial investments have already been made in the sector and it supports significant employment. It is therefore simple to understand why they are such easy price takers. Also, tea is not a product with high switching costs and consumers can easily switch to alternative beverages. Commodity agreements over tea between countries, as a means of stabilizing prices through creation of stocking capacity, have been seriously debated but have never been able to materialize.

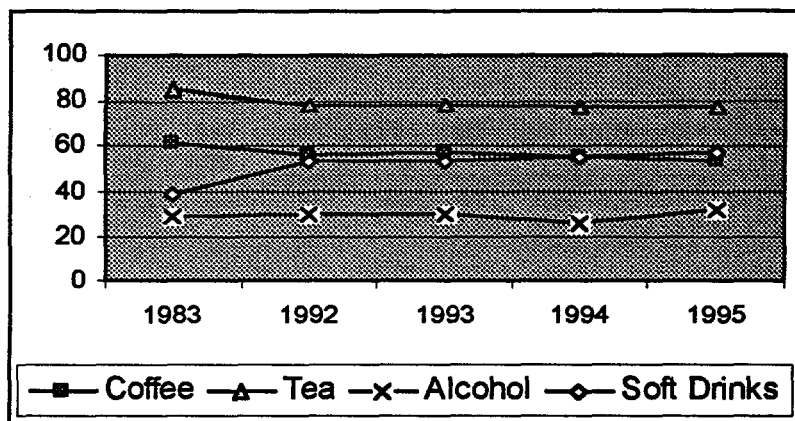
Threat of Substitute Products

Producers in an industry constantly compete with firms in other industries producing substitute products. The presence of substitutes limits the potential returns by limiting prices. Substitute products can be identified by looking at the primary demand at the product-class level, such as the drink market where soft drinks may be a substitute for

tea.³⁹ Substitute products that deserve the most attention are those that are likely to improve their price performance quickly in response to market demand.

The major substitute products for tea are soft drinks, fruit juices, coffee, and alcohol. Intra-industry rivalry between these products differs from market to market. Looking at the U.K. market, as an illustration, about 95.4 percent of the population there consumes some kind of drink everyday (U.K. Tea Council 1995). The consumption trend

Figure 3-2
Drink Consumption Pattern in the U.K., 1983-1995



Source: U.K. Tea Council, 1995.

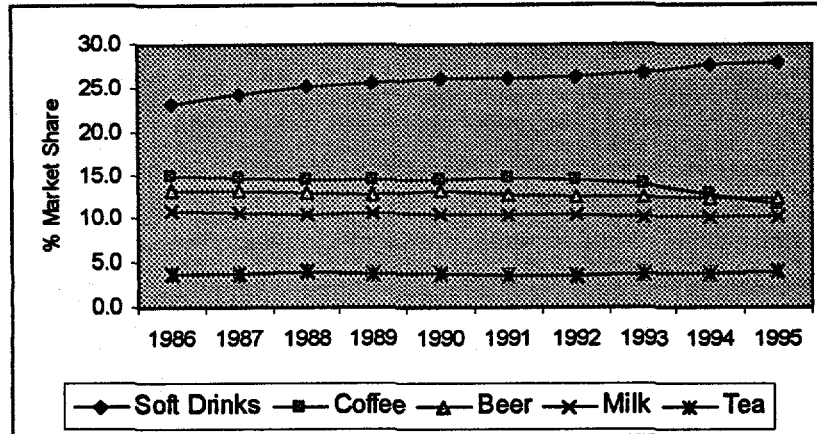
for different beverages shows that the percentage of the population having a distinct preference for soft drinks has gone up steadily in the past 12 years, from 38.3 percent in 1983 to 57.7 percent in 1995 (Figure 3-2). The percentage of tea drinkers declined slightly from 78.7 percent in 1992 to 77 percent in 1995. Coffee took a bit hit in the U.K. where the percentage of the coffee drinking population has declined from 56.9 percent to 53.7 percent in the same time period. In terms of per-capita consumption, however, there has been very little change for coffee, tea, and alcohol, but soft drink consumption has gone up significantly. It seems, thus, that the main threat of substitution for tea in the U.K. comes from soft drinks.

Fruit juice is another substitute for tea. World trade in fruit juice has exceeded five billion U.S. dollars per year and the growth is expected to continue for some time (Kortbech 1991). However, almost all the import of fruit juice takes place in five countries of the world, including the United States, Germany, the United Kingdom, the Netherlands, and France. All of these are important tea consuming countries also. The growing trend of fruit juice consumption is probably due to the growing health consciousness in developed countries. This industry has also been buoyed by new product developments, such as new flavors and blended juices. Convenient packaging and aggressive promotion have helped increase consumer preference for these types of drinks.

³⁹ A product class is a category of products that satisfy the same needs or same function.

In the United States, with a huge market for drinks, there is a larger assortment of substitute products. The relative market share of different beverages between 1986-1995 show again that soft drink consumption has gone up significantly in the last ten years (Figure 3-3). In contrast, coffee and beer both lost market share. However, tea maintained a fairly even keel.

Figure 3-3
Drinks Market Share in the U.S. 1986-95



Source: Beverage Industry, Annual Manual 1995-96, New York.

Drink consumption data from a few selected countries for 1993 (Table 3-2) show that in a majority of the countries of the world, soft drinks are clearly the market leader, followed by beer, and then the other beverages.

Table 3-2
Per Capita Consumption of Drinks, 1993.

	Tea (kg)	Coffee (kg)	Cocoa (kg)	Soft Drinks (litre)	Beer (litre)	All Spirits (litre)
Australia	1.1	0.8	1.9	165	115	1.3
Canada	0.5	4.7	1.9	145	83	2.6
Chile	0.8	0.1				
Hong Kong	1.6	0.8		44	21	7.1
India	0.6				0.4	0.2
Israel	0.5	3.2	1.1		11.5	1
Malaysia	0.5	0.8	0.4		12	0.3
New Zealand	1.5		0.7		115	1.7
Pakistan	0.3					
South Africa	0.7	0.4			48	1.1
Taiwan	0.8	0.7		46	34	

Source: Eoromonitor: Marketing Data and Statistics, 1993.

Competitive Intensity Among Competitors

This is an extremely potent force capable of affecting the industry, both positively and negatively, in a sizeable manner. On the positive side, it can provide competitive pressures to rationalize costs and bring about product and process improvements. On the negative side, it has the potential of driving down prices and hurting the entire industry. Some of the factors that create intense rivalry between competitors are industry maturity, excess capacity, high fixed costs, lack of differentiation and the absence of switching costs. Tea is a classic example of a mature industry where very little market expansion is taking place and the only way for competing countries to gain market share is by taking it away from others. Also, the world tea industry has had excess capacity for a long time and the drive to dispose output has compelled producers to accept whatever prices they have been offered in the auctions. Lack of differentiation has rendered the product to the status of a commodity where buyers can easily shop around for the best price. Switching costs have also been low for tea in the beverage industry, because of its non-essential nature. The former Soviet Union, which used to be a very big market for tea, almost dropped to half of its size in 1992, compared to the pre-1991 years, because of economic problems and a shortage of hard currency. Finally, many producing countries with high strategic interest to sustain their industry have conceded to unreasonably low profit margins (and even losses), which has again contributed to the downward pressure on prices and profitability.

In summary, the main reasons for the intense competition in the global tea industries have been:

- ❑ Competitors are numerous, and many of them are roughly equal in size and power, such as Sri Lanka and Kenya, India and China, and Malaysia and Thailand.
- ❑ Market growth has been low, and share gains at the expense of the competitors have been the only avenue for growth.
- ❑ Products have been essentially undifferentiated.
- ❑ The cost of buyers switching from one supplier to another have been low. Because of the dominance of the auction system, producers have not developed ways and means to tie their customers into long term relationships.
- ❑ The perishability of the product has created the need to cut prices for clearing stocks.
- ❑ The industry has been plagued by prolonged periods of overcapacity.
- ❑ Producers remain in the market in spite of low profits because of sunk investments and the lack of other opportunities.

It is important to assess the competitive forces in the industry in terms of what is presented by the external environment and what is possible within the industry to enhance its position. The following analysis of the tea industry focuses on the intra-industry conditions and the specific factors that enhance a nation's capacity to compete.

FACTORS THAT ENHANCE THE NATIONAL COMPETITIVE ADVANTAGE

Neoclassical trade theory explains the competence of a nation to produce a certain good in terms of its factor endowment and the opportunity cost of resources used to produce the good. David Ricardo improved upon Adam Smith's proposal for nations to compete on the basis of low cost by recognizing that market forces will allocate a nation's resources to their most productive use. Unfortunately, this theory of comparative advantage got mired in the notion that a country's existing factor endowments, like land, labor, natural resources, and capital, determined its capacity to become a low cost producer. Forgotten, or perhaps ignored, was the fact that comparative advantage based on these four factors could be exceedingly fleeting as cost structures are constantly changing. The resource cost advantage of one country could be taken away with the use of new technology by another country (Porter 1990). In short, countries who tie their competitive ability to existing factor cost advantages with no strategy of moving beyond them will face a continual threat of being overrun by nations where technology is advancing productivity. They will also create the ability to lower the cost of production without foregoing attractive wages and returns to capital. Consequently, policies that myopically target static factor comparative advantages to attain national success in an industry will most likely fail. For instance, subsidizing an industry to lower its cost of production will have little effect where competition is based on quality, rapid product development, and productivity enhancement.

Comparative advantage has generally been measured by the Domestic Resource Cost (DRC) ratio.⁴⁰ The DRC is a *static* measure of the domestic factor costs at shadow prices involved in generating a unit value of export at international prices. It does not take into account the possibility of change that could alter the comparative advantage in the future and therefore does not provide any insight into the *dynamic* comparative position of a country. In the past, a few studies have tried to capture this perspective by decomposing changes in the DRC ratio over time into its components such as relative price changes, changes in factor use, and changes in total factor productivity (Nishimizu and Page 1986). This approach allows for examining the level, the change, and the sources of change in measured comparative advantage. Findings of the studies show that changes in price competitiveness and changes in total factor productivity are the major source of changes in international competitiveness. In other words, an increase in output prices relative to prices of intermediate inputs and improvement in total factor productivity reduces the DRC ratio.

The question that now arises concerns what strategies a country should adopt to create this dynamic comparative advantage that will sustain its market position in the long run. The answer is partly provided in competitive strategy literature that indicates that only by building *competitive* advantage could a nation continue to attain success in the global market (Porter 1990, D'Aveni 1994, Day 1990, Bartmess and Cernt 1993). Competitive advantage is said to exist when there is a match between the distinct

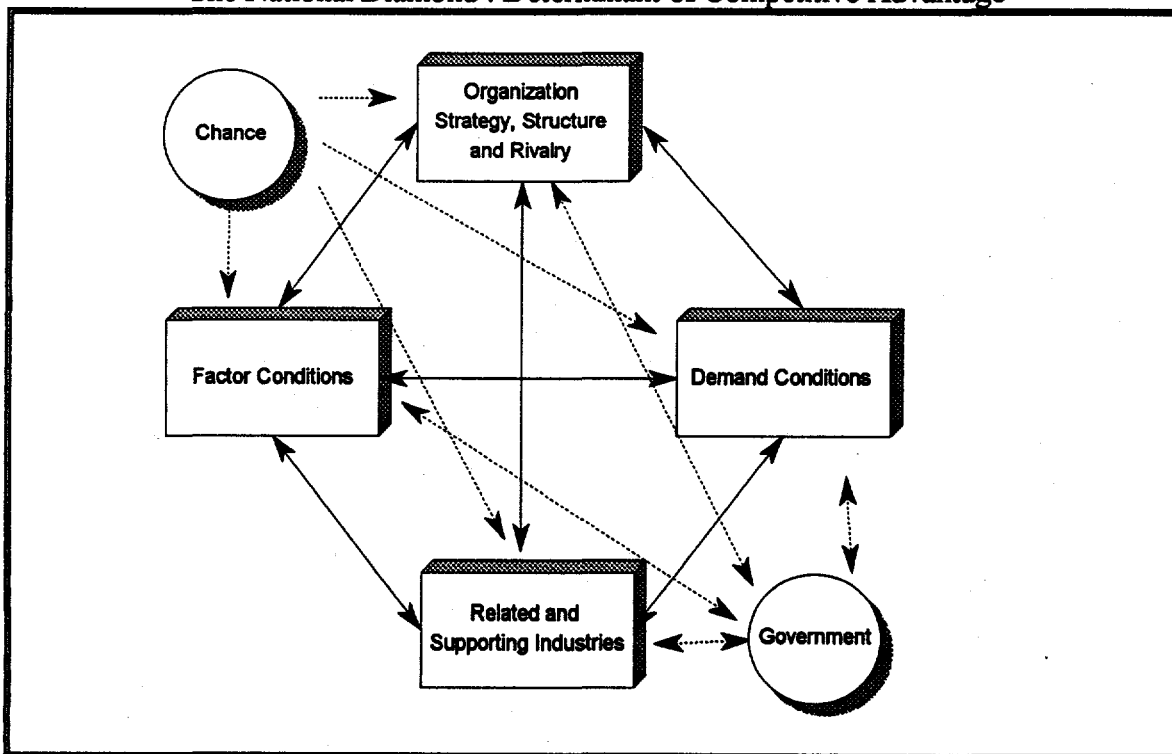
⁴⁰ A DRC ratio of less than 1 indicates the presence of comparative advantage.

competence of an organization and the factors critical for success in an industry. These factors have been presented in the form of a national “diamond” which determine a nation’s competitive advantage (Porter 1990, op.cit.) as shown in Figure 3-4 below. They include factor conditions, demand conditions, presence of related and supporting industries, and the firm structure, rivalry and strategy, reinforced by the government and chance conditions. The system within which these factors operate is highly interactive and activity in any point of the diamond affects all others and vice versa.

Factor Conditions

Among factor conditions that create competitive advantage are human resources, physical resources, knowledge resources, capital resources, and infrastructure resources. The quality of workers in the industry, their skills, and the overall work ethic constitute a nation’s human resource factor. For example, countries with high skills of plantation workers and competitive wages will have an edge over countries which do not. The availability of quality land, water, and other physical resources also provide a competitive edge to one nation over the other in the production of tree crops. For example, Kenya’s abundance of highly productive land for tea growing coupled with natural rainfed irrigation makes it a very efficient producer of tea. The presence of technical and

Figure 3-4
The National Diamond : Determinant of Competitive Advantage



Source: Porter, 1990.

managerial skills in the country also provide a competitive advantage. The Kenyan tea industry, a significant part of which is driven by multinational firms, has gained tremendously from the superior knowledge of these organizations in production and the marketing of tea globally. The availability of capital is another factor that gives competitive advantage to a nation because of the long-term nature of the investment.

The tea industry in Sri Lanka was stagnant for a considerable period of time for lack of adequate investment capital. Only recently have the private companies started to put serious investment in production and marketing and accelerated the growth of the industry. Infrastructure resources are also critical to tree crops industries because of the vastness and separation of the production centers from the processing and marketing centers. For example, lack of adequate roads have mired Kenya's tea industry as the growers cannot get the green leaf to the factory in time for processing.

Sometimes, competitive advantage on some factor may be created by a nation that suffers a *disadvantage* through technological change. For example, the low productivity of labor in Sri Lanka has driven a number of tea companies to use mechanical harvesters, thus replacing less efficient labor with more efficient capital .

Demand Conditions

Home demand conditions are also important for an industry because they determine the rate and nature of improvement made by firms in the industry. The development of an industry for world class competition in a global market depends strongly on demand conditions at home. Three characteristics of home demand are particularly important to creation of competitive advantage – composition, size and pattern of growth, and the means by which the home market pulls the nation's products into foreign markets (Keegan and Green 1997).

The home demand for a product can set the quality standards and give local producers a better understanding of buyers' needs ahead of their major rivals in the world market. Firms are generally more responsive to domestic consumers' needs and this can translate quickly to the foreign buyers needs as well. India's tea industry was innovative in producing tea of many varieties for the domestic market and later finding niches for them in foreign markets. The size and pattern of home-demand growth affects the competitive ability of firms in the industry. This is because economies of scale and the speedy ride up the learning curve which exists in a large and growing home market. The perceived risk of investment in plant and R&D is also reduced when a strong home market exists for the product. Again, India provides a good illustration of a country that has made some investment in developing better clones for tea.

Lastly, the conditions that favor the movement of a product from the home market to an overseas market also create competitive advantage. For example, the tremendous growth of demand for tea in the Middle East has been spurred by demand emanating from a large and growing expatriate population in those countries.

Related and Supporting Industries

Related downstream industries can provide strong support to the growth of a primary industry, by providing inputs to or by absorbing the output of the latter. The growth of the local packaging industry in India and Sri Lanka has boosted their ability to export packaged and branded tea. Efficient integration of downstream industries comes from both proximity and cultural similarity. Contacts and coordination with suppliers and strong linkages that develop within the local market are hard to crack by foreign suppliers, and thus become the sources of competitive advantage both at home and abroad.

Organization Strategy, Structure and Rivalry

Differences in management style, organizational skills, and strategic perspectives create either advantage or disadvantage for firms vis-à-vis their competitors. In plantation industries, management style is critical to success since the nature of the work force is quite different from the average industrial work force. In Sri Lanka and India, for example, generations of plantation workers have lived and worked in the tea and rubber estates and labor management has always been a key factor behind enhancing labor productivity. The standard methods of hiring and firing also do not apply in the case of plantation workers.

