TEA STATISTICS

Performance of Tea in Kenya

Considerable amount of information can be gleaned from a careful study of the statistical data by comparing and contrasting the emerging trends with those observed elsewhere. Statistical data on Kenya tea, received through the courtesy of Tea Board of Kenya and Centreline Tea Brokers, were analysed with the following results.

(1) Area and Production: Exponential growth of the tea industry in Kenya (table1 and figs 1-3) is the manifestation of vigorous young tea, planted on virgin forest land, under hospitable climate and good management. During the last half a century, the estate sector which accounted for 100% of the area under tea in the beginning, now contributes only one quarter. However, the total area has multiplied 16 times: most of the growth coming from smallholder sector. In the meantime, the total production of tea in Kenya recorded an impressive 43-fold increase (table 1 fig 2). This was the consequence of the average yield per hectare growing by more than twice (fig. 3). To speak metaphorically, during the last 5 decades Kenya planted more area to tea every year, than did Mainland China. Similarly the average addition to annual production of tea was comparable to yearly increments in tonnage by much larger Indian tea area. The rise in yield per hectare over this period has been unparalleled (fig. 3). However, the differential performance of small holder grower and estate sector (fig. 4) indicates the untapped potential of the former. This may be achieved by the new clonal varieties, which reportedly tip the scales at 10 tons/ha even under small-grower conditions.

(2) On the export front, Kenya has emerged amongst the largest tea exporters (table 2, fig. 5), surging ahead of traditional tea exporters India and Sri Lanka. Unlike India and China whose domestic consumption mops up the entire increment in production leaving little for export, the tea production in Kenya is meant entirely for export. The export performance of the four major grower-exporters was reported in the last issue of this journal (reproduced in table 2 here) and is compared in a bar chart (fig. 5).

(a) To sustain the lead of Kenya's tea exports, which peaked in 1998, the tea scientists face challenges on the twin fronts of smallholder as well as the estate sectors. The strength of the Kenyan Tea Industry is the quality product of small-holder grower. This sector's weakness, however, is the abysmal yield (fig. 4), which is only half that of the estate sector and may be ascribed to the Low Input Agriculture practiced by them.

(b) The estate sector notches twice as much yield but faces the problem of not-so-good quality of its produce. The poor leaf quality in the field may be related to the practices followed by the Kenyan tea-pluckers, who are said to damage the fresh leaves by holding very large quantities of plucked shoots tightly in their fist before transferring the leaf to the basket. Time and motion studies of plucking operation may hold a solution to the problem. Results of a work study by Tocklai were applied to improve the hand-plucking practices in N.E. India. Even one year's training of tea pluckers in correct time and motion of plucking operations in 20,000 hectares tea on a group of 15 tea estates in North East India, improved the regularity of plucking rounds and quality of tea leaf plucked. The regularity of weekly plucking rounds rose from 18% to 80%, proportionately improving fine plucking even during the stressed peak periods of high crop growth.

(3) Crop Distribution: Uniformity of day-length and temperatures on the equatorial Kenya led to a belief that production and quality of Kenyan tea are absolutely uniform, in sharp contrast to North India where 5% annual crop is harvested in 4 peak days: it could equal the crop of 4 whole lean months during the winter. However, this myth of "uniformity" in crop distribution is not borne out by the data in table 3. Even the monthly averages may vary by as much as 5% to 13.5% of the annual crop (table 4), which indicates the over-riding influence of some other endogenous factor/s. Maybe the "dormancy gene", which was recently discovered at IHBT Palampur has a role to play. Scientific study of this interaction of crop genome with uniform environment of Kenya may show the way to manifold increase in annual crop production by tackling a constraint mechanism, which remains as yet unknown to the tea scientists.

(4) The destination of Kenyan tea export has changed with the export oriented dynamic tea industry of Kenya (Table 5). Starting with most of the tea exports -2/3rd of the total going to the U.K in the 80s, the dominant British market has yielded prominence to newly emerging destinations. Pakistan and Egypt account for 45% of the export revenues, as against only 25% from the U.K. Further enhancement of export earnings requires product diversification rather than market diversification.

