

**THE SRI LANKA TEA INDUSTRY**

**AGRICULTURAL PROFILE  
OF  
THE CORPORATE TEA SECTOR**



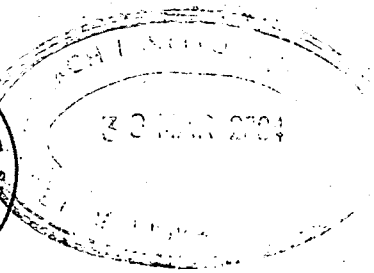
**ADVISORY & EXTENSION SERVICE  
TEA RESEARCH INSTITUTE OF SRI LANKA  
TALAWAKELLE**

*OCTOBER 2003*

Reference Only

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## **FOREWORD**

It gives me great pleasure in writing the foreword to this document titled "Agricultural Profile of the Corporate Tea Sector" which is a compilation of a mass of valuable data on the agricultural status, based on the 304 tea plantations managed by 20 Regional Plantation Companies (RPC). This is the first time ever that such detailed technical information has been collected and compiled from so many estates within this short space of six months, which alone makes this document invaluable and topical.

It is our vision that the contents of this document be put to effective use by planners and policy makers in successfully guiding the destinies of the Sri Lankan Tea Industry to greater heights. The information contained in this document lends itself well towards prudent planning and development thereby enabling the channeling of scarce funds towards desirable avenues of investment.

Of great concern is the finding that the replanting rate in the Corporate Tea Sector, over the past decade (1993-2002), has been only 0.70 percent of the total extent under tea. It is adequately documented, and commonly accepted, that if the industry is to keep pace with the rate of aging and decline of the older seedling tea, then replanting should proceed at a minimum of 2 percent per annum of the total tea extent. This is based on the premise that replacement of the tea stock should take place every 50 years. What we have achieved over the past 50 years, since the commencement of commercial replanting, is about 45 percent replanting in the Corporate Sector estates. Even so, findings here indicate that 31 percent of the replanted tea is over 30 years old and perhaps, would already be showing signs of decline in productivity and profitability!

On a positive note, it is gratifying that the energy crisis in tea processing may not be as bad as portrayed. This study reveals that the equivalent of about 18.4 percent of the overall tea area is under fuelwood, when the accepted norm could vary anywhere from 10 to 20 percent. What is now required is to evaluate their quality of growth and rationalize extraction, and future plantings, on a company basis rather than on an estate basis. A greater shift from fossil fuel to wood fuel would not only result in reduced cost of processing but would also lead to a cleaner environment.

An indirect achievement as a result of this undertaking was the close rapport established between the staff of the Tea Research Institute (TRI) and the stakeholders. The TRI went out to the stakeholder, on its own initiative, than on request from the estate, as done passively in the past. These routine visits, therefore, helped the plantation manager to help himself in solving problems that he was hardly aware of. This pro-active approach by the TRI was highly appreciated by the tea industry at large.

This document, and the 20 individual RPC reports on the same subject, released independently, would not have been a reality if not for the intricate planning, guidance and reporting undertaken by Mr R K Nathaniel our Consultant. His dedication to this assignment is much appreciated by all. My sincere thanks also go to the Advisory and Extension staff of the TRI for the untiring efforts, and long hours, put in by them in organizing the logistics and visiting every one of the 304 estates within a short spell of about 6 months, which was no mean task indeed.

**Dr M T Ziyad Mohamed**  
**Director**

## KEY INDICATORS CORPORATE TEA SECTOR OF SRI LANKA

### 1. Data by Elevation Ranges

INDICATORS	High Country	Uva Region	Mid Country	Low Country	TOTAL/ AVG.
<b><u>GENERAL</u></b>					
No. of Estates	108	79	24	93	304
Total Area (ha)	35,432	25,919	6,358	13,883	81,592
<b><u>TEA IN BEARING</u></b>					
OST (ha)	17,166	18,306	2,567	3,656	41,695
VP (ha)	16,872	6,946	3,514	9,162	36,494
TOTAL (ha)	34,038	25,252	6,081	12,818	78,189
% VP in Bearing	49.18	27.50	57.79	71.48	46.67
<b><u>CROP</u></b>					
Crop/yr ('000 kg)	56,799	31,721	8,976	16,607	144,103
% Crop from VP	66.2	39.5	72.8	82.7	61.7
<b><u>PRODUCTIVITY</u></b>					
YPH of OST (kg)	1,119	1,048	969	786	1,050
YPH of VP (kg)	2,228	1,804	1,846	1,499	1,927
AVERAGE YPH(kg)	1,699	1,245	1,476	1,296	1,459
<b><u>AGE OF OST (%)</u></b>					
> 60 Yrs	97.03	93.42	92.02	49.80	90.97
41-60 Yrs	2.31	6.52	6.54	45.70	8.22
< 40 Yrs	0.66	0.06	1.44	4.80	0.81
TOTAL	100	100	100	100	100
<b><u>AGE OF VP (%)</u></b>					
> 40 Yrs	3.76	9.69	7.17	5.40	5.58
31-40 Yrs	22.19	26.54	39.41	24.63	25.30
21-30 Yrs	30.60	29.41	24.52	24.92	28.37
11-20 Yrs	30.24	22.01	22.86	34.29	29.00
< 10 Yrs	13.21	12.36	6.03	10.76	11.75
TOTAL	100	100	100	100	100