The rivalry between domestic producers have a powerful influence on competitive advantage of firms because it keeps the industry dynamic and exerts constant pressure for innovation and renewal. In Sri Lanka, when the estate plantations were under government control, practically no innovation emerged from either the tea or the rubber industries. Since the privatization moves of the early nineties a variety of new tea offerings and new ways of exploiting foreign market opportunities have been surfacing.

Government

Government is not a determinant of competitive advantage but it is an important influence on its creation. The effect of government policy on trade, taxation, labor, marketing and distribution, etc. is well known on the development of an industry. The tree crop industry of Sri Lanka had suffered very long through inappropriate government policies that took away its competitive advantage in the seventies and eighties (World Bank 1994). By reinforcing and supporting the factors that create competitive advantage, the government could vastly improve the competitive position of the firms and the nation as a whole in the global economy. Evidence of this is clear from the support Kenya received from its government through the KTDA and its emergence as the foremost exporter of tea in the world.

Chance Factors

Lastly, chance events sometimes play a role in shaping the competitive advantage of a nation. These events occur outside the control of the firm, industry or the government. They can create major discontinuity that can be either advantageous or

disadvantageous. For example, the collapse of the former USSR and the economic chaos that ensued literally destroyed the vast market for tea in this region. Major suppliers, like India, lost quite a bit of their competitive edge due to this event.

DETERMINANTS OF NATIONAL COMPETITIVE ADVANTAGE IN TEA

Both international trade and competitive strategy literature recognize that comparative and competitive advantage are the products of policy, technology, human resources, infrastructure, and management factors. Furthermore, lessons of experience have shown that any commodity system⁴¹ needs to be competitive on two fronts: first, it must be competitive within the country and second, it must be competitive against similar commodity systems or industries from other countries (Alavi 1990). The system involves a series of interdependent production and marketing activities linked through a network of exchange relations and other coordinating mechanisms. There are different types of commodity systems throughout the world, each characterized by its individual structures including competitive conditions, entry barriers, contractual or ownership integration, and government influence on the system (Goldberg 1974, Morrissey 1974, Marion, et al. 1986).

Jaffee and Gordon (1992, op.cit.) have identified five critical factors related to the successful production and export of high-value food crops in a number of developing countries: natural resources and human capital; macroeconomic and sector policies; physical, social and technical infrastructure; market demand; and micro-marketing and coordination. These correspond closely to Porter's 'diamond' discussed earlier. In operational terms, these boil down to a number of specific factors that influence a commodity system competitiveness and growth, as shown in Figure 3-5.

Natural Resources and Human Capital

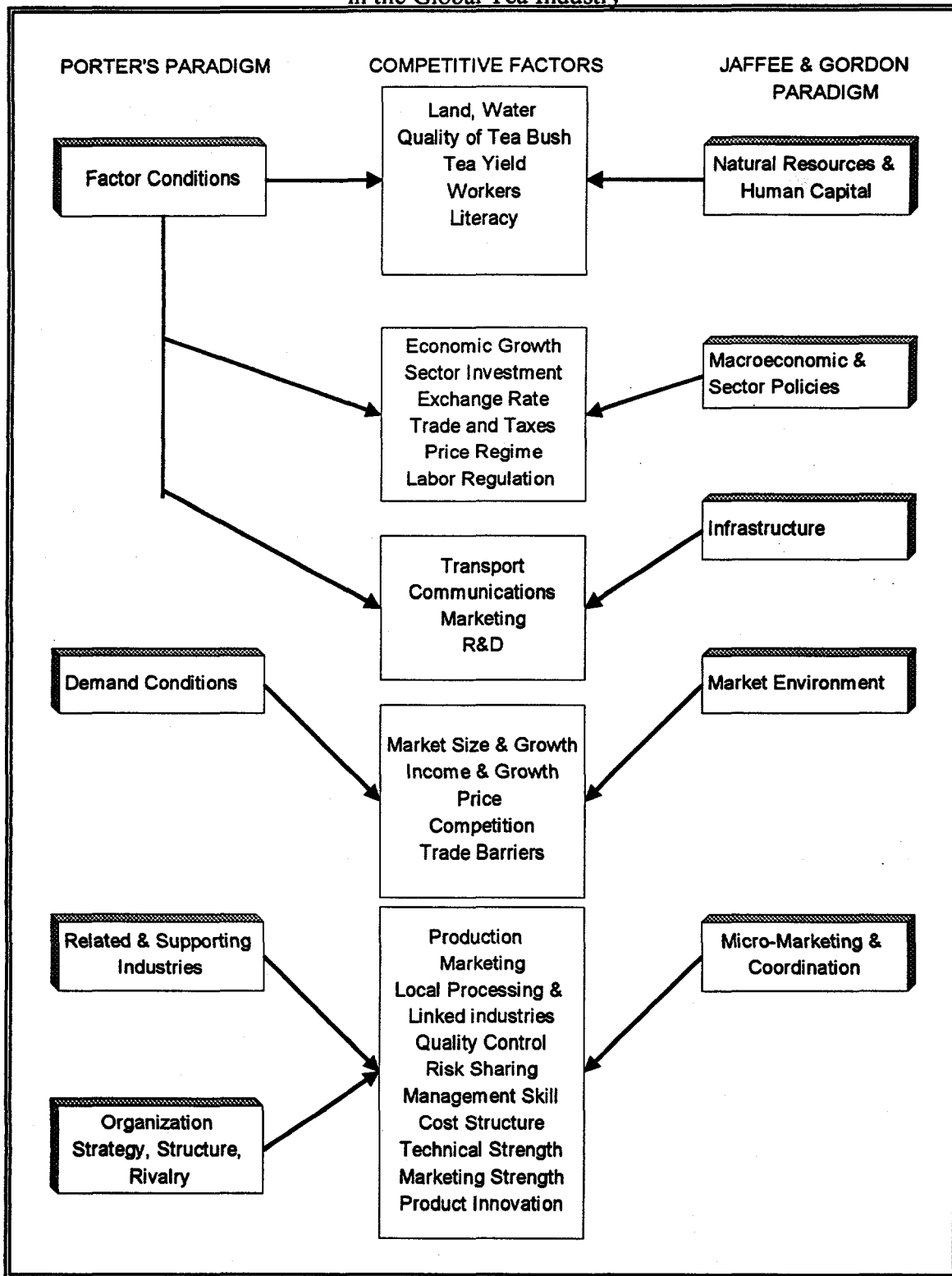
Natural resources and human capital endowment are key elements in the theory of comparative advantage and are a very important basis for gauging the competitive advantage of a nation. Many of these endowments may be grown or acquired over time. For example, the management expertise needed for plantation administration could either be developed in the country through experience or brought in from other countries that have a lead in the technology. During the early days of privatization of Sri Lanka's tea estates, many firms brought in technical advisors from other countries to help in the management process.

Macroeconomic and Sector Policies

Fiscal and monetary policies, exchange rate policies, trade and licensing policies, price policies, and labor policies have strong influences on the incentive to invest in a

⁴¹ A commodity system is a "small economic system ...incorporating an interdependent array of organizations, resources, laws, and institutions involved in producing, processing, and distributing an agricultural commodity," (see Marion et al., 1986).

Figure 3-5
Factors Determining Competitive Advantage
in the Global Tea Industry



Source: Authors' formulation.

sector because they affect costs and returns. Enhancement of productivity, development of markets, and the ability to meet international competition is seriously mired by the absence of a conducive macroeconomic environment.

Infrastructure

Physical, technical, and social infrastructure provide the basic mechanism for interlinking markets with suppliers. Their inadequacy results in production inefficiency, lack of knowledge about markets, and a general failure to adapt to and service clients' needs competitively.

Market Environment

The size and pattern of demand, both within the domestic market and the international market, affect the ability of suppliers to produce and distribute efficiently. The size and growth of demand are related to income, particularly with regard to discretionary purchases. The sudden decline in the demand for tea in the former Soviet Union right after its breakup and economic slump is illustrative of this situation. Demand for a product is also affected by changing consumer tastes and preferences, change in work and living patterns, and technological developments. For instance, the changing structure of the family and work involvement has made tea bags a popular deviation from the earlier loose tea sold in packages.

Micro-Marketing and Coordination

This involves the management of resources – physical, logistical, and human. The coordination of production and distribution, including activities such as processing, storage and transportation, product development, quality control for sales and market power, interlinking functions, risk reduction through risk between partners, market research and promotion and efficiency pricing, is important for a dynamically competitive market. These management and coordination functions establish efficient interface between markets and producers and determine the level of productivity, product quality, and transaction costs.

The tea industry all over the world faces a number of problems limiting effective coordination of the production-marketing system. These include high production and marketing risks, inadequate or asymmetric information flow, high transaction, logistics and marketing costs. The bulky and perishable nature of the product leads to high unit costs of moving it through the distribution channels. Perishability creates high risks for producers and processors alike. In Kenya, large quantities of green tea leaves perish due to lack of adequate transportation resulting in a high risk in handling the product. The general short shelf life of processed tea (outside of vacuum packaging) makes the sellers jittery and severely limits their bargaining capacity vis-à-vis the buyers at the auctions. Again, the quality of tea is not an easily measurable factor and is generally determined by a very

subjective evaluation. This limits the efficiency of grading and probably creates information asymmetries that prevents efficient information flow within the market.

Certain production characteristics of tea also limit the effective integration of the production-marketing system. One of these is the spread of production over a large geographical area creating the involvement of a large number of small producers which makes it difficult and costly to exchange production and marketing information. The dispersion of production centers add to logistic costs and the interruption of physical flows. The small size of the producing units deter investment in storage and distribution infrastructure by the private sector. Monopsony also develops in the presence of a large number of small and geographically dispersed producers since not many buyers are willing to operate in this type of market. The growth of a few relatively large processors among a large number of producers in most tea producing countries attests to this (United Nations 1984, op.cit.). Also, the fact that tea plants have long gestation periods ranging from six to ten years before production, makes them vulnerable to a shortage of long-term financing.

Marketing and distribution support is critical for maintaining efficiency and growth of production. For the major producers of tea, the bulk of the market is overseas and the receipt of international market and technical information becomes a key requirement for competitiveness. Marketing enterprises are likely to provide these services to the producers if they could appropriate the benefit of such action themselves. However, in every country that produces tea, the primary marketing is done through auctions where the buyers actually benefit from the gap in the producer's knowledge. Even if this were not so, in the absence of direct links between the producers and marketers, any information supplied by the latter assumes a public good property where everybody benefits without contributing to its cost. This free-riding could also arise when individual producers acquire the information from one buyer to sell to another competing buyer. This deters private development of an information system. Distribution infrastructure likewise, such as farm to market roads and bulk storage and transport facilities have either public goods characteristics or support the growth of natural monopolies due to the heavy investment and the economies of scale involved. Financial requirements for marketing tea are also high because of the costs of establishing contacts, handling, transportation, storage, and inventory. Private firms in all producing countries have found it difficult to obtain both long – and short-term capital from the financial markets that are shy towards agricultural investment.

In a study of high-value food commodity export, Jaffee and Gordon (op.cit.) found that the inherent technical and economic characteristics of food products interfered with their physical flow and the informational and financial flows within the system that existed. These generic barriers arise in the production-marketing of tea as shown in Table 3-3. This implies that the government has very specific roles in filling the gaps or bottlenecks created by the absence or inefficiency of these flows. Public programs developed to remove externalities or instances of market failures (such as changes in trade policies

affecting the tea sector or lack of producers' knowledge about the activities of major buyers in the world market) should reduce the investment risks in the sector.

Table 3-3
Barriers to Commodity System Flows found in the Global Tea Industry

	Barriers to Physical Flows	Barriers to Information Flows	Barriers to Financial Flows
<u>Product Characteristics</u>			
Bulkiness	High		
Perishability (Tea)	High		
Heterogeneity	High		
<u>Production Characteristics</u>			
Geographical Dispersion	High	High	High
Long Gestation Period			High
Public Goods Nature of Technical Information		High	Medium
<u>Distribution Characteristics</u>			
Public Goods Nature of Transport Infrastructure	Medium		
Public Goods Nature of Communications Infrastructure		Medium	
Public Goods Nature of Marketing Information		High	Medium

Source: Adapted from Jaffee and Gordon (1992).

ANALYSIS OF NATIONAL COMPETITIVE ADVANTAGE IN TEA

The factors that create competitiveness in a global industry were discussed earlier. In the following section, we attempt to analyze the respective positions of three major producers of tea in the world, India, Sri Lanka, and Kenya, on these factors. Table 3-4 provides a summary of the findings.

Natural Resources and Human Capital

Land : The abundance of land, its quality, and its cost are all important factors for the development of tea. The largest tea areas in the world are in China (1.13 million hectares), India (0.42 million hectares), Sri Lanka (0.19 million hectares) and Kenya (0.11 million hectares). India has considerable constraints for lateral expansion of tea as optimum utilization of land has already been made within the tea estates. There are a few potential

areas in the Northeast, but these are limited. Even though there is a possibility of putting some undeveloped government land under tea, the overall land availability is low.

Table 3-4
The Global Players in the Tea Industry: Country Position on Competitive Factors

	<u>India</u>	<u>Sri Lanka</u>	<u>Kenya</u>
<u>Natural Resources & Human Capital</u>			
Land	Average	Weak	Strong
Water resources	Average	Strong	Strong
Quality of tea bushes	Weak	Weak	Strong
Yields	Average	Weak	Strong
Availability and quality of workers	Average	Average	Weak
Literacy rate	Low	High	Average
<u>Macroeconomic Environment</u>			
Macroeconomic and sector policy	Weak	Average	Strong
Sector investment growth	Weak	Average	Strong
Exchange rate regime	Strong	Strong	Strong
Trade and tax regime	Weak	Strong	Average
Price regime	Weak	Strong	Strong
Labor regime	Weak	Weak	Strong
<u>Infrastructure</u>			
Transport and communications	Weak	Average	Weak
Marketing	Average	Weak	Strong
R&D	Average	Weak	Average
Extension	Average	Weak	Strong
<u>Market Environment</u>			
Key market's size and growth rate	Strong	Average	Average
Income and growth of income in key markets	Weak	Average	Strong
Price position in key markets	Weak	Strong	Strong
Competitive strength	Weak	Average	Average
<u>Micro-marketing and coordination</u>			
Production/Marketing coordination	Strong	Weak	Strong
Local processing and linked industries	Strong	Strong	Average
Quality control	-	Strong	Strong
Risk sharing	-	Strong	Strong
Technical, financial & managerial skills	Weak	Average	Strong
Cost structure	Average	Weak	Strong
Marketing strength	Average	Average	Average
Product innovation	Strong	Average	Weak

Source: Authors' estimates.

Kenya has considerable land for expansion of tea and presently only about 10 percent of the potential land area has been exploited. This, combined with the fact that tea provides a good return on investment in growing areas where there is not much opportunity for other crops, makes it easy for encouraging the lateral expansion.

Of the three major producers of tea in the world, only Sri Lanka is going through a contraction in the extent of land under tea. The total area under tea there has fallen from 222,000 hectares in 1992 to 187,000 hectares in 1995 (Central Bank of Sri Lanka 1995, op.cit.). There is not much scope for further expansion in spite of government subsidies for new planting.

Water: India faces a few minor problems with the availability of water for growing tea. Indian tea is predominantly rain-fed. Excess rain during the monsoons creates drainage and soil erosion problems and drought during the winter season necessitates irrigation. About 0.19 million hectares require drainage in Dooars, Terai, Cachar and Assam valley areas and 0.15 million hectares require irrigation in the East, Northeast, and South India. However, proper investment in drainage and irrigation could remove any water problem for tea production without difficulty.

In Kenya, the production of tea is susceptible to periodic drought. Otherwise, the annual rainfall provides enough moisture for growing tea.

Water is abundant in Sri Lanka for tea plantation, except occasionally when it faces prolonged drought. Rainfall provides natural irrigation for tea. The eastern side of the island starts getting dry in July and August, but the western side receives steady rainfall during much of the growing season.

Quality of tea bushes: India has significant problems with its aging tea bushes. Over 60 percent of India's planted area has bushes aged 30 years or more (Chiranjeevi 1992). Technically, the economic age of a tea bush is about 30 years, which means that over half of India's producing stock is past the economic age. The rate of replanting is not high enough to replace them with new stock.

Sri Lanka has problems similar to India. Old seedling tea are still the dominant production stock there, although efforts are underway to replant with the higher yielding vegetatively propagated tea.

Tea bushes in Kenya are considerably younger than in India or Sri Lanka. There have been considerable planting of high yielding clones in the state sector. But the older seedling tea stock has also provided very good yields probably due to better cultivation methods and higher inputs.

Yields: India's tea yields are substantially below those of Kenya, partly due to the age of its tea bushes. The average yield in 1994 was 1752 kg/ha. in comparison to 2,028 kg/ha obtained in Kenya. There is considerable difference in yield between North and South

India, with the North averaging about 1616 kg/ha. and the South 2382 kg/ha. (Tea Board of India, 1995). However, North India, with its substantial large holdings, produces the bulk of India's tea (76%).

Kenya's tea yields are high compared to most other countries, even though they declined somewhat in 1994. The 1993 yields were 2,273 kg/ha. compared to the 1994 yield of 2,028 kg/ha. Partly, this decline was due to adverse weather conditions, but poor infrastructure and capacity limitations contributed. Productivity in the larger estates is more than 40 percent higher than the smallholder sector (Government of Kenya 1995-II). In Kenya's smallholder sector, tea bushes are relatively younger. But relative yields, compared to the estate sector, are low because the small farmers cannot put in the kind of inputs put in by the estates (such as fertilizers) to obtain the high yields. Furthermore, estate plantations put a lot of emphasis on improved crop management, including proper fertilizer application and better weeding and husbandry.