Editors

Table 1: Kenya Tea Production And Area

Year	Estates		Small holder sector		Total	
	Area Planted Ha.	Production M. Tons	Area Planted Ha.	Production M. Tons	Area Planted HA.	Production M. Tons
1950	7642	6777	-		7642	6777
1955	10147	8645	-	-	10147	8645
1960	14935	13627	1002	149	15937	13776
1965	19327	19027	5249	796	24576	19823
1970	22289	33102	17985	7976	40274	41078
1975	24337	38815	37205	17915	61542	56730
1980	25880	55913	50691	33980	76571	89893
1985	27322	75765	56505	71339	83827	147104
1990	29979	87012	67041	109997	97020	197009
1991	31017	90847	69609	112742	100626	203589
1992	31340	88260	72162	99811	103502	188071
1993	31754	98634	73109	112540	104863	211174
1994	32038	90419	78183	119004	110221	209423
1995	32201	105580	80355	138945	112556	244525
1996	32523	113091	81159	144071	113682	257162
1997	32694	91014	84657	129708	117351	220722
1998	33761	118537	84657	175628	118418	294165
1999	33884	94863	90317	153855	124201	248718
2000	35313	90740	90890	145546	126203	236286
2001	-	112906	-	181726	-	294632

Table 2: Kenya Amongst Tea Exporters (Tonnes)

Year	China (Mainland)	India	Kenya	Sri Lanka	World
1980	107,965	224,026	74,799	184,493	858,970
1985	136,864	214,021	126,086	198,017	953,693
1990	195,471	209,085	169,586	215,614	1,134,642
1994	179,679	149,317	183,147	224,235	1,032,557
1995	166,573	163,740	237,498	235,026	1,080,119
1996	169,670	161,696	244,226	233,573	1,115,337
1997	202,464	203,028	198,375	257,353	1,155,923
1998	217,434	210,338	264,289	264,038	1,237,024
1999	199,608	191,719	241,739	262,952	1,248,595
2000	177,423	197,834	192,346	NA	NA

Source: IJTS 1(1): 2001 pp. 37

Table 3: Monthwise Crop Distribution of Kenya

Table 4: Percentage of Tea Annual Production

Month	Year				Year		
	1999	2000	2001		1999	2000	2001
January	21,768	27,009	29,240		8.75	11.43	13.49
February	14,511	14,998	17,814		5.83	6.35	12.83
March	13,975	11,858	26,002		5.62	5.02	11.99
April	26,314	15,067	24,383		10.58	6.38	11.25
May	21,786	22,435	28,187		8.76	9.49	13.00
June	19,685	17,281	19,296		7.91	7.31	8.90
July	17,871	15,073	17,428		7.18	6.38	8.04
August	16,229	16,163	21,538		6.52	6.84	9.94
September	21,336	20,413	22,889		8.57	8.64	10.56
October	24,284	22,170	-		9.76	9.38	-
November	23,877	24,124	-		9.60	10.21	-
December	27,185	29,696	-		10.93	12.57	-

Source: Centreline Tea Brokers Ltd.

Table 5: Export Destination of Kenyan Tea

Country	Weight in Metric Tonnes		Value in U S $		Unit Price	
	1980	2001	1980	2001	1980	2001
UK	42,953	61,312	92,901	98,741	2.16	1.61
Pakistan	8,972	61,416	15,352	102,792	1.71	1.68
Egypt	2,893	48,650	4,487	82,143	1.55	1.69
Afghanistan	-	15,924	-	31,252	-	1.96
Sudan	830	11,121	1,397	14,663	1.68	1.32
UAE	-	8,532	-	15,037	-	1.76
Yemen	-	8,121	-	14,814	-	1.82
USA	5,273	5,535	11,767	13,559	2.23	2.45
Poland	-	3,534	-	6,123	-	1.73
Ireland	3,881	3,478	9,110	5,615	2.35	1.61
Others	9,997	22,115	21,325	37,390	1.98	1.69
Total	74,799	249,738	156,339	422,129		

Fig. 1 Trends in Area Planted in Kenya (ha)