# KEY INDICATORS

## CORPORATE TEA SECTOR OF SRI LANKA

### 2. Data by Planting Districts

Planting Districts (No. of Estates)	Tea in Bearing (ha)			YPH per Year		
	OST	VP	Total	OST	VP	AV.
<b>DIM</b> (47 Est)	7,043	6,534	13,577	1090	2282	1664
<b>DIC</b> (29 Est)	4,389	5,543	9,932	1181	2143	1718
<b>MAS</b> (15 Est)	1,969	2,615	4,584	1166	2518	1937
<b>NEL/PUN/PUS</b> (21 Est)	3,373	3,128	6,501	1125	2005	1548
<b>MDK/DOL/KOT</b> (13 Est)	1,442	2,040	3,482	971	1765	1436
<b>UDP/MRT</b> (24 Est)	5,350	1,677	7,027	982	1762	1168
<b>BAD/NGW</b> (32 Est)	7,315	3,214	10,529	1104	1718	1291
<b>HAP/MAD/PAS</b> (30 Est)	7,158	2,580	9,738	1007	1891	1241
<b>BAL</b> (9 Est)	997	1,246	2,243	914	1789	1400
<b>RAT</b> (23 Est)	1,145	2,537	3,682	712	1297	1115
<b>KAL</b> (10 Est)	132	510	642	451	1365	1177
<b>KLV/KEG</b> (20 Est)	114	1,631	1,745	853	1363	1330
<b>GAL/MAT</b> (17 Est)	156	1,403	1,559	780	1524	1450
<b>MOK/RAK</b> (14 Est)	1,111	1,836	2,947	783	1719	1366
<b>TOTAL/AVG. (304 Est)</b>	<b>41,695</b>	<b>36,494</b>	<b>78,189</b>	<b>1050</b>	<b>1927</b>	<b>1459</b>

#### **Guide to Agro-zones** (See Annex I for further details)

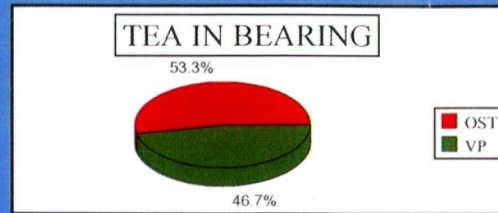
1. **DIM** = Dimbula - Agro-zone WU2
2. **DIC** = Dickoya - Agro-zones WU2 & WM1
3. **MAS** = Maskeliya - Agro-zone WU1
4. **NEL/PUN/PUS** = Nuwara Eliya/Pundaluoya/Pussellawa- Agro-zones WU2 & WU3
5. **MDK/DOL/KOT** = Madulkelle/Dolosbage/Kotmale - Agro-zone WU1, IU1, IM3, WM2 & WM3.
6. **UDP/MRT** = Udapussellawa/Maturata - Agro-zone IU2.
7. **BAD/NWG** = Badulla/New Galway - Agro-zone IU2
8. **HAP/MAD/PAS** = Haputale/Madulsima/Passara - Agro-zone IM2 & IU3
9. **BAL** = Balangoda - Agro-zone IM3
10. **RAT** = Ratnapura - Agro-zones WM1, WL1 & WL2
11. **KAL** = Kalutara - Agro-zone WL1
12. **KLV/KEG** = Kelani Valley/Kegalle - Agro-zone WL1 & WL2
13. **GAL/MAT** = Galle/Matara - Agro-zones WL1, WL2 & WL4.
14. **MOK/RAK** = Morawak Korale/Rakwana - Agro-zones WM1, WM3, WU1, WU2 & IM2.

# GRAPH 1: THE CORPORATE TEA SECTOR

## Productivity and Age Classification of Tea

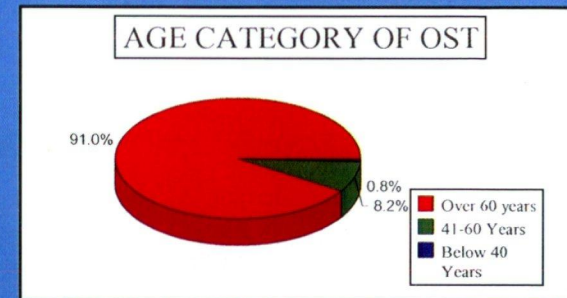
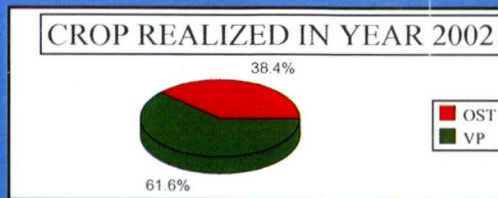
(304 Tea Estates)

TEA IN BEARING		
	Ha	2002 YPH
OST	41,694.16	1,050
VP	36,494.42	1,927
<b>Total/Av</b>	<b>78,188.58</b>	<b>1,458</b>

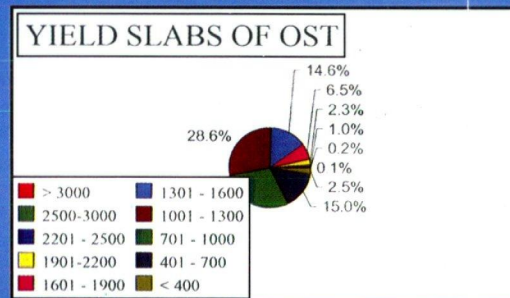


AGE CATEGORY OF OST		
Age Category	Ha	%
Over 60 years	37,919.79	90.97
41-60 Years	3,428.59	8.22
Below 40 Years	336.78	0.81
<b>TOTAL</b>	<b>41,685.16</b>	<b>100.00</b>

Crop realised - 2002	
	Kg Made Tea
OST	43,762,010
VP	70,341,280
<b>Total/Av</b>	<b>114,103,291</b>