Among the major tea producers, Sri Lanka has the lowest average national productivity in production of tea. This average, however, hides the performance of some of the better holdings whose productivity is comparable to Kenya or South India (World Bank 1994, op.cit.). The estate sector productivity, however, is low even after its takeover by the private sector. The average productivity is around 1366 kg/ha.⁴² – less than 50 percent of the Kenyan estates.

Availability and quality of workers: India's growing entrepreneurial class has shied away from plantation crops like tea perhaps because of the risks involved and excessive government control. However, institutional requirements for the development of human resources are present in the sector. Education and training centers such as the Plantation Management Institute and the Training Center for Small Growers and Manufacturers have contributed to the upgrading of knowledge and technology to some extent. The southern tea estates have considerable difficulty in obtaining and retaining workers and management because of their isolation from major urban centers. The rapid economic development of the south has also attracted many of the children of traditional plantation workers to better paying jobs elsewhere..

In Kenya, the availability of workers is a major problem for smallholders, but not for the estates. Although smallholders depends mainly on family labor, they have seasonal labor needs that are difficult to fill because of general labor shortage and competition with the larger tea estates. The coincidence of the main tea plucking season with the harvesting of maize exacerbates the labor shortage (World Bank 1989). Coffee harvesting also attracts labor away with higher wages (Government of Kenya 1995, op.cit.). Overall, labor constraints are a major obstacle to the growth of smallholder tea in Kenya.

Considerable changes are likely to take place in Sri Lanka's plantation work force. Literacy and education will eventually move potential workers away from the plantations

⁴² Estimated from a survey of the 22 plantation companies in August 1996.

to better jobs outside. Presently, however, the density of workers in the plantations (2.85 per ha.) is higher than South India (2.70 per ha.) and Kenya (2.20 per ha.). Management resources in many of the plantations under new private management are being upgraded. Changes in management style are taking place in many plantations, including such innovative measures as participative management, customer orientation, strategic focusing for global competition, and the Japanese Kaizan style of management.⁴³ Some management companies have started workers' skill upgrading programs with the help of the Tea Research Institute (TRI). Others have forged joint ventures with foreign partners to bring in the necessary expertise from abroad.

Literacy rate: Adult literacy in India is 48 percent as compared to 69 percent in Kenya and 88 percent in Sri Lanka (World Bank 1995). The opportunity for technological improvement and overall competitive excellence are therefore much less in India than the other two major producers of tea.

Macroeconomic Environment

Macroeconomic and sector policy: The Indian government has supported the tea industry through extensive financial assistance schemes that have covered almost 10 percent of the cost of development of tea plantations and factories (Tea Board of India 1995, op.cit.). Other measures such as generous loans and subsidies, training and demonstration of improved methods of tea cultivation, supply of planting materials from state run nurseries, and the establishment of cooperative tea factories are some of the government aids to the industry. Tax concessions to sick firms in the industry are also given by the states. However, constraints like high taxation of the plantation companies, and high import tariffs on tea machinery have also worked against the industry. Both the subsidy schemes and the fiscal and trade policies have cost the industry in terms of its competitive ability with the rest of the tea producing world.

The macroeconomic environment has generally favored the development of tea in Kenya. The liberalization of the market and unshackling of prices in early 1992 boosted the industry's performance. The sector has been freed from government price control and is now responsive to international market prices, unlike other agricultural commodities in Kenya. After 1992, more than 40 new companies were given license to buy tea from the auctions, pack and redistribute them to the local market. The government also provides indirect subsidy to the smallholder tea industry by undertaking the supply of fertilizer through KTDA. As a parastatal organization, KTDA also receives indirect financial subsidies through guaranteed loans.

Improvements in the macroeconomic environment and sector policy reforms, starting in 1992, have turned the tea industry around in Sri Lanka and taken it to its peak production of 246 million Kgs. in 1995. Much of the positive benefits have come with the removal of export duty and ad-valorem tax, depreciation of exchange rate, reduction of

⁴³ "Kaizan" management emphasizes continual improvement on a self assessment basis.

controls on marketing, and the transfer of state owned plantations to the private sector (partially completed by end 1996). However, problems still remain, such as the government's reluctance to relinquish control on labor matters. However, the government is slowly withdrawing from this inflexible position and the labor market is turning towards a more free system of collective bargaining. A few subsidies also remain, including a tea planting subsidy, a factory development subsidy, a CTC tea conversion subsidy, and a tea bagging development subsidy.

Sector Investment growth: Between 1988 and 1992, about 14,750 hectares of new tea land was developed in India, which added less than 1 percent to the growth. The country has plans to replant 21,000 hectares and infill about 52,500 hectares of land between 1995-2000. Apart from these, there are not many new investments taking place in the sector. Tea manufacturing capacity, particularly in Nilgiris region, is inadequate. New investment in factory development is not taking place due to the high cost of term loans.

In Kenya, the average expected growth from the estate and smallholder sectors between 1994 and 2005 is 3.6 percent according to KTDA's projection (Table 3-5). If this growth takes place, Kenya's tea output will rise from 209 million kgs. to 308 million kgs.

Table 3-5
Projected Growth of Tea Production in Kenya, 1994-2005
(million kg.)

Sub-sector	1994	2000	2005	Av. Growth
Smallholder	119.1	155.21	187.08	4.20%
Estate	90.3	108.5	121.4	2.70%
Total	209.42	263.72	308.48	3.6

Source: KTDA, 1995.

The three important factors related to this high growth are KTDA's infilling program, emphasis on crop management, and lateral expansion of the tea area. The infilling program has succeeded in gradually reducing the gap between the recommended density of bushes per hectare (8,611) and the actual. This effort is expected to continue, and with it the gap will narrow to only 5 percent by 2004-2005. Along with the infilling program, KTDA's extension support for improving growers' management practices is likely to expand. With increasing emphasis on improved fertilizer application, higher plucking rounds, and better weeding, green leaf yield is expected to rise from the present national average of 0.91 kg./bush to 1.25 kg./bush by the year 2005. The projected area expansion will increase the tea growing area from 76,751 ha. in 1995 to 84,000 ha. in 2005. In comparison to increases in production of green leaf, required investment in tea processing facilities has been low. This has contributed to a decline in the quality of KTDA teas. Processing delays have been exacerbated by uneven leaf delivery to the factories during the year. However, considerable investment have been made to increase factory capacity from 455 million kgs. in 1995 to 675 million kgs. by mid-1997, which will remove the undercapacity problem until the end of the century.

In Sri Lanka, sector investment on tea has been growing since the start of the privatization program. From 1992-1994, the management companies have increased the extent of replanted areas by over 5750 hectares. Other investments have gone into increasing efficiency of production and into new factories for CTC tea production. Now that the government has given out fifty-year leases on the estates, the plantation companies will most likely increase investments in the sector substantially. To aid this, the government has arranged over U.S. \$100 million of capital for the private plantation companies through the ADB (\$60 million) and OECF (\$40 million).

Exchange regime: From the beginning of the 1990s India's exchange rate policies have helped maintain the competitive position of the tea sector. The country has persistently adjusted its exchange rate over the past years (Table 3-6) and there is not much difference at present between the market and the official exchange rate. This has addressed the past problems of overvaluation of the rupee which was detrimental to the tea trade.

Table 3-6
Foreign Exchange Rates of Principal Tea Producers 1989-94

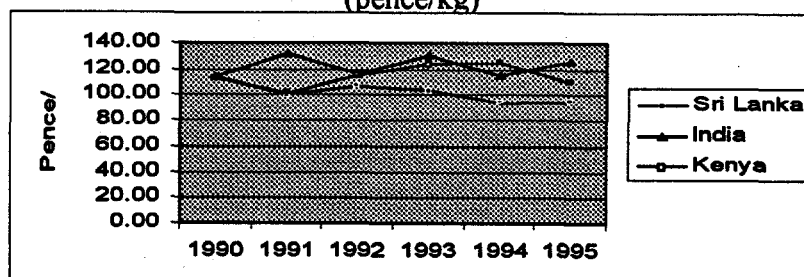
	Per US \$	1989	1990	1991	1992	1993	1994
India	Rupee	16.23	17.50	22.74	25.92	30.49	31.37
China	RMB	3.77	4.78	5.32	5.51	5.76	8.62
Sri Lanka	Rupee	32.27	34.57	36.60	38.95	39.57	40.21
Kenya	Shilling	20.57	22.92	27.51	32.22	58.00	56.05

Source: IMF, *International Financial Statistics*

The devaluation of the Kenyan shilling, by over 160 percent between 1989-1994, has also maintained the competitiveness of its tea in overseas markets. However, short-term appreciation of the currency, as between 1993-1994, could create major setbacks for the industry.

The Sri Lankan rupee was devalued by over 25 percent between 1989-1994. This steady exchange rate adjustment has been very beneficial for the tea industry. The average price of Sri Lanka's tea in the London auctions, between 1989-1994, has steadily declined compared to Indian and Kenyan tea (Figure 3-6). This has increased Sri Lanka's competitiveness.

Figure 3-6
London Tea Auction Prices 1990-1995
(pence/kg)



Source: ITC Bulletin, 1996.

Trade and tax policy: Although past macroeconomic and sector investment policies have not been helpful to the Indian tea industry, recent changes in the trade regime have removed many of the distortions making the industry more competitive. For example, export and excise duties on tea were abolished in the early 1990s and only the tea cess remains. The government, however, has frequently imposed export curbs to contain domestic prices which have worked against new investment in the sector (Chiranjeevi, *ibid.*). Also, the incidence of taxes on growing, manufacturing, and selling tea have been very high, ranging from 54.4 percent in Assam to 60.4 percent in West Bengal, in comparison to about 46 percent in most other industries (Tea Board 1995, *op.cit.*). The government of India does not allow tea imports into the country and has imposed export curbs from time to time to contain domestic prices (Chiranjeevi, *op.cit.*). This has caused uncertainty among tea exporters and deterred active efforts to develop the overseas market.

There are no substantive trade barriers on tea in Kenya. There is no export duty or restriction on export of any kind. However, there are a number of legal and regulatory constraints to the growth of competitiveness of the industry. Many of them are a product of the old Tea Act (Cap 343). For example, this law restricts the growing and manufacturing of tea through a licensing mechanism, which was primarily intended for statistical information and for raising cess funds to finance the Tea Board. But it also empowers the government to intervene in the processing, grading, blending, and marketing of tea in excess of the normal regulatory requirements. It imposes a dated procedure for the marketing and promotion of tea by the Tea Board, and limits non-auction sale by individual producers to less than 50 percent of their total output. The government also mandates a minimum of 55 percent of the sale of tea through the auction system. There is also a 30 percent import duty on tea. This could hinder blending and processing for the manufacture of value-added tea outside of the export processing zones.

The Sri Lankan tea industry has been free from all major export restrictions for a number of years. Only a few cesses remain, fundamentally to finance the Tea Board's operation and to provide nominal subsidies to small growers.

Price policy: Tea prices in India have been unstable because of the uncertainty of supply in relation to demand in the domestic market and the uncertainty of demand in the international market. Periodic slumps in tea prices have occurred due to oversupply and increased stock in international markets (Tea Board of India, 1995, *op.cit.*). The restriction on the import of tea for domestic consumption also creates a lot of volatility in the market.

Kenya's deregulation of the tea industry and free export market pricing has aided the industry's competitiveness. There has been only a minor infringement on this environment through the mandated 10 percent sale by every producer to KETEPA, which supplies the domestic market at a price below the border price.

Tea prices in Sri Lanka are not subject to any form of direct government control. However, the requirement to channel a substantive portion of the output through the auction markets may have some effect on the prices.

Labor policy and issues: The government's specification of statutory benefits for plantation workers in India has kept the cost of plantation labor high. There is also a serious labor shortage in the tea estates of the South due to the rapid pace of economic development there and the reluctance of the children of the plantation workers to work in the plantations. In addition, getting managers to stay in the remote areas is difficult.

In Kenya, there are no government mandated labor policies that affect the growing and processing of tea. Labor contracts in tea estates are determined on the basis of negotiation with the unions.

Government labor policy has been a major obstacle to the growth of efficiency in Sri Lanka's tea sector. State mandated pay increases, minimum employment days, restrictions on relocation, restrictions on layoffs, etc. have seriously undermined the competitiveness of the industry. However, the government's recent policy seem to break away from many of these. It is trying to disassociate itself from intervention in wage determination and letting collective bargaining determine this, and has reduced its opposition to relocation of labor across estates. The labor market may be moving towards a freer environment, but the final outcome is still uncertain.

Infrastructure

Transport and communications: India's roads and transport infrastructure in the tea growing areas, although not well developed is adequate for the present volume of trade. The communications system is also old but major efforts are underway for its upgradation.

There are severe stresses on the roads and ports infrastructure supporting the tea industry in Kenya. The poor condition of access roads from production areas to the factories causes serious delays in green leaf delivery to the factories with resultant leaf losses, lowering of the quality of tea produced and efficiency loss in the factories. The government has planned some improvements in major trunk roads and there has been a change of management in the port of Mombasa. The shortage of processing capacity in the smallholder sector is also a serious problem. The utility infrastructure is also weak and the availability of gas and electricity is erratic. The rural telephone service is poor, blocking communication between the growers and factories. The extension infrastructure for small tea growers is quite good and capable of providing sound technical directions (Government of Kenya 1995, op.cit.). The infrastructure for providing input supplies through the KTDA is also good.

Physical infrastructure support for the tea industry in Sri Lanka is lacking in a number of ways, such as poor rail transport facilities, high costs for road transport, and aging vehicle fleets within the plantations. The power and telephone systems are also

inadequate and cause frequent interruption of services. The infrastructure for export, however, such as shipping, finance, and insurance are well developed with modern communications facilities (DeSilva 1994). The industry is well supported by the Colombo Tea Traders Association, a body of producers and shippers.

Marketing: India's tea marketing infrastructures for both internal and international trade are quite good and facilitate marketing, including direct garden sales, auction sales, and forward sales (Mitra 1991). However, there is no formal mechanism for providing market information to growers and processors. This has affected the industry's ability to perform well in product development.

Tea is a popular drink in Kenya and about 80 percent of the Kenyan population prefer drinking tea because it is cheaper than other beverages (USDA, op.cit.). There are many dominant tea packers and local suppliers of tea in Kenya like the Kenya Tea Packers, African Highland Company, and Brooke Bond. The marketing infrastructure is also strengthened by the presence of the Kenya Tea Growers' Association, which has prominent global tea companies within its membership such as Brooke Bond, George Williamson, James Finlay, and Eastern Produce. Additional forces in the marketing arena are the East Africa Tea Trade Association (EATTA), the Tea Broker Association, the Tea Buyers Association, and the Warehouseman's Association. But, government involvement in the provision of such public goods as market information and export promotion is low. The estate firms, however, have good access to foreign market information and their internal marketing information system is well developed. International distribution is also fairly smooth for these firms, although domestic marketing is hampered to a degree by the quota set for KETEPA.

Sri Lanka may not be in as advantageous a position as its other two major competitors in the global marketing of tea. A majority of the manufacturers do not have direct links with overseas buyers, relying mostly on the auction system to sell their products. Efforts are being made now to change this. A few private management companies have started to link up with buyers abroad, mainly small resellers in Japan, Western Europe, the CIS countries, Poland, Middle East, and the United States. Some value adding is done by tea traders in Colombo, including blending, packaging, and branding. Some tea companies have their own brand in the market and some are starting to introduce branded tea in markets abroad. The emphasis on increasing the output of value added tea is strong.

R&D: India has a number of well known tea research centers including the Tocklai Experimental station of TRA and the Tea Research Institute of UPASI. The tea industry supported National Tea Research Foundation (NTRF) undertakes research on different areas of tea production. The Tea Board also provides funding to technical institutes such as the Indian Institute of Packaging for specific research on tea. Overall R&D, however, is weak; only about 0.2 percent of the industry turnover is spent on tea research, as compared to an average of 0.64 percent in all other major industries (Tea Board 1995, op.cit.). Lack of adequate research funding has hindered the type of sophisticated *research*

needed for a world-class industry. In addition, the research work is fragmented and there is little interaction between the different agencies (Tea Board, 1995, *ibid*). Some private estate companies have now started their own tea research.

The quality of tea research in Kenya, financed by the industry through a cess on production (World Bank 1987), has not been above average. Coordination of tea research by the Kenya Agricultural Research Institute has partly addressed the issue of fragmentation of research in many institutions. The Tea Research Foundation (TRF) has been developing new clones and improved technology for production. However, the work of the institute has only been on production of improved clonal varieties, nutrition, tea bush management, and harvesting. Research in manufacturing processes are lacking.

The pace of the development of tea technology in Sri Lanka is low (World Bank, 1994). New clonal varieties developed by the local research institutes have not been successful. The R&D work is fragmented and not extremely field oriented. The Tea Research Institute (TRI), although well funded, has lost a lot of research workers to forces of migration and is becoming increasingly marginalized. Work on adaptive research to fit clones developed elsewhere to Sri Lanka's needs have also been neglected.

Extension: In India, limited extension for tea is undertaken by TRA and UPASI-TRI through their network of advisory centers (Tea Board, *op.cit.*). The Tea Board provides some funding to the Assam Agricultural University for extending advisory services to the tea gardens.

Tea extension services in Kenya provided by the Kenyan Tea Development Authority are quite good. KTDA provides good transport and housing for its extension staff. Field staff also spend a lot of time in tea nurseries, and on supervising the timely collection of green leaf, which has contributed to the high quality of Kenya's tea.