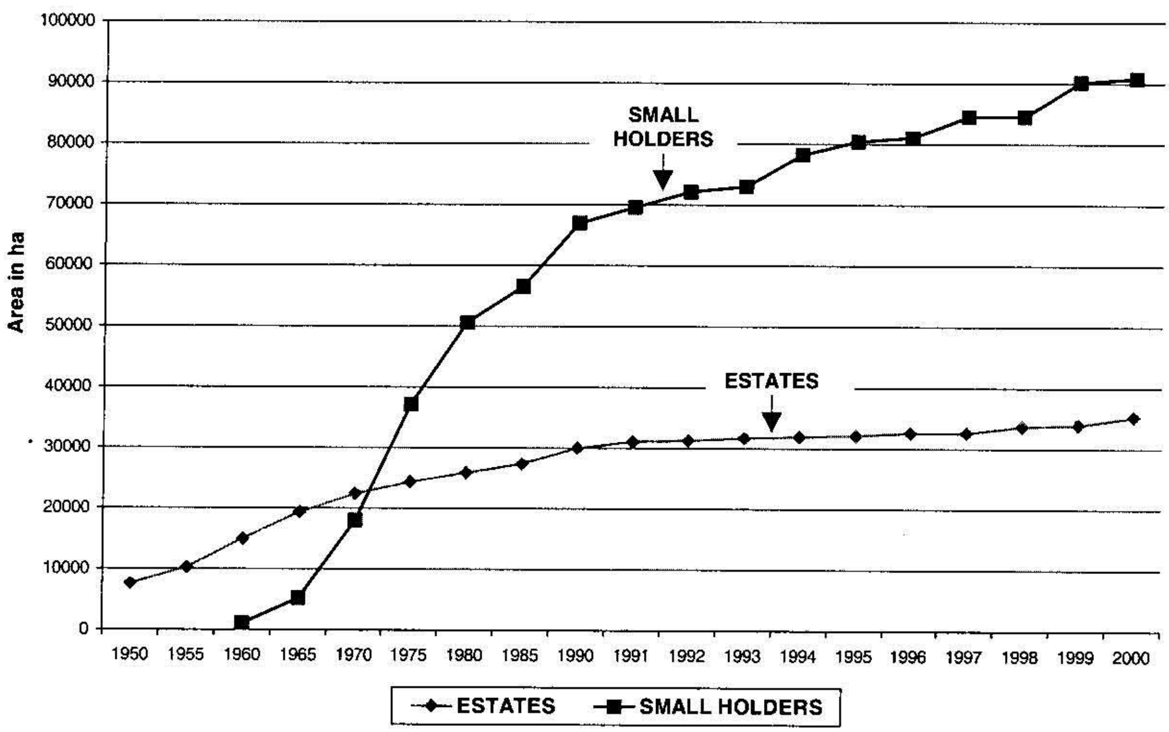


Fig. 2: Trends in Tea Production in Kenya (tonnes)