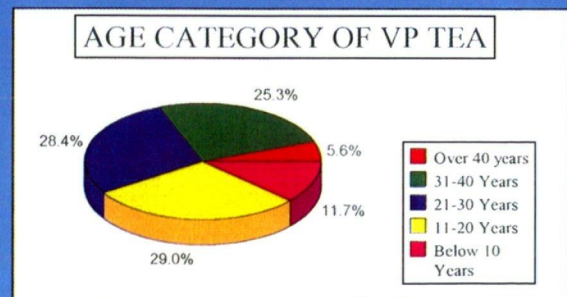
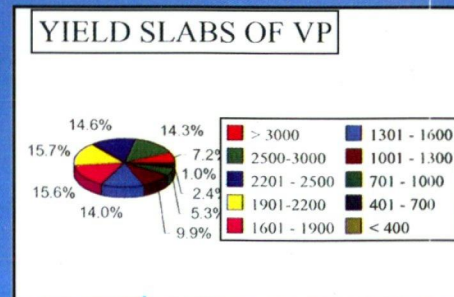


YIELD SLABS OF OST		
	%	Ha
> 3000	0.1	28.84
2500-3000	0.2	86.87
2201 - 2500	1.0	429.62
1901-2200	2.3	950.26
1601 - 1900	6.5	2690.75
1301 - 1600	14.6	6072.38
1001 - 1300	28.6	11911.74
701 - 1000	29.3	12226.53
401 - 700	15.0	6244.91
< 400	2.5	1052.26
<b>TOTAL</b>	<b>100</b>	<b>41,694.16</b>



AGE CATEGORY OF VP TEA		
Age Category	Ha	%
Over 40 years	2,049.55	5.64
31-40 Years	9,198.28	25.30
21-30 Years	10,310.60	28.36
11-20 Years	10,535.64	28.97
Below 10 Years	4,267.37	11.74
<b>TOTAL</b>	<b>36,361.44</b>	<b>100.00</b>

YIELD SLABS OF VP TEA		
	%	Ha
> 3000	7.2	2612.47
2500-3000	14.3	5230.00
2201 - 2500	14.6	5320.23
1901-2200	15.7	5731.14
1601 - 1900	15.6	5703.90
1301 - 1600	14.0	5112.02
1001 - 1300	9.9	3595.47
701 - 1000	5.3	1951.87
401 - 700	2.4	876.94
< 400	1.0	360.38
<b>TOTAL</b>	<b>100</b>	<b>36,494.42</b>



## GRAPH II:

## THE CORPORATE TEA SECTOR

(304 Tea Estates)

### Land Use Pattern

#### LAND USE

##### 1. UNDER TEA

	Ha	%
OST in Bearing	41,694.66	51.23
VP Tea in Bearing	36,282.78	44.58
Immature VP/Grass/Nursery	3,402.57	4.18
<b>Total Tea</b>	<b>81,380.01</b>	<b>100.00</b>

81380.01

##### 2. TOTAL LAND USE

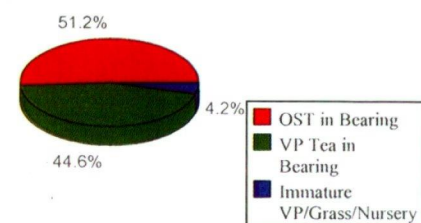
	Ha	%
Total Tea	81,380.01	47.52
Rubber	16,695.57	9.75
Coconut	1,032.75	0.60
Oil Palm	1,404.05	0.82
Minor Crops	991.14	0.58
Fuelwood	15,024.58	8.77
Timber	4,155.44	2.43
Jungle/forest	5,885.35	3.44
Scrubland	3,953.52	2.31
Building/garden	11,196.03	6.54
Uncultivated	14,141.52	8.26
Other	15,382.73	8.98
<b>TOTAL</b>	<b>171,242.69</b>	<b>100.00</b>

171242.69

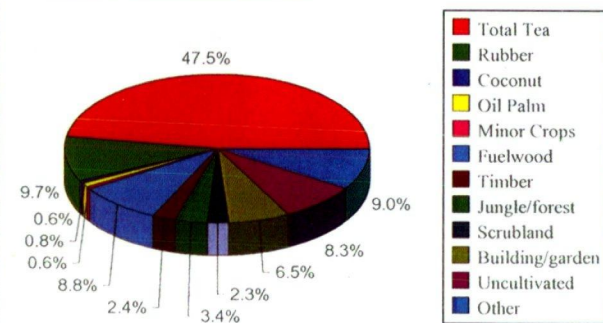
##### 3. TOTAL CULTIVATED AREA

	Ha	%
Total Tea	81,380.01	67.43
Rubber	16,695.57	13.83
Coconut	1,032.75	0.86
Oil Palm	1,404.05	1.16
Minor Crops	991.14	0.82
Fuelwood/Timber	19,180.02	15.89
<b>TOTAL</b>	<b>120,683.54</b>	<b>100.00</b>

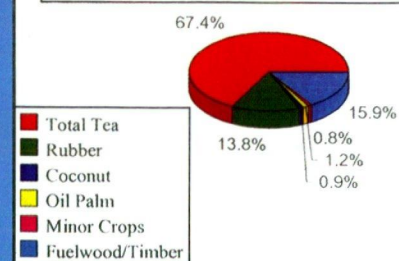
#### LAND USE - Under Tea



#### TOTAL LAND USE



#### TOTAL CULTIVATED AREA



# **THE SRI LANKAN TEA INDUSTRY**

## **Agricultural Profile of the Corporate Tea Sector**

### **Introduction**

This report is the result of an “agricultural census”, undertaken by the Staff of the Advisory and Extension Services of the Tea Research Institute (TRI) of Sri Lanka, covering all the 304 tea estates managed by the 20 Regional Plantation Companies (RPC) handling tea. During the past few months (April-September 2003), the Advisory Officers of the TRI visited these estates scattered in all tea growing districts and elevation zones in Sri Lanka.