The National Institute of Plantation Management (NIPM) in Sri Lanka has not been very effective in providing training to field workers. Its main problem is a dearth of qualified permanent training staff. In the smallholder sector, the Tea Smallholdings Development Authority (TSHDA) provides a fair amount of extension services. Overall, however, the extension services are weak (DeSilva, 1994).

Market Environment

Key markets' size and growth rate: Market demand conditions are almost ideal for tea in India. Domestic demand is rising at rate of 5 percent per annum (Tea Board 1995, *op.cit.*). The per capita consumption is, however, low at 0.62 kg. compared to 3.22 kg. in Ireland (the highest in the world), 2.61 kg. in the UK, 2.14 kg. in Turkey, and 1.23 kg. in Sri Lanka. International demand for high quality Indian tea is also good even though the country is unable to meet this demand because of its own internal needs. Exports to new markets like Poland, West Asia and the Middle East have gone up even though the formerly strong Soviet Union market has been weak (Table 3-7). The latter, which used to

import 32 percent of India's tea, has reduced its import drastically (19 percent per annum) - from 115.7 million kgs. in 1989 to 46.46 million kgs. in 1994. This is a big loss for India, which has reduced its competitive standing from number one to number four in world export of tea, after Kenya, Sri Lanka, and China. Among the other major export markets, U.K. (18 percent of total) has maintained a fairly even growth of 5 percent; but both Poland (14 percent of the total) and UAE (9.8 percent of the total) have increased intake by 25 percent per annum. Thus, about 23.8 percent of the international market is growing at 25 percent per annum, while the shape of at least 32 percent of the market is uncertain in the future.

Table 3-7
Direction of India's Tea Export, 1989-94
(Million Kilograms)

	1989	1990	1991	1992	1993	1994	Growth ¹
CIS	115.74	128.6	106.5	47.07	71.96	46.46	-19%
U.K.	21.89	21.68	23.75	28.93	25.83	26.52	5%
Poland	5.69	6.98	9.31	15.32	14.96	20.57	25%
UAE	4.19	4.77	7.44	5.28	11.93	14.39	25%

Source: ITC Bulletin, 1995. ¹ Growth estimated from the slope of the regression line.

With changing consumer income and taste globally, there is a good potential for the export of quality tea from India. The sale of instant tea, tea bags, and other packet teas had very robust growth in the 1980s. In the 1990s, even though the absolute export level fell, the values realized were in excess of 9 percent (Chiranjeevi, op.cit.). The extent of value-added tea exported from India in recent years has been around 35 percent of the total export. The trading environment has become considerably liberal with the abolition of export duties, excise duties, and dual exchange rate arrangement under the Liberalized Exchange Rate Management System (LERM), the reduction of the interest rate of rupee export credit, and the exemption of export profit from income tax. However, a few existing constraints, such as high import tariffs on tea packaging machines are likely to reduce the competitiveness of the industry, especially since it affects the export market directly.

The size of Kenya's domestic market for tea is approximately 25 million kgs., or roughly 12 percent of its production.⁴⁴ The average growth of the market has been practically nil and the per capita consumption of 0.70 kgs. per annum is already high from most developing country standards to suggest significant expansion in the future. The country's tea export is about 184 million kgs. per year. The principal markets are the United Kingdom (40%), Pakistan (29%), and Egypt (14%).⁴⁵ Import trends in these markets show that tea sales to the UK, the largest market, have declined by about 2 percent per annum since 1989 (Table 3-8). In Pakistan, the second largest market for

⁴⁴ Based on 1994 production and retention of tea in the country, ITC Bulletin 1995.

⁴⁵ Data source: Tea Board of Kenya, Annual Report and Accounts, 1993-94.

Kenya, growth has been about 2 percent per annum, which is fairly low. Part of the slow down in Pakistan's import is due to its trade imbalance with Kenya. Thus about 70 percent of the market for Kenyan tea is at best in doldrums. The only encouraging picture seems to be in Egypt where the import of Kenyan tea is growing at a very brisk pace of 21 percent per annum, even though the absolute quantity is low. In addition, major markets like the former Soviet Union and the Middle East, which have a traditional preference for orthodox teas, are outside Kenya's target markets because its orthodox tea production is miniscule. The future market potential for Kenya appears to be only in the high quality CTC segment.

Table 3-8
Direction of Kenya's Tea Export 1989-94
(Million Kilograms)

	1989	1990	1991	1992	1993	1994	Growth
United Kingdom	80.2	83.4	82	75.7	81.7	72.5	-2%
Pakistan	41.3	48.6	45.7	43.6	52.4	44.4	2%
Egypt	5.8	18.6	21.0	24.4	31.7	29.9	21%

Source: ITC Bulletin, 1995.

Sri Lanka's domestic tea consumption is only 8 percent of its output as 92 percent is exported. Its major markets in 1990 used to be Egypt, Iraq, Iran, the U.K., the USSR/CIS, and Syria. By 1995, the market make-up had changed, with the leading importers being the CIS, Jordan, Egypt, the U.A.E., Syria, and the U.K. in that order (Table 3-9). In terms of growth, the largest market for Sri Lanka is the CIS where its main competitor is India. Sri Lanka's export to the CIS in 1995 (40.37 million Kg.), however, was very close to India's export to that country in 1994 (46.46 million Kgs.). The CIS market has a distinct preference for leafy tea which is the dominant product of the low grown areas of Sri Lanka.

Table 3-9
Direction of Sri Lanka's Tea Export 1989-95

	1989	1990	1991	1992	1993	1994	1995	Growth
Egypt	33.9	29.62	20.4	16.8	12.42	16.6	16.85	-15%
Iraq	24.17	18.82	0.91	0	0	0	0	-27%
Iran	12.63	24.76	31.65	24.48	8.51	5.11	5.89	-18%
United Kingdom	12.32	11.67	11.7	10.52	13.55	17.49	12.88	4%
USSR/CIS	11.22	14.13	5.14	4.1	25.03	12.66	40.37	23%
Syria	10.1	16.32	9.93	14.44	17.76	22.86	16.7	9%
Jordan	3.96	6.52	31.41	21.81	24.02	25.77	18.12	14%
U.A.E	5.82	7.91	10.65	4.78	17.64	21.58	16.83	20%

Source: ITC Bulletin, 1995 and Forbes and Walker (Sri Lanka) Tea Review 1995.

The Middle East market still dominates Sri Lanka's export (57%).⁴⁶ The UAE is the second largest growing market for Sri Lanka with an average growth of 20 percent in the past six years. The only competition there is from India, which trails Sri Lanka in market share. However, the UAE import is mainly for trade and not for consumption. Jordan is the third largest market after the CIS and the UAE. Between 1989-1994 this market grew about 14 percent. Most of its purchase is value added tea (over 69% in tea packets). Jordan is probably an intermediary in buying tea for Iraq which is still under the UN embargo. The market in Egypt was lost to Kenya in 1991. Egypt's import from Sri Lanka in 1994 was still around 16 million kilograms a year. The partial loss of the Egyptian market could be attributed to a shift in consumer preference there from value-added to bulk tea. But the main reason is probably an aggressive push by Kenya with its CTC tea, which Sri Lanka does not produce in substantial quantities.

Income and income growth in key markets: The four major markets for Indian tea are the CIS countries (46.5 million kgs.), the U.K. (26 million kgs.), Poland (20.5 million kgs.) and the UAE (14.4 million kgs.).⁴⁷ In the CIS, real income growth has been negative in the past few years and thus tea consumption has been reduced substantially. Income growth in the UAE was also negative between 1980-93.⁴⁸ In Poland, the average annual growth of income has been less than one half of a percent. Only in the U.K. did income grow over 2.5 percent. From this perspective, the traditional markets for Indian tea do not hold great promises for future expansion. There has been some recovery in the CIS countries in 1996, but the demand there is still uncertain for Indian tea.

Among the major markets for Kenya's tea, the U.K., Pakistan, and Egypt have all had positive per capita income growth of 2.5 percent, 3.1 percent, and 2.8 percent, respectively. This is a positive indicator for future growth of tea consumption in these countries. The U.K. market may, however, be at its saturation level and then no change could be expected unless some structural changes were to take place in consumption behavior.

Sri Lanka's main markets in 1995 were the CIS, Jordan, Egypt, and the UAE. Income growth in the former Soviet Union/CIS countries, between 1980-1993, was -0.4 percent. In Egypt, income growth in the same period was 2.8 percent and in the UAE it was -4.4 percent. However, the CIS countries are recovering from their previous economic decline, and the countries with which the UAE is trading have sound economies. The future potential for tea consumption in these countries remains strong.

Price conditions in key markets: Market success depends in large part on an organization's ability to deliver the benefits desired by customers effectively and efficiently. Such abilities are called positional advantages and are the sources of competitive superiority for each tea producing country. Pricing is a major factor in creating positional advantage.

⁴⁶ See Forbes & Walker (Sri Lanka), Annual Tea Review 1995.

⁴⁷ 1994 export figures, ITC Bulletin, 1995.

⁴⁸ See World Bank, World Development Report, 1995.

The price of bulk tea at the auctions in various countries are determined partly by their quality and partly by their offer prices. Comparing average prices of tea from nine countries at the London Auctions during 1985-1994 (Table 3-10), the price advantage seems to be on the side of China, Indonesia and Sri Lanka, enhancing their positional

Table 3-10
Annual Average Prices of Tea at the London Auction
(Pence per Kg.)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
India	198.5	141.9	122.5	122.5	144.8	142.3	132	116.6	131	115.2
China	74.9	65.2	...	...	...	...	76.1	85.7	91	74.4
Sri Lanka	155.7	115.7	105.2	99.3	125.6	112.3	100.3	107.4	104	93.7
Kenya	176.6	156.5	117.8	103.7	123.4	112.4	101.1	115.6	123.9	125.6
Indonesia	87.8	99	84	83.4	...	...	...	...	...	...
Bangladesh	155.7	114.4	72.2	88.5	111.4	78.6	...	89	93.4	...
Malawi	120	106.1	78.8	75.6	97.6	79.1	78.3	84.6	94.2	101.8
Tanzania	149.3	124.9	95	89.9	112.2	102.3	89.3	95.7	109.4	104.3
Rwanda	153.2	149.4	107.5	112.9	146.9	184.1	148.7	139.3	144.5	161.3

Source: ITC Bulletin, 1995.

advantage. The highest priced teas came from Kenya and Rwanda making them non-competitive to a degree. Of course, the quality differentials must be factored out from these figures to get the true picture.

The price of Indian tea in the CIS, Poland, and the U.K. declined between 7 to 9 percent between 1989-1994 (Table 3-11). The drop was less (-3%) in the United Arab Emirates which imports about 10 percent of India's exported tea. The average price received from the UAE was also higher than those obtained in the other major markets.

Table 3-11
Price of Indian Tea in Major Export Markets
(U.S. Dollars per 1000 kg.)

	1989	1990	1991	1992	1993	1994	Change
CIS	2.52	2.98	2.33	1.96	2.07	1.92	-8%
U.K.	2.22	2.96	2.50	2.18	1.90	1.79	-7%
Poland	1.98	2.51	1.83	1.53	1.84	1.27	-9%
UAE	2.67	3.03	2.75	2.89	2.60	2.37	-3%

Source: ITC Bulletin, 1995

Statistics show that on average the price of Kenyan tea in the U.K. has been less than India's in the past. Between 1989-1994 the price increased by only 2 percent per annum (Table 3-12). Higher price increases (4%) were realized in the other two major countries of export, Pakistan and Egypt. The World Bank forecasts an increase in the average price of Kenyan tea by 27 percent in real terms between 1987 and 2000 (World Bank 1987). This is indicative of continued strong market position of Kenya in the future.

Table 3-12
Price of Kenyan Tea in Major Export Markets
(U.S. Dollars per 1000 kg.)

	1989	1990	1991	1992	1993	1994	Change
U.K.	1.70	1.71	1.60	1.81	1.67	1.92	2%
Pakistan	1.53	1.64	1.62	1.89	1.80	1.85	4%
Egypt	1.44	1.19	1.50	1.59	1.64	1.54	4%

Source: ITC Bulletin, 1995.

Between 1989-1994 the average price of Sri Lankan tea declined in all its major markets. However, the CIS market has shown an upward trend in prices since 1992. This market imported about 40 percent of Sri Lanka's packet teas and 12 percent of its tea bags, at premium prices in 1995 (Forbes & Walker, op.cit.). In 1995, Sri Lanka's average export price to the CIS was Rs. 107.34 compared to the national average FOB price of Rs. 101.76. This market holds a lot of potential for Sri Lanka.

Table 3-13
Price of Sri Lankan Tea in Major Export Markets
(U.S. Dollars per 1000 kg.)

	1989	1990	1991	1992	1993	1994	Change
USSR/CIS	2.03	2.60	1.82	1.57	1.75	2.26	-2%
Jordan	1.54	2.46	1.75	1.39	1.54	1.48	-6%
Egypt	1.62	1.90	1.59	1.56	1.52	1.50	-3%
U.A.E	1.70	2.29	2.17	1.81	1.87	1.77	-2%

Source: ITC Bulletin, 1995.

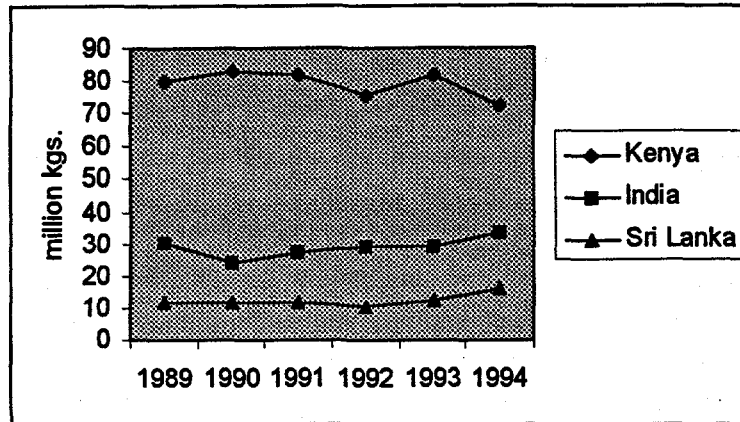
Export prices to Jordan have declined in recent years because the country has reduced its purchase of value-added tea. In 1995, about 69 percent of Jordan's tea import from Sri Lanka was in packet form, down from 77 percent in 1992. Prices of Egyptian export have also declined for the same reason. In 1995, only 25 percent of Egypt's import from Sri Lanka was in the form of value-added tea whereas in 1980 this number was 85 percent. However, prices in the U.A.E. market have been fairly strong.

Extent of competition in the key market: The main competitor of India in the CIS market is Sri Lanka, which exported 10.38 million kgs. to the CIS in 1994 (12.4% of CIS import) compared to India's 33.87 million kgs. (41% of CIS import). The second largest competitor was Germany, which exported 7.86 million kgs. (9.5% of CIS import) to the former Russian Federation. In the U.K., India's main competitor is Kenya, which has more than double of India's market share.

The major competitors of Kenya in the U.K. are India and Sri Lanka. In 1994, U.K. imported 72.5 million kgs. (39.6 %) of tea from Kenya, 33.6 million kgs. (18.3%) from India and 16.3 million kgs. (8.9%) from Sri Lanka. In 1993, the ratios were 42% (Kenya), 15% (India), and 6.5% (Sri Lanka). The important thing to note here is that

while Kenya's share of the market has been dropping, the market shares of both India and Sri Lanka have been going up in the U.K (Figure 3-7).

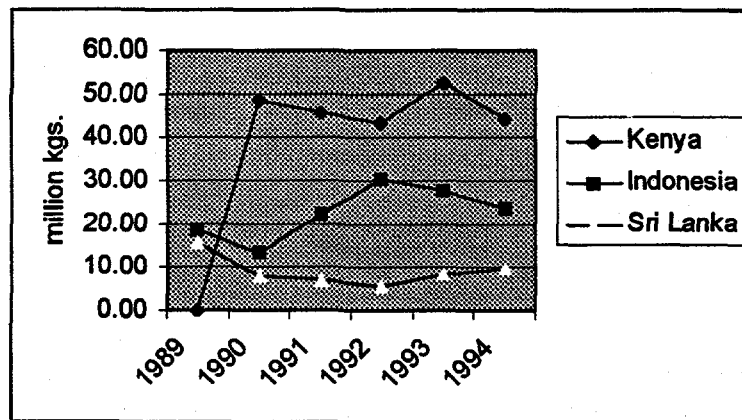
Figure 3-7
Tea Export of Major Competitors to the U.K., 1989-1994



Source: ITC Bulletin, 1995

In Pakistan, Kenya's main competitor is Indonesia, which had 22.2 percent of that market compared to Kenya's 41.7 percent in 1994. Sri Lanka was a distant third with 9.2 percent. However, the trend for both Kenya and Indonesia are downwards while it is upwards for Sri Lanka (Figure 3-8).