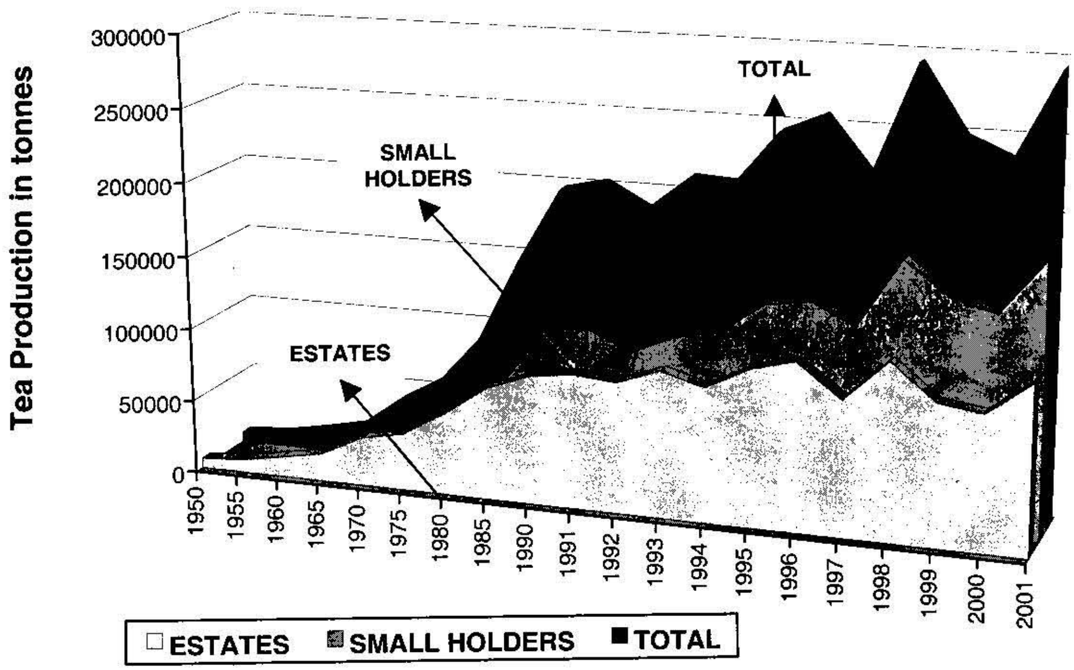
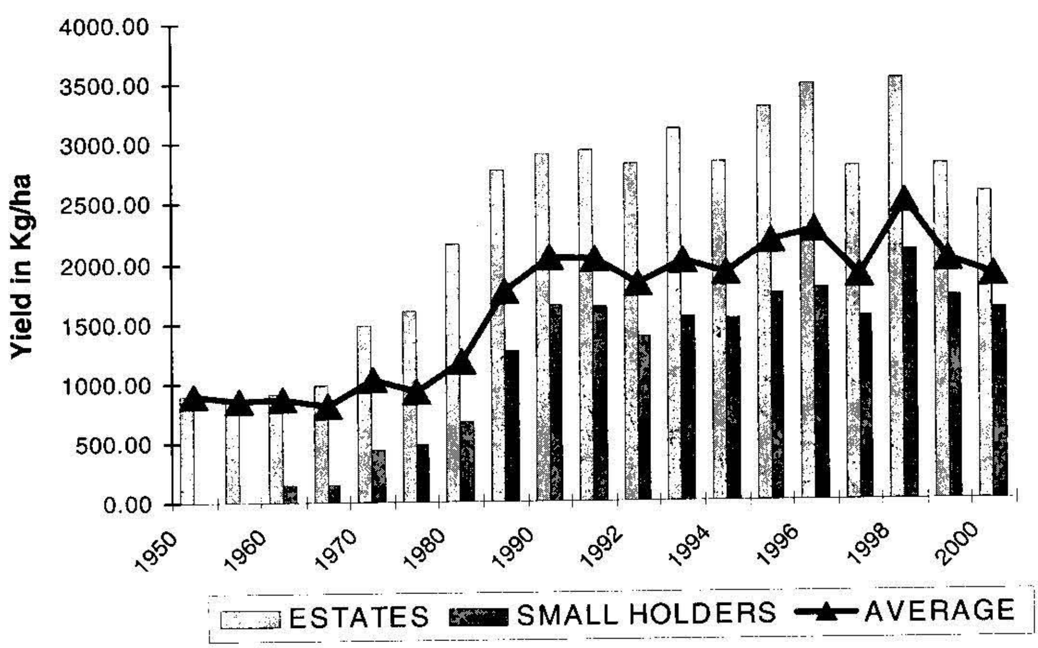