In this exercise, the TRI went out to the stakeholder, on its own initiative, than on request from the estate, as done passively in the past. These routine visits, therefore, helped transform the approach of the TRI from a passive one to a pro-active one with a high degree of client focus. In addition to giving advise during these visits, a mass of valuable information was collected initially as a pre-evaluation report on the estates prior to the visit and thereafter through a detailed field by field evaluation with, and following, visits.

This report deals largely with the information collected as pre-evaluation data, while a detailed field-by-field analysis on each estate will be prepared in due course by the TRI, to form a database towards a better extension focus on a need- based pattern. The database would also be useful to the scientists in their research and experimentation work.

Wherever possible, cross-checking was resorted to, along with built-in checks and balances in the questionnaire, to confirm the veracity of the information provided. In order to achieve this objective, data entry was undertaken by senior technical persons and not entrusted to low-level data entry operators. Cross-checking of the submitted data, and referring back to the estate for clarification, was possible only in instances where an erroneous entry was obvious. (About 25% forms needed such referral). Accuracy in this report is only possible to the extent of the provision of correct data by the respective estates!

An overall representation of the entire Corporate Tea Sector could be obtained from Graphs I and II. Details of specific parameters are discussed in three sections as (1) Overall Corporate Performance, (2) Corporate performance in elevation ranges of high-, mid- and low-country as well as Uva., and (3) Corporate performance in the 16 tea-growing agro-climatic zones of the country.

Twenty separate Reports are also issued, independent of this document, where the profile of each RPC is detailed out, along with a graphic representation of performance of all the individual tea estates managed by the particular RPC.

It is intended that this Report would serve as an effective guide to policy makers in identifying the development needs of the Corporate Tea Sector and to enable the authorities to guide tea investment/development in the desired direction.

## SECTION I

### OVERALL CORPORATE PERFORMANCE

#### 1.1. General

Based on year 2002 data, the highest combined average yield for any estate was in the yield slab of 2,500 – 3,000 kg made tea per ha, and this was on two estates, Chrystlers Farm (Kotagala Plantations Ltd), with 2,816 kg/ha, and Eildon Hall (Horana Plantations Ltd), with 2,716 kg/ha<sup>1</sup>. The overall average combined yield was seen to be between 2,200-2,500 kg per ha per year only on 7 estates, and between 1,900-2,200 kg on a further 23 Estates. Therefore, it is evident that only 32 estates in the Corporate Tea Sector in Sri Lanka yielded above 1,900 kg made tea per ha during the year 2002.

The highest average yield for seedling tea on any estate was in the yield slab of 2,000 – 2,500 kg made tea per ha, and this was on Gonakelle Estate in Passara (Namunukula Plantations Ltd), with 2,038 kg per ha in 2002.

In the case of VP tea, the highest average yield for any estate was in the yield slab > 3,000 kg made tea, and this was on 5 estates, Brunswick (Maskeliya Plantations Ltd) with 3,208 kg/ha; Fairlawn (Horana Plantations Ltd) with 3,166 kg/ha; Eildon Hall (also of Horana Plantations Ltd) with 3,141 kg/ha; Dunsinane (Elpitiya Plantations Ltd) with 3,048 kg/ha and Balmoral (Agrapatna Plantations Ltd) with 3,015 kg/ha.

#### 1.2. Land Utilization

The survey covered all the 304 tea estates under the management of the 20 RPCs. The total land area covered in the survey was 171,453.83 ha and the manner in which the extents are utilized is as indicated below:

---

<sup>1</sup> See Annex-II for details of estates in the higher yield slabs.

**Table 1.1. Land Use in the Corporate Tea Sector**

Type of Use	Ha	%
Land under cultivation	120,894.68	70.51
Jungle/Forest/Scrubland	9,838.87	5.73
Buildings/Gardens/Roads	11,196.03	6.53
Uncultivated	14,141.52	8.26
Other	15,382.73	8.97
<b>TOTAL</b>	<b>171,453.83</b>	<b>100</b>

It is evident that only about 70.5 % of the land area of the estates is under any form of cultivation, while 5.7 % is in jungle/forest/scrubland, 8.3% being uncultivated and a further 9.0 % being put to other unspecified uses.

**Table 1.2 Area Under Different Crops**

Type of Cultivation	Ha	%
All Tea Areas	81,591.15	67.49
Rubber	16,695.57	13.81
Coconut	1,032.75	0.85
Oil Pam	1,404.05	1.16
Minor Crops	991.14	0.82
Fuelwood/timber	19,180.02	15.87
<b>TOTAL CULTIVATED</b>	<b>120,894.68</b>	<b>100</b>

Tea cultivation occupies 67.5 % of the land area while rubber occupies 13.8 %, coconut 0.9 %, oil palm 1.2% (seen to be an expanding crop in Galle/Matara with smaller extents in Kalutara), other minor crops about 0.8 % and fuelwood/ timber a further 15.9 %.

About 78.3 % of the combined fuelwood/timber area is said to be under fuelwood (which amounts to 15,025 ha). It is gratifying to note that this extent is about 18.4 % of the total tea area (81,592 ha), whilst the average requirement is popularly indicated to be around 10 –15 %. However, nothing is known of the management standards of these areas, whether optimal or otherwise. It is prudent to evaluate the fuelwood plantings, in each RPC, for their growth and productivity and thereafter rationalize planting and extracting of same.