Figure 3-8
Tea Export of Major Competitors to Pakistan, 1989- 1994

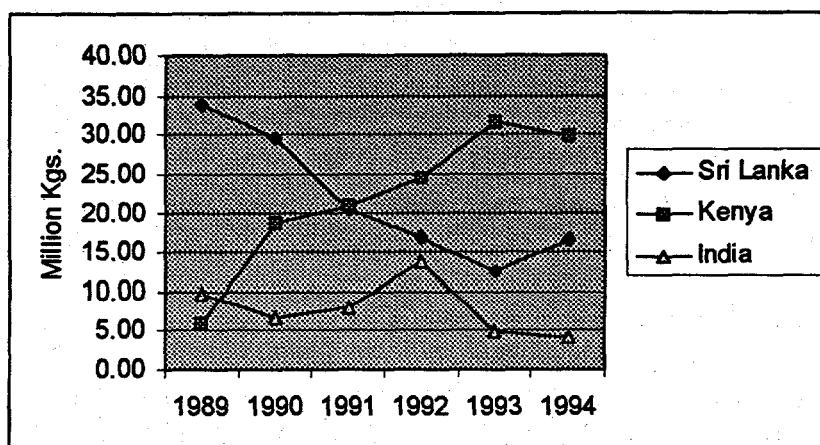


Source: ITC Bulletin, 1995

In Egypt, the main competitor of Sri Lanka is Kenya which took away the leadership from Sri Lanka in 1991 and has since consolidated its position. By 1993 Kenya secured 52 percent of the Egyptian market that was previously held by Sri Lanka. By 1994, Sri Lanka's share of the market dropped to less than 20 percent. However, since

1994, its position has improved somewhat and Egypt still holds good promise for Sri Lanka.

Figure 3-9
Tea Export of Major Competitors to Egypt, 1989-1994



Source: ITC Bulletin, 1995

Micro-marketing and Coordination

Production/Marketing Coordination: In India, the coordination of production and marketing takes place through well developed channels that facilitate spot or forward sales and public auctions in six auction centers. Efforts are also underway for improving international market research, new products for new segments, and for establishing packaging and quality standards for the marketplace. The average price of Indian tea has been relatively higher than major competitors', partly because of its protected domestic market. For instance, in 1993 the average price of Indian tea was US \$2.03 per kg., compared to \$1.86 for Sri Lanka, \$1.71 for Kenya, and \$1.26 for Indonesia.

In the Kenyan tea estates, run by large multinational companies, production and marketing are well integrated. The smallholder sector, managed by KTDA, has excellent facilities for getting the producer's output to the auction centers, but not much is available for increasing the value added component of the export.

The coordination of production and marketing in Sri Lanka's estates were weak until private management companies took over in 1992. The situation has improved since then and most of the production companies are trying to develop marketing channels outside the traditional auction markets. Although its major form of export is still bulk tea, there is a strong move towards increasing the proportion of value added export. Response to international market demand for tea in sachet, aluminum foil soft packet, box board cartons, economy packs, canisters, bags, etc. has been quite good. Manufacturers are also responding to demands from specific buyers for instant tea, organic tea, flavored tea, etc.

Local processing and linked industries: The processing of value added teas like instant tea, tea bags, and packet tea has grown rapidly in India with good support from the linked packaging and advertising industries.

In the Kenyan tea estates, production and processing are integrated and efficient. In the smallholder sector, KTDA has provided the integrated services of supplying planting material, credit, extension, leaf collection, and marketing of made tea. These contribute immensely to the industry's competitiveness. The export of value added tea in different forms, however, is not the forte of Kenya. Its instant tea export, after reaching a peak of 1.22 million kgs. in 1992, declined to 1.02 million kgs. in 1994.

Local processing of tea into value added form is very good in Sri Lanka. The country produces packet tea, tea bags, instant tea, many forms of flavored tea, vacuum packed tea, etc. Supporting industries like packaging, advertising, and export management are available within the country.

Quality control: Quality control is fairly good and institutionalized in the Kenyan tea estates. Infrastructure failure and inadequate processing capacity, however, have reduced the quality of Kenyan tea from the smallholder sector. The KTDA in the past had maintained fairly strict quality standards in accepting green leaf from its member growers, but again the failure of the transport system and delays in processing have resulted in quality deterioration of made tea.

Quality control within the tea industry in Sri Lanka is quite good and the image of Sri Lanka's tea in the world market is very positive.

Risk sharing: The smallholder sector in Kenya is well supported by KTDA and thereby has marginal risks of production and marketing failure.

In Sri Lanka, the small tea growers have access to factory processing services owned by the estates. Most factories also buy green leaf from non-estate growers for filling capacity. These reduce the risks for the small holders considerably.

Technical/Financial and Managerial Skills: Technical and management strengths within the Indian tea industry are inadequate for meeting challenge from major international competitors. The productivity of research is particularly low because of inadequate funding. The financial strength of the industry is also low. The capital market has not supported the industry and only meager external financing has been possible through a few financial institutions. Short-term financing from commercial banks is available at high rates of interest.

The Kenyan tea estates are well endowed with technical, financial, and management strength of well established companies. Even in the smallholder sector, KTDA has performed quite well. It is financially strong despite very little subsidy from the government, except for some guaranteed loans at below market rates from agencies such

as CDC (Government of Kenya 1992). Its technical and management capacities have been good in the past, but are inadequate for the future. It is now under considerable pressure to restructure and reorient its functions.

Technical and management strengths are lacking in many of the private plantation companies in Sri Lanka. They, however, are trying to upgrade these skills as quickly as possible through training and joint-venture programs with foreign partners.

Cost structure: The average cost of production of tea in India today is about U.S.\$ 1.20 per kilogram.⁴⁹The COP in Kenya is approximately 46 shilling/kg. or roughly U.S. \$ 1.00. The COP in Sri Lanka varies from \$ 1.85/kg. in the estate sector to \$ 1.21 in the private sector.⁵⁰ Kenya, thus has the lowest COP, followed by India, and then Sri Lanka.

Marketing strength: India relies on some product differentiation and brand promotion for international marketing of tea. A particular advantage of the country is its ability to produce both orthodox and CTC teas. In general, orthodox tea prices have been better than CTC tea (Chiranjeevi, op.cit.), but today the percentage of orthodox tea produced in India is only 11. The country has been expanding its production of value added teas like instant tea, tea bags, and packet tea. The marketing channels for tea export from India are well established. Generally, producers have access to four different channels: ex-garden sales to domestic and foreign buyers, direct consignment to London auctions, sales at domestic auctions, and forward sales (Mitra 1991).

The India Tea Board promotes tea through its foreign offices in London, Brussels, New York, Dubai, and Moscow. It also has a brand promotion fund that provides interest free loans to exporters for introducing new brands. It has placed three brands in overseas markets for its Darjeeling, Assam, and Nilgiris teas. It also promotes value-added teas like packet tea, tea bags, and instant tea. It supports generic tea promotion as well through the U.K. and German tea councils.

International marketing by the estate sector of Kenya is quite strong since it is managed by multinational companies. Most of KTDA tea sales take place at the Mombasa auction through 20 brokerage firms. Private sales, basically for obtaining better prices, are also handled for KTDA by the brokers (GOK 1992). KTDA's own marketing division obtains marketing information directly rather than getting it through the brokers. Heavy reliance on the auction system has kept back the development of modern marketing techniques such as market segmentation and positioning for increasing competitive advantage. Product differentiation is also poor. Almost all tea produced in Kenya is of the CTC variety, with the exception of a small amount of instant tea (1 million kgs.) marketed to the U.S., the U.K., Germany, and Italy. Kenya is, however, targeting the North African and Middle Eastern countries because of their increasing consumption, although the demand there is mostly for orthodox tea. After the collapse of the International Tea

⁴⁹ From India Tea Board (1995) estimated cost of production converted at exchange rate of Rs.35/U.S. \$.

⁵⁰ Data source: Sri Lanka Plantation Sector Statistical Pocket Book (1995), Rupee value converted at exchange rate of Rs.40 per U.S. \$.

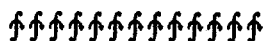
Promotion Association a few years back, Kenya withdrew its membership at the U.K. Tea Council. At present it promotes its tea unilaterally in Pakistan, Egypt, and the UAE.

Sri Lanka's marketing strength lies in its recently privatized tea companies. Some of these companies have strong track records in managing successful business. Most of them have shown strong entrepreneurial drive. Sri Lanka has the highest ratio of value added export - currently around 35 percent of the major tea exporters of the world.

Product innovation: One of India's main strengths in the international market is its diversity of products and processes. It produces both orthodox and CTC teas and many of its factories have dual production capacity. It has also been directly exporting consumer packages in various sizes and specialty teas like instant tea.

Product innovation in Kenya's tea industry has not been notable. Since over sixty percent of the tea produced there comes from the smallholder sector, managed by KTDA, there has not been much effort in developing new varieties of products to suit different market needs. Furthermore, the industry's growing share of the international market has desensitized it to the need for product differentiation for retaining competitive advantage. Kenya does not export any significant quantity of value added teas. The only new product developments have come from the estate sector in the form of vacuum-packed tea, and some new light blends.

New product development in Sri Lanka has been quite insignificant in the past three years, except for the development of the Ortho-CTC variety.⁵¹ Although companies are looking to diversify their market, the main effort is still towards marketing the existing product lines to new markets.



⁵¹ From survey of management companies, August 1996.



CHAPTER 4

THE SRI LANKAN TEA INDUSTRY: STRATEGIES FOR CREATING GLOBAL COMPETITIVE ADVANTAGE

The most important concept of competitiveness at the national level is national productivity. Sustained productivity growth requires that an industry constantly upgrade itself in terms of product quality, new desirable features, improve product technology, and boost production efficiency (Porter 1990, op.cit.). The various firms in the industry must also develop the capability to compete in more and more sophisticated markets and industry segments. Human resources freed up in the process of improving productivity can be retrained for diversion to other value-adding activities. It is important to understand that cheap labor and 'favorable' exchange rates are not the absolute definition of competitiveness (Porter, *ibid.*). Competitiveness also lies in supporting high wages and commanding premium prices in international markets, and most important of all, developing an advantage that is dynamic and evolving.

Even though companies and not nations are on the front line of international competition, the responsibility of the nation is not lessened. The environment within the home country shapes the ability of companies to innovate technology and methods that places them in the forefront of global competition. The most important sources of the national advantage need to be nurtured and advanced. Simple reliance on low wages and price control will not make a nation competitive and keep it there. Internationally successful firms constantly seek out new advantages and struggle with rivals to protect them.

Lessons of experience show that even though different organizations may use different strategies to accomplish their goals, they all tend to manifest some common underlying behavior. In general, five principles seem to explain the reason for sustained competitive advantage in globally successful firms (Porter, *ibid.*). These principles are:

- ❑ Competitive advantage grows fundamentally out of improvement, innovation, and change;
- ❑ Competitive advantage involves the entire value system encompassing the value chain of firms, suppliers, channels, and buyers;
- ❑ Competitive advantage is sustained only through relentless improvement;
- ❑ Sustaining advantage requires that its sources be continually upgraded;
- ❑ Sustaining advantage ultimately requires a global approach to strategy.

The long-term challenge for firms in Sri Lanka is to put themselves in position where they are most likely to perceive and thus best able to address the imperatives noted above.

The process could be started by assessing their strengths and weaknesses in the domestic and global markets, getting an early insight into the forces of the environment, understanding the needs and trends of the markets, and getting a head start for creating meaningful innovation. Some of the ways in which they could create the impetus for innovation are (Porter, *ibid.*):

- Selling to the most sophisticated and demanding buyers and channels. These buyers and channels will stimulate the fastest improvement because they are knowledgeable and expect the best performance.
- Seeking out buyers with the most difficult needs. These buyers will provide the challenge for upgrading performance and R&D.
- Providing quality and service beyond the norms of standards products.
- Seeking out outstanding competitors as motivators.

SWOT ANALYSIS OF THE TEA INDUSTRY⁵²

Once the forces affecting competition have been identified, the industry will be in a position to identify its strengths and weaknesses to overcome the threats and cash in on the opportunities. An understanding of the strengths, weaknesses, opportunities, and threats facing the Sri Lankan tea industry today is the first step towards creating a long-term strategy for enhancing its position in the global market. Foregoing discussions of the production-marketing system and the relative positions of the main suppliers of tea to the global market on major success factors shown in Table 3-4 provide us with the following picture of the Sri Lankan tea industry today:

Strengths

- Sri Lanka holds a dominant position as a leading exporter of black tea and has a strong presence in major markets such as the Russian Republic and CIS countries, Jordan, Egypt, and the UAE.
- It has a reasonably diversified product line, producing both orthodox and CTC tea. It has recently developed a type of Ortho-CTC tea with some of the more desirable features of both forms.
- It has made some progress in the production and export of different forms of value added tea such as decaffeinated tea, instant tea, and flavored tea. Many of the private producers have targeted the health food segment of the world with their organically-grown tea and are trying to establish direct sales linkages with overseas end distributors.
- The Sri Lankan tea industry is operating in a diversified geographical market which gives it the strength to sustain future demand fluctuations.
- Quality control within the industry is good.
- Sri Lanka's image is strong in the international tea market.

⁵² A SWOT, or strengths-weaknesses-opportunity-threat analysis examines the enterprise's internal strengths and weaknesses and external opportunities and threats. It is grounded in the principle that a strategy must produce a strong fit between the organization's internal capability and external environment.

Weaknesses

- The total area under tea in Sri Lanka is shrinking without much improvement in productivity, in contrast with Kenya where both land area under tea and productivity is on the rise.
- The facilities for the production of tea have become obsolete. The growing stock is old and has lost productivity. Factory modernization is slow and there is an imbalance in the production ratio of orthodox and CTC teas. The country has been slow in exploiting the potential of the tea-bag market by falling behind in CTC production. In the instant tea market also, despite its earlier lead, Sri Lanka has fallen behind Kenya and India.
- Its productivity is very low compared to other international producers.
- The availability of quality workers is on the decline.
- The export distribution network for tea is weak. Most of the tea is still channeled through commodity auctions.
- Technical and management skills are lacking.
- The sector is financially weak.
- Unit costs are high, relative to key competitors.
- The coordination of production and marketing is weak and international marketing skills are below what is required for a market leader.
- The rate of product innovation is low.

Opportunities

- World demand for black tea is expected to grow at a rate of 3.2% per year.⁵³ A substantial part of this demand is likely to come from developing countries, particularly in the Middle East, and from CIS countries which have a preference for orthodox tea. The CIS countries are also likely to continue to be strong buyers of high quality tea as there are indications that the market there has started to recover from its earlier economic problems.
- The demand of tea in the west is likely to become very selective for specialty tea such as instant tea, organically grown tea, and flavored tea. Sri Lanka has strong potentials for exploiting these premium price segments.
- The future consumption potential in other key markets is high.
- The price trend in major markets like the CIS and the UAE are strong.
- The world market for beverages is fast becoming segmented due to changing lifestyle and consumer preferences, as well as intensive market promotion by beverage manufacturers. Sri Lanka is placed better than most of its competitors to take advantage of this segmentation.
- Sri Lanka produces a wide array of tea, from high quality light tea to strong dark tea. It can exploit this ability to expand the product line and diversify into related products.
- There is a good potential for Sri Lanka to achieve forward integration of its market by establishing direct linkages with overseas buyers and consumers. The

⁵³ FAO, Trade Projections till 2005

private tea companies in the country are already exporting branded tea and packaging is developing.

- Deregulation and recent government actions in freeing up the production-marketing system extend good opportunities to the private sector to install new production processes that enable cost efficiency and foster increased price competition.
- The favorable exchange rate regime holds good potential for future price competitiveness.

Threats

- Almost all countries competing with Sri Lanka have higher productivity and productivity growth rate.
- Kenya has overtaken Sri Lanka as the world's largest exporter of tea.
- The pace of technology development and product innovation is low.
- Government's control over the labor market still threatens to destabilize the industry.
- Sri Lanka's lack of CTC production capacity is likely to make it lose some extremely lucrative markets like Pakistan, which is slated to become the leading importer of black tea by the year 2005.
- Changing demography and buyers' needs and taste are likely to replace the demand for traditional bulk tea with differentiated tea in the world market.
- Stagnant infrastructure development may decrease the industry's ability to compete internationally.

An effective competitive strategy involves offensive or defensive action in order to create a defensible position against the five competitive forces shown in Figure 3-1. For the Sri Lankan tea industry, this may involve a number of possibilities (Porter 1980, op.cit.):

- Using the industry's strengths to position it in a way that creates the best defense against the array of competitive forces.
- Influencing the balance of forces through strategic moves to improve its operating environment.
- Anticipating likely shifts in the factors underlying the forces and responding to them before the rivals recognize them.

Positioning

The first approach for the industry is to match its strengths and weaknesses to the market and industry structure and find positions where the forces are the weakest. For example, the industry may only sell products that are not vulnerable to competition from substitutes to the powerful buyers in the tea auctions.

Influencing the balance

The balance of competitive forces are partly controllable by the organization. For example, product innovation or branding could create the necessary differentiation for warding off the threat of substitute products. Capital investment in large scale facilities or forward integration with packers and exporters would create entry barriers. Structural analysis could be used to identify the key factors and the places where strategic actions to influence the balance should be applied.

Pre-empting change

Long-range forecasts, through careful analysis of the industry-market trend, can provide projection of the changing trends that could be used in long-term planning. This is one way of staying ahead of the competition. The industry's core competency lies in its product image and the ability to serve different market segments for black tea with differentiated products. These core competencies should be constantly reassessed in the terms of future market needs and new methods should be planned to address problems before they arise.

Long-term planning for the tea industry would involve a number of steps, starting with a clear definition of the industry's mission and objectives and ending with tactical plans.

DEFINING THE MISSION AND OBJECTIVES OF THE INDUSTRY

It is perhaps widely accepted within the tea industry in Sri Lanka that its mission should be to produce high quality tea for maintaining profitable growth and a leadership position in the global market. The four main objectives for firms in support of this mission are shown in Table 4-1.

It is important to note that there may be some built-in conflicts within these objectives and that long-range goals for profitability and increased sales may require short-run sacrifices. The process of developing an integrated strategy therefore has to be based on:

- Examining the environmental threats and opportunities;
- Selecting objectives that are consistent with these threats and opportunities, and with the core competencies of the industry; and
- Acquiring any additional competencies required for successful implementation.