Fig. 3: Pattern of Yield in Kenya (kg/ha)



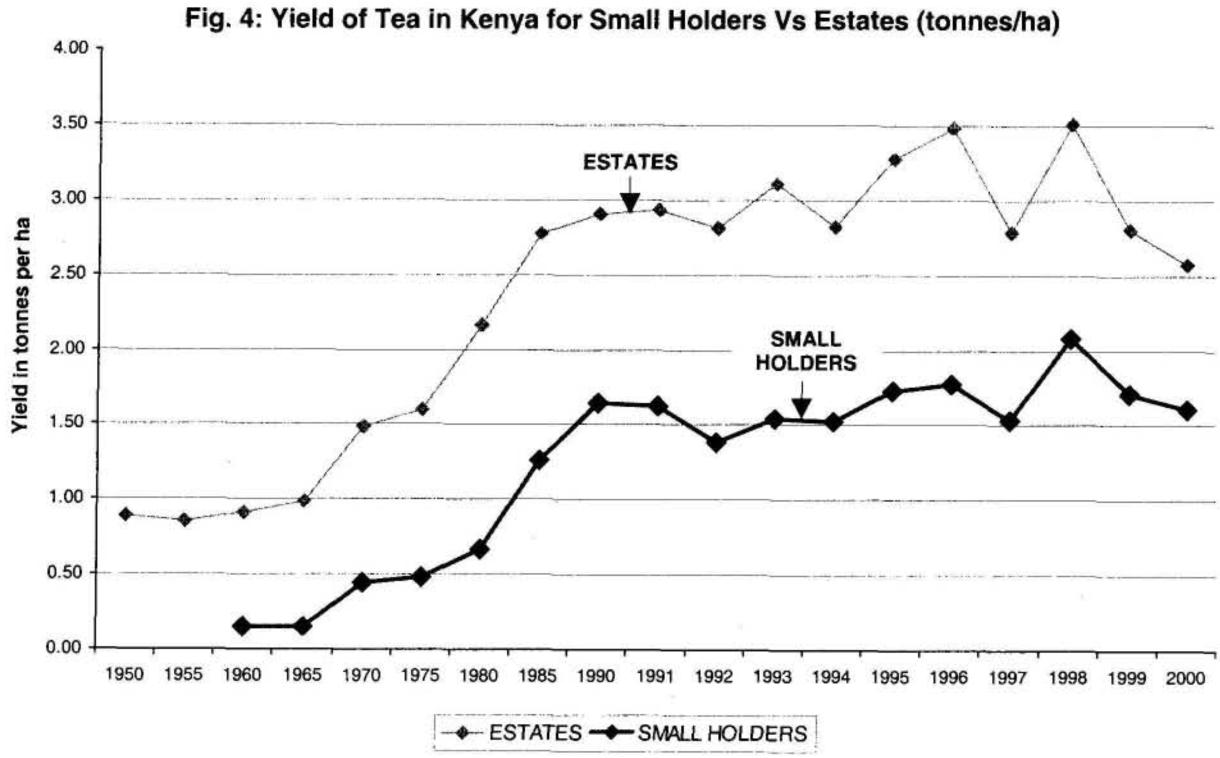


Fig. 4: Yield of Tea in Kenya for Small Holders Vs Estates (tonnes/ha)
Yield in tonnes per ha
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
ESTATES
SMALL HOLDERS
1950 1955 1960 1965 1970 1975 1980 1985 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000
ESTATES SMALL HOLDERS

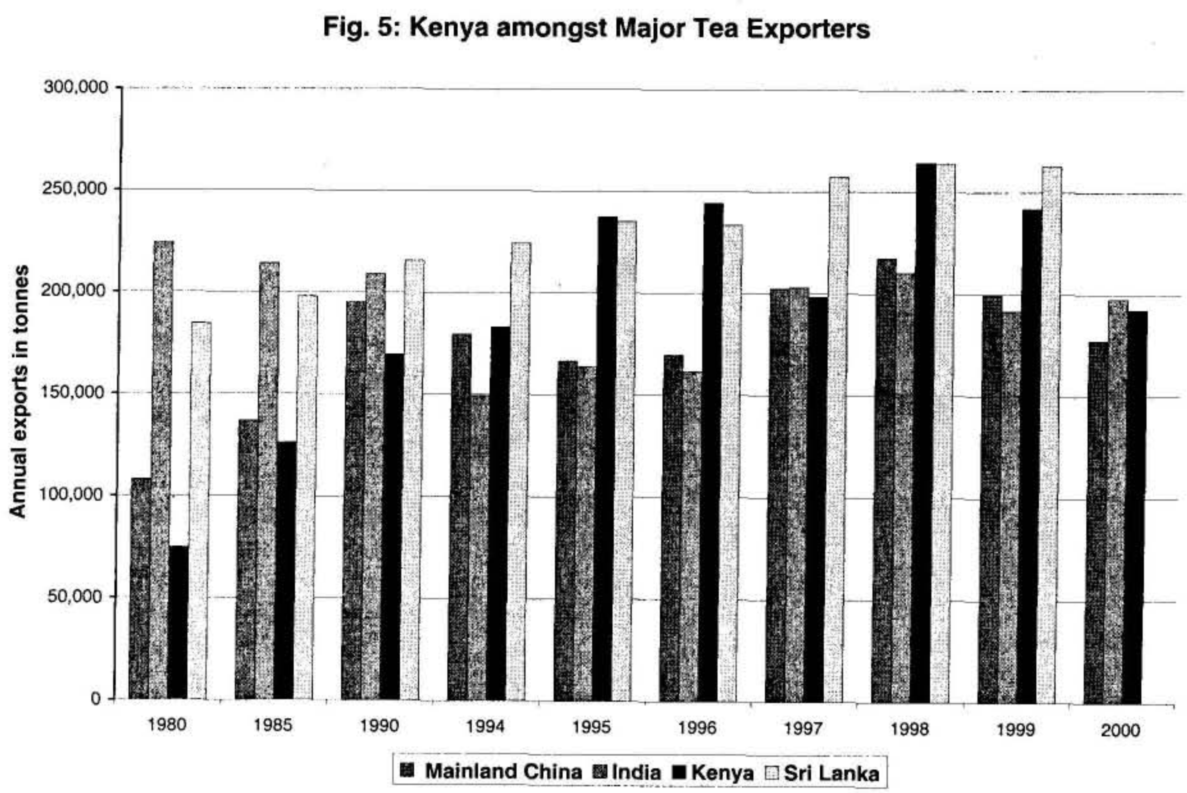


Fig. 5: Kenya amongst Major Tea Exporters
Annual exports in tonnes
300,000
250,000
200,000
150,000
100,000
50,000
0
1980 1985 1990 1994 1995 1996 1997 1998 1999 2000
Mainland China India Kenya Sri Lanka