**Table 1.3. Area Under Different Types of Tea**

Type of Tea Area	Ha	%	
		Tea in Bearing	All Tea
OST in Bearing	41,694.16	53.33	51.10
VP Tea in Bearing	36,494.42	46.67	44.73
<b>TEA IN BEARING</b>	<b>78,188.58</b>	<b>100</b>	<b>95.83</b>
Immature VP	1,673.48		2.05
Under Rehab Grass	1,415.16		1.73
Nurseries	313.93		0.39
<b>TOTAL TEA AREA</b>	<b>81,591.15</b>		<b>100</b>

(OST denotes Old Seedling Tea)

From Table 1.3, it is seen that the area in bearing comprises of 95.8 % of the total tea area (excluding areas of abandoned tea). About 53.3 % of the tea in bearing is OST while 46.7 % is under VP.

### 1.3. Tea Production

Tea production for the year 2002 was found to be as follows:

**Table 1.4. Tea Production for the Year 2002**

Type of Tea	Ha	%
Old Seedling Tea	43,762,010	38.35
VP Tea	70,341,280	61.65
<b>TEA IN BEARING</b>	<b>114,103,291</b>	<b>100</b>

Therefore, it is evident that 46.7 % of the area under VP tea produces 61.7 % of the total crop, while 53.3 % of the area under OST produces only 38.4 % of the total crop.

With this level of production, the overall productivity status of tea is as follows (taking only the 2002 figures):

**Table 1.5. Productivity of Tea for the Year 2002**  
(Weighted)

Type of Tea Area	Yield Per Ha (Kg made tea)
Old Seedling Tea	1,050
VP Tea	1,927
<b>AVERAGE</b>	<b>1,459</b>

VP tea was, thus, seen to have over 80 % greater capacity for productivity than OST for various reasons

#### 1.4. Yielding Ability of Tea

A bulk of the OST (57.9 %) falls within the yield slabs of 700 to 1,300 kg made tea per ha per year. About 24.6 % yields an average above 1,300 kg made tea per ha per year, while 17.5 % yields below 700 kg. It is worthy of note that only about 0.28 % of OST yields an average above 2,500 kg per ha per year.

**Table 1.6. Tea Areas in the Different Yield Slabs**

Yield Slab (kg)	OST(%)	VP Tea (%)	ALL TEA (%)
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>	<b>41,694.16</b>	<b>36,494.42</b>	<b>78,188.58</b>
> 3000	0.07	7.16	3.38
2500 – 3000	0.21	14.33	6.80
2201 – 2500	1.03	14.58	7.35
1901 – 2200	2.28	15.70	8.55
1601 – 1900	6.45	15.63	10.74
1301 – 1600	14.56	14.01	14.30
1001 – 1300	28.57	9.85	19.83
701 – 1000	29.32	5.35	18.13
401 – 700	14.98	2.40	9.11
< 400	2.52	0.99	1.81
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>

Those OST areas yielding below an average of 700 kg made tea per ha per year (totaling 7,297 ha) could prove to be uneconomic to be maintained. Serious consideration should be given towards diversifying such areas away from tea, into other more economic crops, if soil conditions are not ideally suited for replanting.

In the case of VP tea, about 74.2 % falls within a broad yield slab of 1,300 kg to 3,000 kg, and this is fairly evenly distributed within the narrower slabs. Only 7.2 % of the VP yields above 3,000 kg per ha per year, while a further 18.6 % yields below 1,300 kg per ha. What is of concern in VP tea is that proportion yielding below 1,000 kg per ha, which comprises 8.7% (177.6 ha) of the total VP area. Though the area involved is small, these would be largely uneconomic to maintain, unless agricultural conditions, are improved to enhance productivity levels.

When both OST and VP are combined, about 52.3 % falls within the yield slab of 700 –1,600 kg per ha. About 36.8 % yields higher than 1,600 kg per ha while 10.9 % yields lower than 700 kg per ha.

### **1.5. Age Category of Tea**

Towards identifying the sustainability of tea productivity in the Corporate Sector, it was necessary to analysis the age of the tea in bearing. Till now, this has not been attempted over the entire Corporate Tea Sector at about the same time. The information provided by each Corporate Sector tea estate was pooled for this analysis.

Table 1.7 indicates that a bulk of OST is over 60 years old, while about 9.0 % is under 60 years, and this would commonly be termed “post-war” seedling. Some of it may even be planted with bi- and/or poly clonal seedlings.

In VP tea, the greatest proportion, 57.3 %, is in the age group of 11 – 30 years. It is worthy of note that only 11.7 % of all VP is below 10 years, while aging tea over 30 years comprise about 30.9 %. The details are as given below:

**Table 1.7. Tea Area in Bearing in the Age Categories**

Age Category	OST (%)	VP Tea (%)	ALL TEA (%)
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>	<b>41,694.16</b>	<b>36,494.42</b>	<b>78,188.58</b>
> 60 Years	90.97		48.58
31 – 60 Years	8.22		4.39
< 40 Years	0.81		0.43
> 40 Years		5.64	2.63
31 – 40 Years		25.30	11.78
21 – 30 Years		28.36	13.21
11 – 20 Years		28.97	13.50
<10 Years		11.74	5.47
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>

**1.6. Pace of Replanting in the past Decade**

The fact that only 11.7 % is below 10 years, while aging tea over 30 years comprise 30.9 % indicates that replanting has been going on at a very low ebb, much below the commonly accepted norm for replanting, which is 2% of the tea ha to be replanted each year, and this is evident from the Table below:

**Table 1.8. Area Replanted during the past Decade (1993-2002)**

Age Category	Total Ha RP from 1993-2002	Av Annual RP/yr by Corporate Sector (ha)	Av Annual RP per Estate (304 Estates)	ANNUAL RP AS % OF CORPORATE TEA HA
VP 4-10 Yrs old	4,291	715.2	2.35	0.88
VP < 4 Yrs old	1,383	345.8	1.13	0.42
<b>TOTAL/AV</b>	<b>5,674</b>	<b>567.4</b>	<b>1.87</b>	<b>0.70</b>

**Note: 1.** RP indicates replanting

**Note 2:** For purposes of this analysis, the total tea ha is assumed to have been almost the same over the past decade.