Table 4-1
Sri Lanka's Tea Industry: Probable Objectives for the Millenium

PROFITABILITY
<ul style="list-style-type: none"> ▪ Net profit as a percent of sales – Set target ▪ Net profit as a percentage of total investment – Set target ▪ Net profit per share of common stock – Set target
VOLUME
<ul style="list-style-type: none"> ▪ Market share – Set target ▪ Percentage growth in sales – Set target ▪ Sales rank in the market – Set number by market segments ▪ Production capacity utilization – Set target
STABILITY
<ul style="list-style-type: none"> ▪ Variance in annual sales volume – Set target ▪ Variance in seasonal sales volume – Set target ▪ Variance in profitability – Set target
NONFINANCIAL
<ul style="list-style-type: none"> ▪ Improved image for quality and reliability – Set target ▪ Enhancement of technology for product and process innovation – Set target ▪ Improvement of manpower resources – Set target

Source: Authors' formulation.

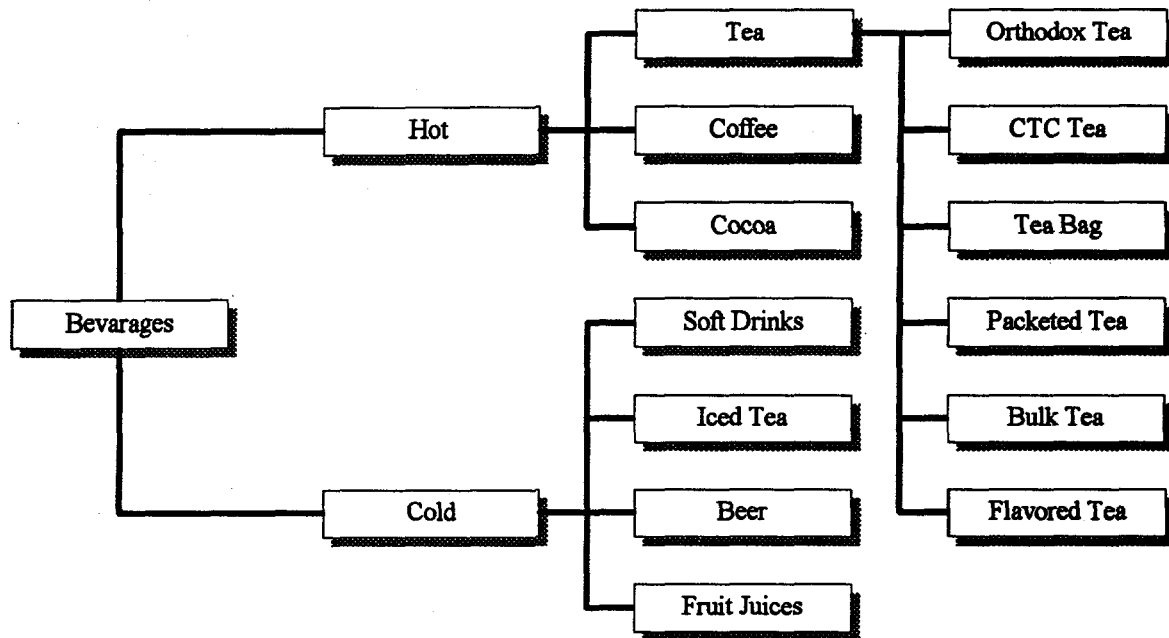
For example, even though world demand for black tea is growing, so is the volume of production. This requires a careful strategy of matching buyers' needs with the ability of the industry to serve the needs within its core competency. The growing CIS market for high quality orthodox tea provides Sri Lanka with the right product-market fit because of its strength in production of high quality orthodox tea. However, a significant amount of future demand will be of CTC tea, particularly in strong markets like Pakistan. Sri Lanka's capacity for the production of CTC tea is presently 20 million kg/year or about 8 percent of its total capacity. In comparison, Kenya's CTC production is over 95 percent and this has enabled it to get a strong footing in Pakistan. Some Middle Eastern countries, like Egypt, have also become CTC tea buyers and this is costing Sri Lanka market share in those countries. The strategy, therefore, has to assess future market possibilities in these countries and perhaps add capacity for CTC production.

THE RELEVANT MARKET FOR TEA

There are many different products that serve the same need as tea. The competing alternatives for tea could be classified at three different levels. First of all, there are competing product classes that serve the same generic need as tea, such as hot beverages, cold beverages, and alcoholic beverages. Second, there are competing product forms within a product class, such as within the hot beverages class there are tea, coffee, cocoa, chocolate, etc. Thirdly, there are competing suppliers (or types of tea) within a product

form such as Kenyan tea, Indian Tea, orthodox tea, CTC tea, tea bags, and loose tea in packets. The principal market structure⁵⁴ for tea is shown in Figure 4-1.

Figure 4-1
The Market Structure for Tea



Source: Authors' formulation.

Competitive products for tea, both in the hot and cold beverage product class, are soft drinks, juices, beer, coffee, cocoa, and chocolate. However, the substitutability of these products tends to vary across markets. In the U.S., for example, soft drinks are a strong substitute for tea, but coffee is not (FAO 1995, op.cit.). Also, juices are complementary to tea in the United States. There are not enough consumer research data from other countries of the world to draw inference about the substitutability of tea for different types of drinks, but average consumption data from the United Kingdom show that soft drinks may be the main competitor of tea in that market, also.

The per-capita consumption of soft drinks is rising in many parts of the world in comparison to tea and coffee.⁵⁵ The global market for fruit juices is around \$10-12 billion a year (Clairmonte and Cavanagh 1990, op.cit.). The dominant subsector is orange juice, accounting for two-thirds of the market. Apple juice ranks second, followed by grapefruit juice, and other minor juices. The industry is dominated by major multinational corporations such as Coca Cola, Procter & Gamble, RJR Nabisco, Allied-Lyons, Cadbury Schweppes, Pernord Ricard, Suntory, Tchibo, and Oetker, which put out millions of dollars for promoting that industry every year. There has been a spectacular growth in

⁵⁴ The market structure determines the degree of substitutability among a set of products.

⁵⁵ Data source: The U.K. Tea Council (1996).

this industry in the past ten years, making it one of the world's major agro-based businesses (Kortbech 1991). Even though the average per capita consumption of juices worldwide is still low, it is going up gradually with increasing consumer consciousness about health. There is a good prospect of high growth in the developing countries in the future, but at present a small number of developed countries including the United States, Germany, the United Kingdom, the Netherlands, France, Canada, Japan, Belgium, Italy, Sweden, and Switzerland account for the major portion of fruit juice import.

Consumption of alcoholic beverages, on the other hand, is barely growing in most developed countries (Standard and Poor 1996). Many firms in the wine and spirit industry are restructuring and downsizing. The future focus of this industry seems to be on product innovation, repositioning of product portfolio towards premium products, and capitalizing on opportunities in developing countries.

Analysis of Primary Demand for Tea

The demand for black tea in the world is growing at less than one percent per annum. This demand is influenced by climate, population density, cultural tradition, and other factors that vary according to regions. Sizeable growth has taken place in the last ten years in countries like India, Pakistan, Syria, Morocco, and Jordan. Both Asia and Latin America showed a growth rate of 16 percent, during the period 1986-1995 (Figure 1-7).

Demography and lifestyle characteristics (also called *psychographics*) are important determinants of tea consumption as much as they reflect the way of modern urban living. The cultural and historical pattern of tea consumption in the world has changed significantly in the last two decades because of changes in beverage consumption habits of younger groups influenced by heavy promotion of soft drinks all over the world. Per-capita tea consumption in the United Kingdom, the world's largest tea consuming country, fell from a peak of 4.50 kilograms in 1961 to 2.53 kilograms in the period 1993-1995.⁵⁶ On the other hand, population and income growth have contributed to a rapid increase in tea consumption in the Middle East, North Africa, South Asia, and the CIS countries. Between 1985 and 1995, annual tea consumption in Jordan increased by 21.9 percent, in Dubai by 9.8 percent and in Syria by 5.7 percent. In India, tea consumption increased at an annual rate of 3.7 percent and in China by 3.6 percent. In the former USSR-Russian Federation-CIS, the average growth was only 2 percent. Growth in the later half of 1990s, however, has been very strong there, indicating a return of the earlier high-demand characteristic of this region. The overall demand growth in Europe, barring the U.K., was around 0.9 percent. As Figure 1-6 shows, the highest consumption in 1995 took place in Asia (27%) followed by Africa (16%). The highest regional consumption was in the CIS-Russian Republic (15%). Overall, the CIS and Russian Republic, the Middle Eastern and African countries like Egypt, Morocco, and Jordan, and Asian countries like Pakistan and probably India in the long-term hold the greatest potential for Sri Lanka's export of black tea in the coming decade.

⁵⁶ ITC Bulletin, 1996.

If we break the rate of consumption and the growth of consumption into three levels, high, medium, and low, and classify the main tea consuming countries along these dimensions, the result could be represented in the 3x3 matrix shown in Figure 4-2. The country cluster in each cell represents a particular level of future potential market for tea. The three cells in the upper right corner are the star cells representing the maximum future potential. In contrast, the three cells in the lower left corner represent minimum future potential. The countries in the diagonal of the matrix hold good promise for the future, but could have a reversal also.

Countries with high levels of per-capita consumption and high growth rate of consumption hold the maximum potential. These countries are the UAE and Jordan.⁵⁷ Countries with high consumption but low growth rate are the U.K. and Ireland. Among medium consumption and high growth countries are Syria, Poland, and Chile. India, Sri Lanka, Japan and the CIS are medium-consumption medium-growth countries. Among countries where the consumption level is fairly low at present, but growing strongly are China and France. The medium-consumption but low-growth countries are the Netherlands, Pakistan, Iran, Saudi Arabia, Kenya, South Africa, Egypt, and Australia. Finally, countries with simultaneous low consumption and low growth rates include Germany, USA, Canada, Tanzania, Uganda, and Sudan.

Analysis of the Selective Demand for Tea

Selective demand is the demand for a specific type of tea, such as green tea, instant tea, and herbal tea. In analyzing selective demand, one must understand how buyers make choices from the alternative suppliers. Choice is a function of the buyer's needs and the buyer's perception of the alternatives in the context of a specific usage situation. Because needs represent internal drives and motives, which are difficult to observe and measure, one could use the concept of *benefit sought* to explain the need. The functional and psychological benefits that buyers hope to receive generally reflect these underlying needs. Frequently, *attributes* are used interchangeably with *benefits*. Attributes governing choices are not entirely related to the physical form of the product but may include broader expectations such as consistency, and reliability.

Principal Market Segments for Black Tea

The world market for tea has two broad segments: green tea and black tea. In 1995, over 80 million kilograms of green tea were exported, accounting for about 7.5% of all the exported tea.⁵⁸ Green tea, the dominant product of China, has its market largely in East Asia and North Africa (mainly Morocco). Black tea is primarily manufactured in two forms, orthodox tea and CTC⁵⁹ tea. Other forms of black tea are oolong (partially fermented tea), instant tea, flavored tea, organically grown tea, and decaffeinated tea.

⁵⁷ Demand for tea in Jordan may be derived demand from Iraq which is currently under UN trade embargo.

⁵⁸ International Tea Committee, Annual Bulletin of Statistics (1990).

⁵⁹ CTC stands for Crush (or cut), Tear and Curl. It is a particular process of manufacturing that yields heavy liquoring and more cuppage.

Figure 4-2
Per capita Tea Consumption: Volume vs. Growth Matrix

Low C - High G	Med C - High G	High C - High G
<div style="border: 1px solid black; padding: 5px;"> China France </div>	Poland Chile Syria	United Arab Emirates Jordan
Low C - Med G	Med C - Med G	High C - Med G
	<div style="border: 1px solid black; padding: 5px;"> India Sri Lanka Japan CIS/Russian Republic </div>	
Low C - Low G	Med C - Low G	High C - Low G
Germany USA Canada Tanzania Uganda Sudan	Netherlands Pakistan Iran Saudi Arabia Kenya South Africa Egypt Australia	<div style="border: 1px solid black; padding: 5px;"> United Kingdom Ireland </div>

Note: C = Per Capita Consumption, G = Per Capita Consumption Growth Rate
High consumption > 2 kg/capita; Medium consumption > 0.5 kg/capita; High growth > 10% P.A.; Medium growth > 5% P.A.

Source: ITC Bulletin, 1996.

Orthodox and CTC Segments: The traditionally strong consumers of orthodox tea are the East European countries and the Middle East, although the latter is shifting towards CTC tea in bags (notably Egypt). The countries of the European Community (EC) have been, and continue to be, the dominant buyers of CTC tea. They are expected to import 142,000 tons of CTC tea by the year 2000 (69% of their total imports). A 1992 FAO projection had placed the production increase of black tea at 2,638 million kgs. by the year 2000, of which 47 percent was expected to be orthodox and 53 percent CTC tea (FAO 1992, op.cit.). The same projection had placed world consumption of black tea in the year 2000 at 2,548 million kgs., of which 46 percent was expected to be orthodox and 54 percent CTC. Table 4-2 shows the projected values of production, internal demand, and export availability of orthodox and CTC teas by major producers in the year 2000. The top three suppliers of orthodox tea in 2000 are expected to be Sri Lanka with a 32

percent share of the market, China with a 26 percent share and Indonesia with a 24 percent share. Kenya is expected to become the largest supplier of CTC tea by 2000, supplying nearly half the world demand. India would be a distant second with 23 percent of the market share. Sri Lanka and Indonesia are each expected to have about 5 percent of the market.

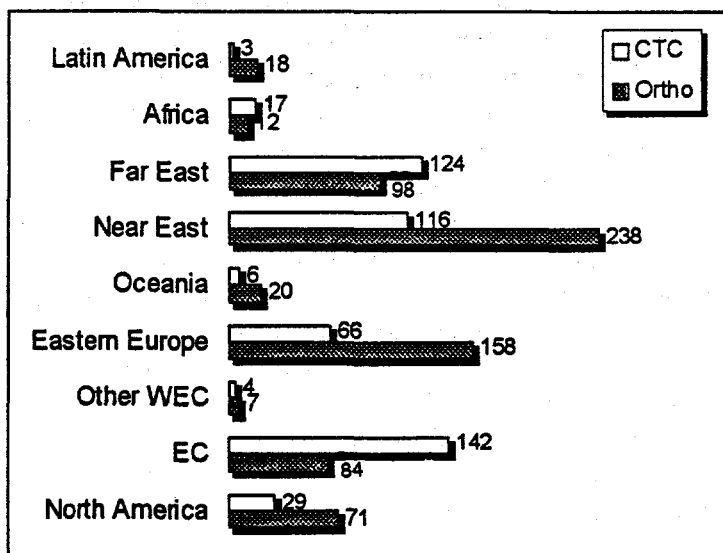
Table 4-2
Projected Supply of Orthodox and CTC Tea in Year 2000
(million kgs.)

Country	Orthodox				CTC			
	Production	Internal Demand	Export Availability	EA/IR	Production	Internal Demand	Export Availability	EA/IR
India	120	25	95	14%	846	725	121	23%
Sri Lanka	240	18	222	32%	24	0	24	5%
Kenya	3	0	3	0%	247	22	225	43%
China	205	25	180	26%	0	0	0	0%
Indonesia	180	9	171	24%	24	0	24	5%
Turkey	200	180	20	3%	0	0	0	0%
Total	948	257	691	98%	1141	747	394	75%

EA = Export Availability; IR = World Import Requirement.
Source: FAO, 1992.

The highest sale of orthodox tea in 2000 is expected to be to the Near East (Egypt, Libya, Iran, Iraq, Saudi Arabia, Syria, Yemen, etc), Eastern Europe (CIS, Poland, etc.), and the Far East (Pakistan, Hongkong, Malaysia, etc.). The respective demands of the different regions are shown in Figure 4-3.

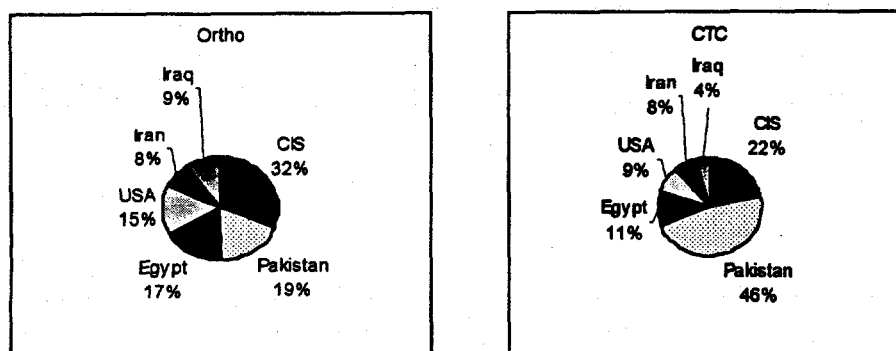
Figure 4-3
Projected Demand for Orthodox and CTC Tea in 2000



Source: FAO 1992.

The expected demands from major tea importers for orthodox and CTC teas are shown in Figure 4-4. The largest importers of orthodox tea in 2000 are expected to be the CIS, Pakistan, Egypt, United States, Iraq, and Iran. The largest importers of CTC tea are likely to be Pakistan, CIS, Egypt, the United States, Iran, and Iraq, in that order. These six countries will be the main markets for both orthodox and CTC tea in the years to come.

Figure 4-4
The Top Six Markets for Ortho and CTC Tea in 2000



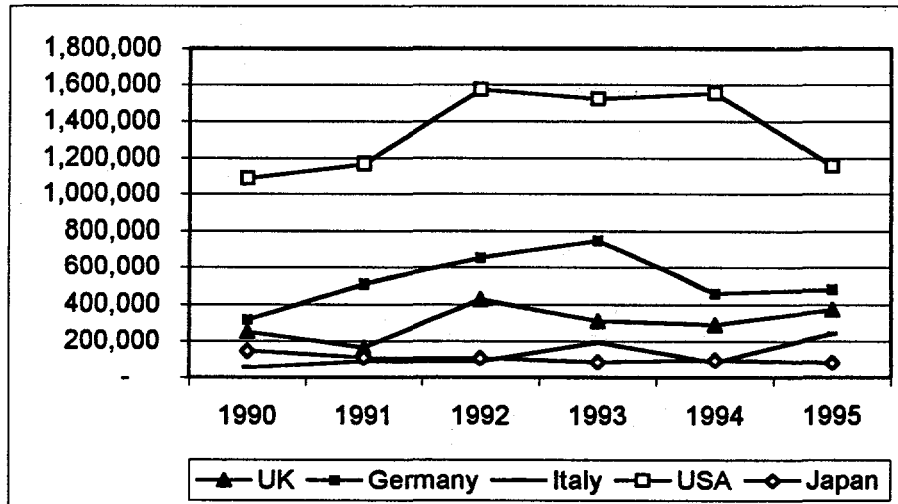
Note: Figures indicate market share.
Source: ITC Bulletin, 1996.

The Specialty Tea Segments: *Oolong* and other specialty teas are produced from plants grown in special areas. The hills of Assam, Niligiris and Darjeeling in India and the high country of Sri Lanka produce these high-grade teas, which command premium prices in the American and Western European markets. *Instant tea* caters to convenience-oriented consumers mainly in the United States and Europe. Product differentiation is a major marketing tool in these markets. In the United States, tea has long been positioned as a softer alternative to coffee, as it has about one third less caffeine, and it has performed better than coffee in the health conscious 1990s. The primary target has been women over the age of 25. Supermarket sales of coffee in the U.S. declined nearly 7% in 1992, whereas sales of tea bags and loose tea grew by about 1% (The Wall Street Journal 1993). In the intensely competitive market of the United States, where product differentiation is the key to market share, companies are differentiating their products in many different ways. For example, Tetley introduced round tea bags in place of the traditional rectangular bags, backed by \$35 million of promotion. But relative to carbonated beverages, the preparation of tea is time consuming and inconvenient. Also, tea is not sweet enough to lure young consumers hooked on carbonated drinks. To overcome these obstacle, major tea makers are pushing ready-to-drink iced-tea products with sugar added. Lipton has teamed with PepsiCo Inc. to sell Lipton original tea, while Nestle SA has joined forces with Coca-Cola to sell ready-to-drink tea. Celestial Seasonings has a line of bottled herbal-tea products. All these indicate that the future of tea marketing lies in product differentiation and positioning to take advantage of the growing diversity of consumer taste.

The import trend for *instant tea* in some of the major tea importing countries is shown in Figure 4-5. In the USA, the major importer of instant tea, demand fell in 1995 after staying level for almost three years. The German demand picked up in 1995, after a year of decline. In Italy the trend is up but in Japan it is down. Overall, the demand for this type of tea is likely to improve, depending upon the intensity of marketing efforts.

The share of the instant tea market, in 1990 and 1995, for the three big producers, India, Sri Lanka, and Kenya, in the major markets of the world are shown in Figure 4-6. Kenya held almost the whole of the U.K. market with 94 percent share in 1995. In the past five years it has gained a 5 percent share at the expense of India. Sri Lanka has maintained its small market share of 5 percent. In the giant U.S. market, India dominated with 65 percent of sales in 1995, up from 59 percent in 1990. The six percentage point gain came from Sri Lanka's loss of 2 percent of the market and a 4 point loss in Kenya's share. Most importantly, note that Sri Lanka totally lost the market for instant tea in the U.S.A. in 1995. In Germany, the second biggest market for instant tea, Kenya has seized the market leadership from Sri Lanka and now has 63 percent of the market, gaining 41 percentage points over its 1990 share. Sri Lanka lost 44 percent of the market going from 77 percent in 1990 to 33 percent in 1995. India gained a 3 percent share in this period going from 1 percent in 1990 to 4 percent in 1995, also at the expense of Sri Lanka. In the Italian market, India almost had a monopoly in 1990 with 99 percent of the market.

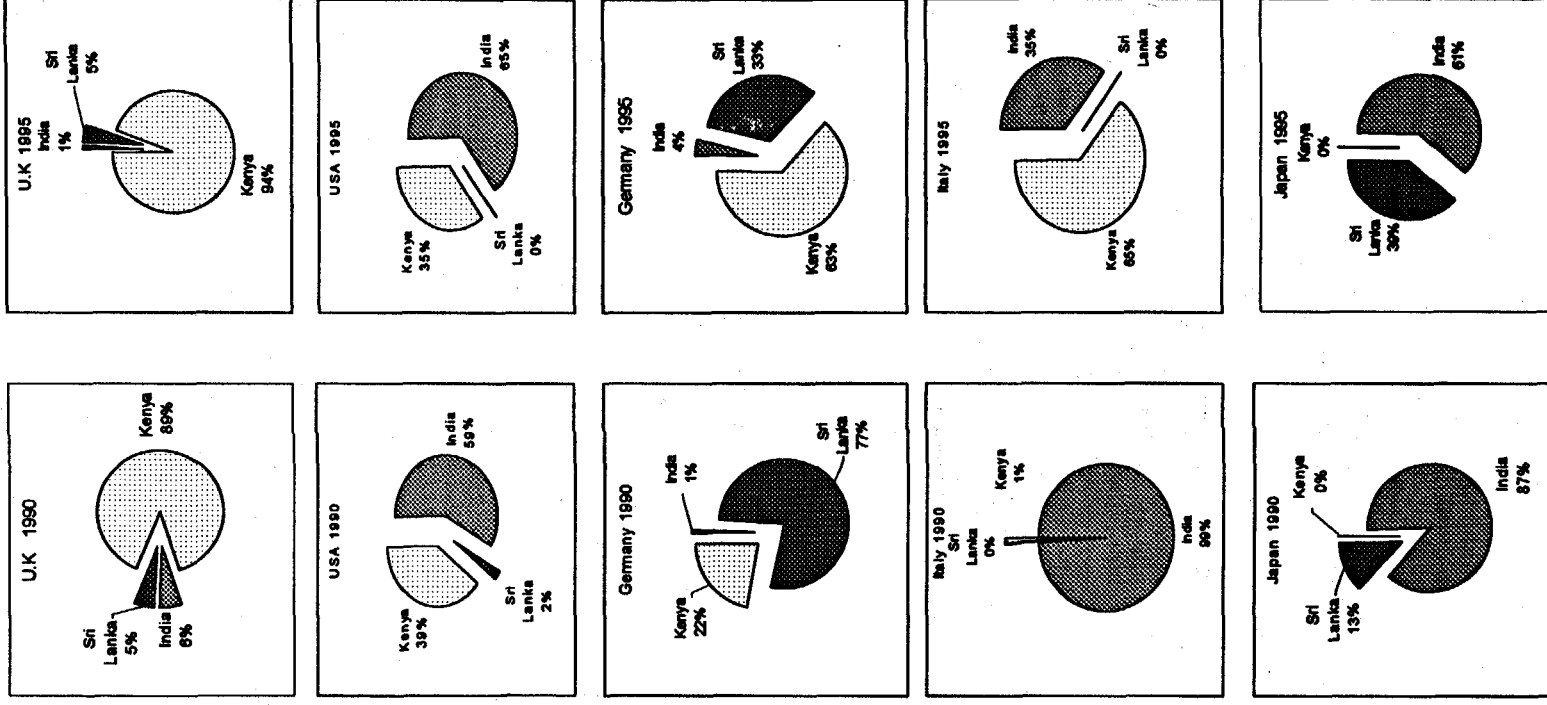
Figure 4-5
Instant Tea Import Trend in Major Countries
(kgs.)



Source: ITC Bulletin 1996.

But it lost this monopoly to Kenya and ended up with only a 35 percent share in 1995. Kenya's gain in Italy is phenomenal, going from 1 percent of the market in 1990 to 65 percent in 1995. Sri Lanka has no presence in the Italian instant tea market. In Japan, India held the leadership with 61 percent of the market in 1995. But it has lost almost 26

Figure 4-6
 Changing Share of Instant Tea Market in Major Consuming Countries



Source: ITC Bulletin, 1996.

percent of the market since 1990. This is the only market where Sri Lanka has made a headway since 1990: its share has risen from 13 percent in 1990 to 39 percent in 1995, all at the expense of India. Kenya does not have any share of this market.

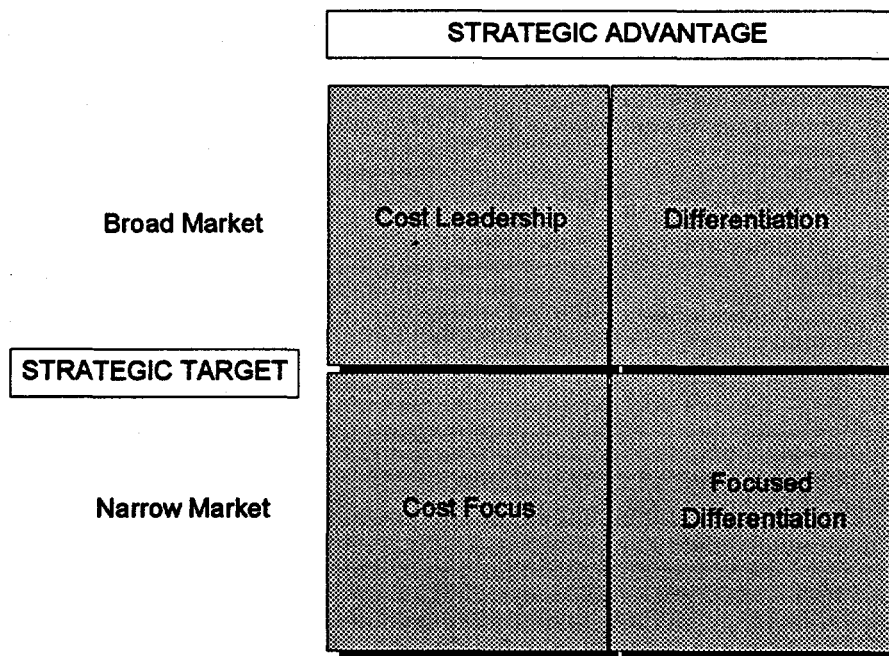
THE STRATEGIC OPTIONS

Creating a defensible position in the market place and coping successfully with the five competitive forces, described earlier, should define Sri Lanka's competitive strategy in the global tea industry. A combination of three generic strategies, at the broadest level, could help it create this defensible position and outperform its competitors in the long-run (Porter 1980).

1. Overall cost leadership.
2. Differentiation.
3. Focus.

The two main sources of competitive advantage in any industry are *low cost* and *differentiation*. A combination of these two sources of competitive advantage with the scope of the target market served (narrow or broad) yields four generic strategies, namely cost leadership, product differentiation, cost focus, and focused differentiation (Figure 4-7). These strategies are internally consistent and can be used either singly or in combination.

Figure 4-7
Generic Strategies for Tea



Source: Porter, 1990..

The industry has to decide on the *type* of competitive advantage it seeks, based on cost or differentiation, and the *market scope*, that is the size and extent of the market it seeks (Porter 1985). These decisions are helped by an analysis of the industry's competitive strength and the market opportunities offered in the long-run.

BROAD MARKET STRATEGIES

Overall Cost Leadership

This strategy is useful when an industry is able to establish itself as a low-cost producer for serving a broadly defined market. In general, to implement this strategy the industry must construct the most efficient facilities (in terms of scale or technology), vigorously pursue cost reductions from experience, impose tight cost and overhead control, and obtain the largest share of the market to achieve the lowest cost per unit of production. These advantages push the industry up the experience curve which then leads to more refinement of the entire process of production, delivery, service, and further lowering of cost. A low-cost position also provides defense against powerful buyers who drive down prices to the level of the next most efficient competitor. It provides substantial entry barriers and makes the industry strong enough to combat substitute products from competitive industries. A low-cost strategy, therefore, protects the industry against all five competitive forces that affect the industry (Figure 3-1). Cost leadership eventually becomes the basis of lower prices and more value offered to customers in the later, more competitive stage of the product life cycle. But it is only sustainable if sufficient barriers exist to prevent competitors from achieving the same low cost. Rapid technology development through R&D is one means of achieving this end.

Obtaining low overall costs may require a high relative market share and other conditions like higher productivity and a lower factor cost per unit of production. It may even require a wider product line to spread cost and the servicing of major customer groups to build volume. Implementing the strategy require major investment in a state-of-the-art processing system, aggressive pricing, and start-up losses to build market share. The cost structure of Sri Lanka's tea industry, shown above, does not lend itself to the adoption of the cost-leadership strategy easily. This country has one of the highest costs in the global tea industry created by low productivity. The low productivity arises from a lack of investment in agricultural inputs, a lack of replacement of aging growing stocks and factories, absence of proper R&D, and low worker motivation. Unless each of these problems are addressed, it is difficult for the country to adopt the overall cost-leadership strategy. However, there may be market niches where Sri Lankan producers would be able to realize cost advantages relative to competition.

Differentiation

The second generic strategy is to differentiate the industry offerings and create a line of products that are perceived industry-wide as unique products. The strategy could be extremely powerful in coping with the five environmental forces in a different way

than the cost leadership strategy. It provides insulation against competitive rivalry because of customers' brand loyalty and resulting lower sensitivity to price (Porter 1980, op.cit.). It automatically generates entry barriers because competitors have to overcome the uniqueness of the product to gain consumer preference. Differentiation yields higher margins with which the industry could deal with suppliers' power. Buyers' power is also diminished by an absence of substitute products to satisfy consumers' desire. The threat of substitute products is diminished as a natural sequel to differentiation unmatched by rivals in the industry.

To build differentiation, the industry in Sri Lanka has to match its natural advantages and strengths to the characteristics of the market that allows differentiation. The challenge could be met in many different ways: through technology that would create the desired product, quality, brand image, and features that consumers crave, and develop a marketing network. As seen in the previous analysis, Sri Lanka is strong in the production of orthodox tea, which appeals to a particular type of market looking for flavor, brightness, leafiness, etc. The convenience and cuppage of CTC tea is also a growing consumer preference in many markets. The traditional dividing lines between these two inherently different market segments are now being blurred by new technological innovation such as Ortho-CTC tea that possesses features from both. The high mountain blends of Sri Lanka have a certain uniqueness in their characteristics that suit the desire of light tea drinkers in Europe. In the U.S market, product differentiation has mainly been designed around the type of brew rather than the quality of the drink. The United States has been a vast market for instant tea and ready to drink tea, both high on convenience but low on quality. There is, however, a gap in this market for high quality, good flavor tea in ready-to-drink form. Sri Lanka has products that meet this demand for quality and convenience at the same time. This could provide the differentiation needed to fulfill the needs of the quality-convenience niche. The image of Sri Lanka's tea is fairly strong in the world market. There has been little effort, however, to enhance this image and to extend it to a larger portion of the tea drinking population. This image needs to be advanced, beyond the gourmet tea segment, with forceful and creative marketing, something which Columbia's coffee industry has been able to do very well in the past.

NARROW MARKET STRATEGIES

Cost Focus and Focused Differentiation

A narrow focus strategy, which targets a narrowly defined market, has the ability to create more customer value from a better understanding of customers' needs and wants. The entire focus strategy is built to serve a particular target very well and has a distinct advantage if the competitors are working in much broader markets. Benefits of both differentiation and lower cost are possible with this strategy since concentrating on providing products to serve a particular segment's needs is a form of differentiation and it is possible to achieve lower cost with specialization. It must be noted though that the low cost is not from the perspective of the whole market but within the narrow market target.

The focus strategy imposes a limit on the overall market share achievable because it involves a tradeoff between profitability and sales volume.

A narrow focus strategy can be combined with either cost-leadership or differentiation strategy. The first results in a *cost-focus* strategy where the industry pursues a narrow target market with a low-cost strategy, offering the market lower prices than the competition. The second yields a *focused-differentiation* strategy that offers a narrow market the perception of product uniqueness at a premium price. As indicated above, cost leadership is a sustainable source of competitive advantage only if there are enough barriers to prevent competitors from achieving the same low costs. Sustained differentiation depends on continued perceived value and the absence of imitation by competitors (Porter 1980, op.cit.). Several factors determine whether focus could be sustained as a source of competitive advantage. First, a cost focus is sustainable if the competitors are defining their target markets more broadly. Second, a differentiation focus is sustainable only if competitors cannot define the market even more narrowly. Third, focus can be sustained only if competitors cannot overcome barriers that prevent imitation of the focus strategy and if consumers in the target segment do not change over to other segments that the focuser does not serve.