Over the past decade (1993-2002), the average annual rate of replanting in the Corporate Tea Sector has been only 0.70 % (567.4 ha being replanted, on the average, per year) out of the total tea extent (81,592.65 ha). In respect of the 304 tea estates in the Corporate Sector, the area replanted should be an average of 1,631.9 ha each year, if one is to go by the norm of 2% of the tea ha to be replanted each year.

From the above discussion, it is evident that the pace of replanting over the last decade was inadequate to sustain the productivity of tea in Sri Lanka in the long term. It is worthy of note that during the past decade, replanting has slowed down even further in the last 4 years (1999-2002). This is revealed by the fact that the average annual rate of replanting during the 6-year period between 1993-1998 was 0.88 % of the total tea extent, whilst during the 4-year-period between 1999-2002, the rate of replanting slowed down to 0.42 %.

As indicated earlier, a bulk of the OST is approaching senility, at least in some tea growing districts, and 30.9 % of the VP tea is over 30 years old, and perhaps even beyond their peak period of productivity. Under such circumstances, some sustainable and viable system must be instituted if the Corporate Tea Sector is to stabilize its tea productivity over the long-term.

It is often said that replanting is not undertaken by estates because of the excessively high cost of operations. With the heavy dependence on tea for the health of the national economy, which scenario would perhaps hold true for a few decades to come, some drastic measures need to be instituted to promote replanting at a desirable pace. If necessary, the government should come out with a attractive package to induce the Corporate Tea Sector to undertake regular replanting. This could take the form of financial assistance (if needs be from cess funds) in the first few years, till such time as a satisfactory and sustainable system of a revolving fund could be established by the Corporate Sector Companies.. It is only then that the long term stability of tea productivity could be ensured.

It is worthy of note that the tea smallholders cultivate about 45 % of the country's tea extent but they are said to produce about 60 % of the total national crop. Average smallholder yield, in the year 2000 was 2,216 kg per ha which was almost a third more than the average yield of the estate sector (not necessarily Corporate Sector only). Overall, smallholder yields are also recorded to be progressively increasing with time, and his sustainability is somewhat assured with a somewhat regular program of replanting being undertaken under the Tea Replanting Subsidy Scheme.

## 1.7. Worker Utilization

An attempt was made to study worker utilization and worker productivity at the Corporate level from the figures submitted by the estates. Many estates provided incomplete information in respect of worker utilization during the period 1998-2002, and hence some of the figures displayed in Table 1.9 could be somewhat distorted.

**Table 1.9. Average Worker Utilization during 1998-2002**

	Av. Green Leaf Intake (kg/MD)	Worker Utilization (Av. Per ha/year)		Av annual Worker Out-turn
		Total	Pluckers	
Av. 1998 -2002	17.97	563	340	74 %

Overall intake per plucker, on a corporate basis, over the last five years was about 18.0 kg green leaf per day, and this was seen to decline marginally over the years. The total average workers per ha per year was 563, while pluckers per ha per year was 340. Worker-out-turn was steady over the years at about 74%.

## SECTION II

### PERFORMANCE IN THE ELEVATION RANGES

#### 2.1. Land Utilization

The 304 tea estates managed by the Corporate Sector were assigned to the respective elevation ranges they belong, for this aspect of discussion. The ranges are high-country, Uva (mid-country semi-dry zone), mid-country (wet zone) and low-country. The number of estates in each elevation range and the different agro-climatic zones<sup>2</sup> are as shown below:

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<sup>2</sup> Please refer Annex I for a definition of the respective agro-zones

**Table 2.1: Agro-zones of Estates in Elevation Ranges**

<b>Agro-zones &gt;&gt;&gt;</b>	<b>High</b>	<b>Uva</b>	<b>Mid</b>	<b>Low</b>	<b>TOTAL</b>
WU1	15		5	1	21
WU2	81		11		92
WU3	4				4
WM1	1			11	12
WM2			3		3
WM3			1	15	16
WL1				41	41
WL2				19	19
WL3				1	1
WL4				4	4
IU1			3		3
IU2	7	17			24
IU3		33			33
IM2		29		1	30
IM3			1		1
<b>Total Estates</b>	<b>108</b>	<b>79</b>	<b>24</b>	<b>93</b>	<b>304</b>

Within the low-country range there is 1 estate at high elevation (Beverley, in Deniyaya) and 26 estates in the mid-elevation (mainly in Deniyaya, Morawak Korale and Balangoda). Within the high-country range there is 1 estate at mid-elevation (Kenilworth, in Ginigathenna). Uva (mid-country semi-dry) as well as the Mid-country (wet) ranges have estates both at mid- and high elevations. The classification indicated in Table 2.1 is based more on agro-climatic location of the estate than its elevational location.

Irrespective of the size, the largest number of estates is in WU2 and the lowest number in WL3 and IM3. About 35.5% (108 estates) of all corporate sector tea estates are in the high-country, 26.0 % (79 estates) in the Uva, 7.9% (24 estates) in mid-country and 30.5.% (93 estates) in the low-country.