The global tea market holds numerous opportunities for Sri Lanka to follow both cost focus and focused differentiation strategies. The main action necessary is to select the right target markets and to concentrate on them. Earlier on we had analyzed the principal market segments for black tea. There are many ways in which these segments could be further refined. For example, secondary segments could be defined in terms of consumers' needs and desires, usage rate, values and lifestyles, etc. Many sophisticated marketing tools and techniques (such as conjoint analysis) are available for formation and profiling of segments based on these factors. However, detailed consumer research data are necessary to do this scientifically. A few tentative market segments that could be defined with available secondary data are:

Benefit Segments

Benefits sought by consumers who drink tea varies widely from region to region and country to country. For example, most consumers in Europe look to tea as a light substitute for soft drinks and other non-alcoholic beverages. Demand for lighter Sri Lankan tea such as the Uvas, the Nuwara Eliyas, Udapussellawas, and other high grown tea is strong in Germany, the Netherlands, France, and other European countries. Herbal tea and flavored tea are popular in the United States and Europe where the consumers are willing to pay a lot more for these varieties (Peel 1996). In the Middle and Southern European markets, herbal tea plays a much greater role than plain black tea (Spethmann 1994). The benefit seen in herbal tea is largely medicinal. Flavored tea, particularly with the essence of tropical fruits, is extremely popular in Europe and America and is expected to grow in market share in future years (Sturdivant 1996). The leafy low-grown teas of Sri Lanka have a good market in the Middle East because buyers there prefer the stronger body and taste.

Values and Lifestyle Segments

There is a strong influence of values and lifestyles on the consumption of tea in developed countries. This allows for the creation of segments known as values and lifestyle segments (VALS) for marketing. Some of the important VALS profiles and how these affect tea consumption are:

- *Nutritionally concerned people:* These make up 46 percent of the over-50 population in developed countries. This group believes that what one eats and drinks affects how one feels (Sandor 1994). Tea as a natural beverage whose nutritional values are recently coming to consumers' attention could be a very appealing beverage for these people.
- *Fast and health conscious individuals:* They are also concerned about health and nutrition, but are more interested in convenience. They tend to cook only when the family is together and rely heavily on time saving devices like the microwave oven. Even though this group may believe in the health benefits of tea, the inconvenience of preparation may turn them away. To attract this segment and get them hooked on tea, it is necessary to develop new product formulations that will provide the convenience of preparation. Instant tea is one such product offering. Tea bags are another. Microwavable tea packages may again be an alternative for the future.
- *The convenient drink seekers:* These are mostly people on the go who desire their beverages in convenient ready to drink form such as canned cold drinks, available in convenient locations such as supermarkets, vending machines, candy stands, etc. Soft drinks are the most preferred beverage for these individuals. Iced tea, packed and sold like soft drinks, have made considerable inroads into this market lately and could grow tremendously with proper marketing. The most important consideration for Sri Lankan producers who want to tap this segment is to differentiate their products from the existing line of iced teas sold in Europe and America. The mass producers of iced tea in these markets are marketing them with very little tea content and very large promotional contents for mass consumption. The high grown teas of Sri Lanka have a natural advantage for preparation of ready to drink teas that also have good flavor and taste. This opens up a favorable niche in the market for iced tea that could be addressed very effectively with a focused-differentiation strategy. By concentrating on the high-value seeking iced tea drinkers in Europe and America and by providing a highly differentiated product made with its light high-grown teas, the Sri Lankan industry could capture a chunk of the premium-priced ready-to-drink tea segment in these countries.

Behavioral Segment

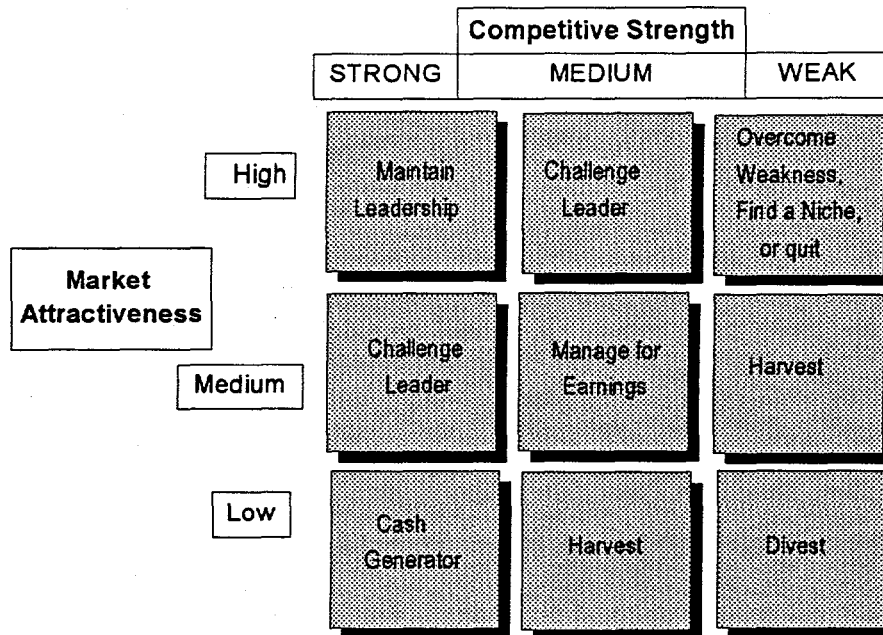
The most common behavior used to define this segment is the consumption rate. Consumers differ in the rate of their consumption and for most consumer goods about 20 percent of the segment population consumes 80 percent of the product. Thus, the market could be divided into a heavy-consumer end and a light-consumer end. Naturally, heavy consumers are of the greatest interest to marketers who try to understand their characteristics in order to influence their desire for more of the product. Earlier in the analysis we had identified countries where per-capita consumption of tea is the highest (Figure 4-3). In this category are the UAE, Jordan, the United Kingdom, and Ireland. However, if we divide the market in terms of absolute level of consumption by combining per-capita consumption and population, other countries join the rank such as the CIS countries, Pakistan, the United States, and Egypt. Among these countries, Pakistan is a big consumer of CTC tea where Sri Lanka has been behind the other top producers. However, Pakistan is also a big buyer of orthodox tea. The strategy for Sri Lanka would therefore be to concentrate on the orthodox segment of Pakistan's market with a *cost-focus* strategy with the attempt to become a low-price provider of orthodox tea. Some difficulty may initially be encountered to prevent the current segment population to switch to CTC, which provides larger cuppage for the same amount of tea used. This could be prevented if Sri Lanka is able to retain the segment's loyalty through aggressive low pricing. This means that Sri Lankan producers may have to accept lower profitability goals initially in price sensitive markets such as Pakistan and Egypt to maximize long-term gains.

The industry must also recognize those export markets where the absolute level of consumption is not high but the intake is growing at a high rate. These markets provide the best opportunity for *cost-focus* strategy or *focused-differentiation* strategy. Prominent countries in this class are China, France, Poland, Chile, Syria, UAE, and Jordan (Figure 4-3). Investing to develop a loyal consumer base in these countries today will help ward off competition there in the long run.

THE OPTIONS FOR SRI LANKA

Considering all the possible generic strategies discussed above, which set of strategies should the tea industry in Sri Lanka adopt? This decision depends upon the nature of the specific market served by the industry. The direction policy matrix shown in Figure 4-8 provides guidelines for implementing strategies in different markets. This matrix relates the competitive position of the industry with the market's attractiveness. Multiple factor indices may be used to quantitatively define both dimensions of this matrix as shown in Table 4-3.

Figure 4-8
The Directional Policy Matrix



Source: Hussey, 1978.

From an assessment of the overall strength of Sri Lanka's tea industry and the attractiveness of the potential markets of CIS, Egypt, Pakistan and USA (Table 4-3), the use of three basic strategies shown in Figure 4-9 could be suggested. But additionally, each market needs to be targeted with one or more of the three generic competitive strategies, i.e., cost leadership, differentiation, and focus.

The CIS market is extremely attractive for Sri Lanka and given the tea industry's medium strength in that market, the best strategy to follow would be:

- Challenge the leader (India) with differentiated products for meeting the demand of quality-conscious buyers.
- Segment the market and identify niches for cost focus and focused differentiation.

The Egyptian market is gradually moving towards CTC tea. However, its orthodox tea segment is still large. Given the high level of market attractiveness and medium competitive strength of Sri Lanka in Egypt, the best strategy would be to:

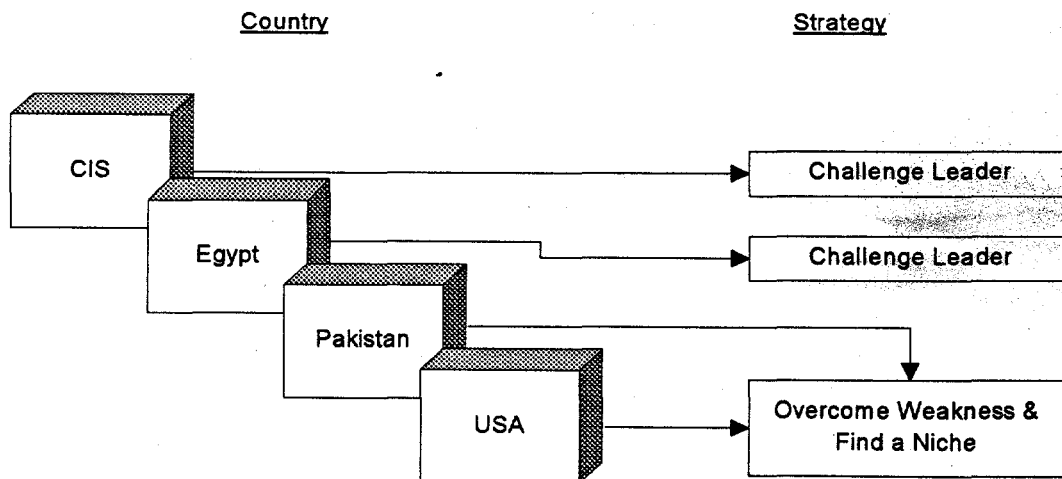
- Overcome weaknesses that are providing edge to the major competitor (Kenya), such as increasing production of CTC tea.
- Create product differentiation, by adding the Ortho-CTC product line in the market.

Table 4-3
Evaluating Competitive Strength and Market Attractiveness
for Sri Lanka's Tea in Four Major Countries

	CIS	Egypt	Pakistan	USA
COMPETITIVE STRENGTH DIMENSIONS				
1. Market share	Medium	Medium	Low	Low
2. Management skills	Medium	Medium	Medium	Medium
3. Modern and efficient facilities	Medium	Medium	Low	Medium
4. Innovation technology	Medium	Low	Low	Low
5. Product image	High	High	Medium	Medium
6. Cost advantage	Low	Low	Low	Low
7. Quality of distribution	Medium	Medium	Low	Low
<i>Overall Competitive Strength</i>	<i>Medium</i>	<i>Medium</i>	<i>Low</i>	<i>Low</i>
MARKET ATTRACTIVENESS DIMENSIONS				
1. Global industry sales-growth rate in the market	High	High	High	Medium
2. Attractiveness of market size	High	Medium	High	Medium
3. Projected market growth rate	Medium	High	High	Medium
4. Consumer loyalty	Medium	Medium	Low	High
5. Government-created barriers	Medium	Low	Medium	Low
6. Overall potential for profit	High	High	Medium	High
<i>Overall Market Attractiveness</i>	<i>High</i>	<i>High</i>	<i>High</i>	<i>Medium</i>

Source: Authors' projections.

Figure 4-9
Basic Strategies in Key Markets



Source: Authors' formulation.

- Analyze the orthodox tea segment of this country to determine what changes are taking place in consumers' preferences and develop new products to meet these needs.

The overall attractiveness of Pakistan's market is high but Sri Lanka's competitive position there is low. The strategies best suited for this market are therefore :

- Overcome weaknesses.
- Differentiate the product.
- Find a niche for developing consumer loyalty.
- Follow a low-cost focus strategy.

The U.S. market is very strong for ready-to-drink and convenient packed tea. Presently, it holds medium attractiveness for Sri Lanka and the industry's competitive strength is low because it does not possess the capability of producing a diversified line of tea and its marketing strength is low. Some of the recommended strategies for this market would therefore be:

- Address some of the critical weaknesses that are preventing a major entry into this market. Form joint venture enterprises both for producing packaged ready-to-drink mixes and marketing them in the United States.
- Segment the market for instant tea and iced tea and develop a well differentiated product line to fill the niche for high quality, good flavored tea where competition is non-existent at this time.

SUSTAINING COMPETITIVE ADVANTAGE VIA STRATEGIC INTENT

The three generic strategies presented in this chapter are alternative, viable means of addressing competitive forces in the tea industry world-wide. Firms or industries that fail to develop their strategy in at least one of these three directions are likely to lose out to competition. These organizations will lack market share, investment returns, the resolve to become efficient low cost producers and effective marketing skills that provide well-differentiated products with value in the eye of their customers. These organizations almost guarantee low profitability, losing either the high-volume customers who demand low prices or giving up profits to grab business from low-cost competitors. They also lose high-margin businesses – the cream – to firms who have focused efficiently on high-margin target markets with highly differentiated products.

Sustaining competitive advantage is yet another dimension of the competitive game that the Sri Lankan tea industry must understand well if it expects to be strong in the future. Competitiveness is a function of the pace at which an organization implants new advantages deep within itself. Thus, there has to be a *strategic intent*, growing out of ambition and an obsession for winning. Few competitive advantages are long lasting and keeping scores of old advantages is not the same as building new advantages (Hamel and Prahalad 1989). Success lies in creating tomorrow's competitive advantage faster than the

competitors' ability to mimic what one has today. For Sri Lankan tea producers and exporters, the effort should be to build a wide portfolio of advantages by stacking layers of advantage on top of one another. For example, one layer of advantage could be through diversification into high-value forms of tea. Then a second layer of quality and reliability could be added by building plants large enough to serve world markets. The third layer could be built with efficient marketing channels and brand names to gain recognition. Yet another layer could be added by building a global brand franchise – or a global customer base. This process of building layers demonstrates how the organization could move along the value chain to keep strengthening its competitive advantage.

††††††††††††††††

The Final Analysis

As part of their evolutionary process, industries pass from periods of rapid growth to more modest growth upon reaching a period commonly called industry maturity. The global tea industry reached this maturity over a decade ago. It is now in a critical period during which fundamental changes are taking place in the competitive environment requiring difficult strategic response. The slowing of growth is creating more competition for market share. When this share is not realized through expansion of the market itself, companies turn to attack the shares of others. Outbreak of price wars, discounted service, and promotional warfare may develop in the industry to shake out weak players. The transition to maturity also provokes firms to concentrate on their core markets and defend their position vigorously. This does not seem to have happened with the Sri Lankan tea producers who have conceded important markets like Pakistan and Egypt to relative newcomers like Kenya. Another characteristic of a mature industry is the shift of the more competitive firms towards greater cost economy and service commitment. This may require higher investment in the most modern facilities and equipment. However, in the case of Sri Lanka, one finds the contrary to have happened, mainly because the industry was far too long under public control. There is a slow down of capacity creation in mature industries as the market evens out, otherwise overcapacity would develop. This has not happened in the tea industry, as more and more producers are relentlessly adding more and more production capacity. Fortunately, Sri Lanka does not belong to this category. But, it should monitor the competitors' capacity addition closely and take corrective actions where necessary. One important thing that Sri Lanka's tea producers need to do, however, is to change its marketing and distribution methods to capture the essence of the market. Mass marketing through auctions definitely is not the best method of meeting consumers' needs nor is it good for all the strategies involving differentiation and focus that we have discussed earlier. It is time for the industry to make a realistic assessment about the future and decide what strategies and methods they want to pursue to take them out of the rat race for survival. Winning the game would require new thinking, new orientation, and intelligent moves because the competitors are equally powerful. Sustaining competitive advantage does not only depend upon exploiting the national environment. Individual firms in the industry must work actively to improve their home base by upgrading the national "diamond" (Figure 3-4). First, they must draw on their own home-based resources to extend and upgrade their own competitive advantage (e.g., factor pools, local demand, etc.). Achieving this requires that the company understand how each part of the "diamond" best contributes to competitive advantage. It also requires a long-term investment perspective. Some of the firms in the industry already have taken this outlook and are channeling investment in the plantations for productivity increase. In many studies of successful firms and industries it has been seen that to do so the leading firms took explicit steps to create factors and to ensure that institutions were established, because factors are created and not inherited (Porter 1980, op.cit.).

While the government has an important and constructive role in creating factors, this responsibility can not be the government's alone. The firms in the tea industry have to

influence government in shaping policy and must put their support behind constructive government programs. They should stay clear of quick fixes that in the long run undermine their competitive ability (for example, asking for subsidies). They may also look for alliances for exploiting the benefits of national advantage in other nations. Again, some Sri Lankan companies have already taken this step by forging alliances with experienced companies outside Sri Lanka to provide management and technical know how. The government should encourage and not obstruct this.

The government's role is also quite important in international competition. The central role of the government is to develop critical resources (like manpower and capital) for high levels of productivity. It should assist innovation and improvement within the industry and create an environment in which firms can upgrade their competitive advantage. A few of the essential steps that government must take are deregulation of the labor market, removal of unnecessary controls of the industry (such as control over marketing of tea), and development of the financial market without which companies cannot find investment capital. The government of Sri Lanka has already taken many steps to improve competitiveness of its tea industry, such as devaluation of the currency, partial deregulation, and privatization of the estates. Other things that are also necessary are overseas promotion of the industry, collection of marketing intelligence, tax reforms, infrastructure development (particularly the power infrastructure), expansion of investment in tea research, and the improvement of education for plantation workers. There are a few important premises that hopefully could guide future government policy towards the sector (Porter 1980, op.cit.):

- Firms compete in industries, not nations.
- A nation's competitive advantage in an industry is only relative.
- Dynamism leads to competitive advantage, not short-term cost advantage.
- Pursuit of competitive advantage demands that industries upgrade.
- Competitive advantage takes decades to develop, not a few years of a business cycle.
- Nations gain competitive advantage because of differences, not similarities.

§§§§§§§§§§§§§§§§

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