**Table 2.2. Land Use in Elevation Ranges**

Agro-zones >>>		High (%)	Uva (%)	Mid (%)	Low (%)	TOTAL	
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>		<b>51735</b>	<b>45711</b>	<b>12343</b>	<b>61665</b>	<b>Ha</b>	<b>%</b>
Land under cultivation		78.7	73.2	73.9	60.8	<b>120,895</b>	<b>70.5</b>
Jungle/Forest/Scrub		5.2	4.6	5.8	7.1	<b>9,839</b>	<b>5.7</b>
Buildings/Gardens/Rds		7.8	6.6	5.8	5.6	<b>11,196</b>	<b>6.5</b>
Uncultivated land		3.0	8.1	4.8	13.5	<b>14,142</b>	<b>8.3</b>
Other		5.3	7.5	9.7	13.0	<b>15,382</b>	<b>9.0</b>
<b>TOTAL</b>	<b>%</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>171,454</b>	<b>100</b>
	<b>No of Estates</b>	<b>108</b>	<b>79</b>	<b>24</b>	<b>93</b>	<b>304</b>	

From Table 2.2 it is seen that 78.7 % of the cultivated land is in the high-country, with low-country having the least, at 60.8 %. Uncultivated lands, jungle/ forest/scrub and land put to other unspecified uses are also highest in the low-country.

**Table 2.3. Different Crops in Elevation Ranges**

Type of Crops	High (%)	Uva (%)	Mid (%)	Low (%)	TOTAL	
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>	<b>40794</b>	<b>33480</b>	<b>9124</b>	<b>37498</b>	<b>Ha</b>	<b>%</b>
All Tea Areas	86.8	77.4	69.7	37.0	<b>81,592</b>	<b>67.4</b>
Rubber	0.0	0.4	0.2	44.2	<b>16,696</b>	<b>13.8</b>
Coconut	0.0	0.1	0.0	2.7	<b>1,033</b>	<b>0.9</b>
Oil palm	0.0	0.0	0.0	3.7	<b>1,404</b>	<b>1.2</b>
Minor Crops	0.1	0.1	4.2	1.4	<b>991</b>	<b>0.8</b>
Fuelwood/timber	13.1	22.0	25.9	11.0	<b>19,180</b>	<b>15.9</b>
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>120,895</b>	<b>100</b>

The highest percent of tea in the cultivated area is in the high-country, at 86.8 %, and the lowest in the low-country, at only 37%. With 44.2 % rubber, this crop becomes the crop of major economic significance in the low-country. In addition, low-country also has some coconut and oil palm plantings.

It is gratifying to note that all regions, on the average, have the minimum area required under fuelwood, theoretically said to be about 10 % of the area under tea. What needs to be done is perhaps evaluate the quality of growth of these plantings, and rationalize fuelwood plantings within the estates of each RPC situated in the different elevation ranges.

It is seen from Table 2.4 that, on the average, the area in bearing comprises of 95.8 % of the total tea area (excluding areas of abandoned tea), with the highest being in the Uva, at 97.4 %, and the lowest in the low-country, at 92.3 %. In the category of tea in bearing, Uva region has only 26.8 % VP as against the highest of 66.0 % in the low-country.

**Table 2.4. Types of Tea in the Elevation Ranges**

Type of tea area	High (%)	Uva (%)	Mid (%)	Low (%)	TOTAL	
					Ha	%
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>	<b>35432</b>	<b>25919</b>	<b>6358</b>	<b>13883</b>	<b>Ha</b>	<b>%</b>
OST in Bearing	48.7	70.6	40.4	26.3	<b>41,694</b>	<b>51.1</b>
VP Tea in Bearing	47.3	26.8	55.3	66.0	<b>36,494</b>	<b>44.7</b>
<b>TEA IN BEARING</b>	<b>96.0</b>	<b>97.4</b>	<b>95.7</b>	<b>92.3</b>	<b>78,189</b>	<b>95.8</b>
Immature VP Tea	2.1	1.4	2.0	3.3	<b>1,673</b>	<b>2.1</b>
Under Rehab Grass	1.6	0.9	2.0	3.6	<b>1,415</b>	<b>1.7</b>
Nurseries	0.3	0.3	0.3	0.8	<b>314</b>	<b>0.4</b>
<b>TOTAL TEA AREA</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>81,591</b>	<b>100</b>

## 2.2. Tea Production

In order to understand the regional distribution of productivity on estates, in the various elevation ranges, an analysis was undertaken on the 304 tea estates managed by the Corporate Sector. It should, however, be noted that this analysis is undertaken only on the yield figures reported for the year 2002. This has been undertaken separately for OST and VP as well as on the combined estate productivity, the details of which are given in Table 2.5 (a), (b) & (c).

From that , it is seen that the overall average yield of OST was above 1,500 kg per ha per year only on 14 estates. Overall OST yields in a further 108 estates fell within the range of 1,000-1,500 kg, and 102 estates between 700-1,000 kg. OST yields were below 700 kg per ha per year on 38 estates, and these would all be largely uneconomic to maintain at today's cost of production.

**Table 2.5. Estate Productivity in the Elevation Ranges (Based on Year 2002 figures)**

**(a) OST**

Yield Slab (kg MT/ha)	No. of Estates					TOTAL	
	TOTAL	High	Uva	Mid	Low	Crop (kgMT/yr)	%
> 3000	0						
2,501-3,000	0						
2,001-2,500	1		1			572,474	1.3
1,501-2,000	13	8	5			5,041,048	11.5
1,001-1,500	108	55	34	8	11	22,242,275	50.8
701-1,000	102	35	33	23	11	13,679,869	31.3
< 700	38	8	6	4	20	2,226,340	5.1
<b>TOTAL</b>	<b>262</b>	<b>106</b>	<b>78</b>	<b>35</b>	<b>42</b>	<b>43,762,010</b>	<b>100</b>

**Note:** Out of a total of 304 Estate, Agrakande (Watawala Plantations Ltd.) in the high-country, did not have YPH data separately for OST & VP, while tea on 41 estates were totally replanted.

A total of 41 Estates had no OST areas as the entire tea extent was already replanted. These estates were all in the low country districts, except for Chryslers Farm in the high-country and Dotel Oya in the mid-country.

In the table below, the overall average VP yield is seen to be above 3000 kg per ha per year only on 5 estates; between 2,500- 3,000 kg on 19 estates.

Overall VP yields in another 88 estates fell within the range of 2,000-2,500 kg; 116 estates between 1,500-2,000 kg and 49 estates between 1,000-1,500. VP yields were below 1,000 kg per ha on 28 estates, and largely uneconomic to maintain.

**(b) VP**

Yield Slab (kg MT/ha)	No. of Estates					TOTAL	
	TOTAL	High	Uva	Mid	Low	Crop (kgMT/yr)	%
> 3000	5	5				2,325,608	3.3
2,501-3,000	19	16	2	1		7,632,089	10.9
2,001-2,500	88	60	17	4	7	29,102,402	41.3
1,501-2,000	116	22	46	16	32	24,754,628	35.2
1,001-1,500	49	2	11	2	34	4,986,233	7.1
701-1,000	22	2	2		18	1,497,860	2.1
< 700	4		1	1	2	42,460	0.1
<b>TOTAL</b>	<b>303</b>	<b>108</b>	<b>79</b>	<b>24</b>	<b>93</b>	<b>70,341,280</b>	<b>100</b>

**Note:** Agrakande Estate is not included (see note on Table 2.5 a)

**(c) COMBINED AVERAGE**

Yield Slab (kg MT/ha)	No. of Estates					TOTAL	
	TOTAL	High	Uva	Mid	Low	Crop (kgMT/yr)	%
> 3000	0						
2,501-3,000	2	2				661,551	0.6
2,001-2,500	26	19	1	2	4	16,602,679	14.6
1,501-2,000	93	55	10	8	20	43,522,694	38.1
1,001-1,500	137	29	56	10	42	46,566,277	40.8
701-1,000	40	2	11	1	26	6,269,417	5.5
< 700	6	1	1	1	3	480,672	0.4
<b>TOTAL</b>	<b>304</b>	<b>108</b>	<b>79</b>	<b>22</b>	<b>95</b>	<b>114,103,291</b>	<b>100</b>

Combined yields were below 1,000 kg per ha per year on 46 estates, as seen in the Table above, and these would all be largely uneconomic to maintain at today's cost of production.

It is prudent to evaluate other options for a more economic land use where the YPH of OST is below 700 kg per ha and also where the yields of VP and/or combined yield falls below 1,000 kg per ha. This is perhaps the appropriate way to sustain profitability an estate unit, independent of other units.

Summarizing the data in Tables 2.5 (a), (b) and (c) the overall tea production in the elevation ranges, for the year 2002, in the elevation ranges, was found to be as follows:

**Table 2.6. Tea Production (2002) in Elevation Ranges**

Type of Tea Area	High %	Uva %	Mid %	Low %	TOTAL	
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;</b>	<b>33827</b>	<b>25250</b>	<b>6082</b>	<b>12818</b>	<b>Crop</b>	<b>%</b>
OST in Bearing	33.8	60.5	27.7	17.3	<b>43,762,010</b>	<b>38.4</b>
VP in Bearing	66.2	39.5	72.3	82.7	<b>70,341,280</b>	<b>61.6</b>
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>114,103,291</b>	<b>100</b>

In the high-country, 47.3 % of the area under VP tea (see Table 2.4) produced 66.2 % of the total crop, while in Uva 26.8 % VP produced 39.5 % of the crop, in mid-country 55.3 % of the area under VP produced 72.3 % of the crop and in low-country 66.0 % under VP produced 82.7 % of the crop. On a Corporate basis, it was seen that 44.6 % of the area under VP tea produced 61.7 % of the total crop.

With this level of production, the overall productivity status of tea is as follows (taking only the 2002 figures):

**Table 2.7. Productivity (2002) in the Elevation Ranges (Weighted)**

Type of Tea Area	YPH in High	YPH in Uva	YPH In Low	YPH In Low	AV. YPH
OST in Bearing	1,119	1,048	969	786	<b>1,050</b>
VP in Bearing	2,228	1,804	1,846	1,499	<b>1,927</b>
<b>AVERAGE</b>	<b>1,669</b>	<b>1,245</b>	<b>1,476</b>	<b>1,296</b>	<b>1,459</b>

Average OST yields were the highest in the high country at 1,119 kg made tea per ha per year, followed by Uva with 1,048 kg, mid-country with 969 kg and lastly low-country with 786 kg. VP tea yields were the highest in the high country at 2,228 kg made tea per ha per year, followed by mid-country with 1,846 kg, Uva with 1,804 kg, and lastly low-country with 1,499 kg.

Combined yields, were as a result, the highest in high-country (1,669 kg), followed by mid-country (1,476 kg), low-country (1,296 kg) and lastly Uva (1,245 kg). The relative low percent of VP tea in Uva (26.8 %) and the high percent VP in low-country (66.0 %) resulted in the shifting of the respective positions.

### 2.3. Yielding Ability of Tea

What was depicted in Tables 2.5 (a), (b) and (c) was the distribution of the number of estates, in the agro-zones, falling into the different yield slabs. In this section, the percent tea area in the agro-zone falling into the different yield slabs are indicated separately for OST, VP tea and for all tea areas separately in Table 2.8 (a), (b) and (c).

As seen in Table 2.8, a bulk of the OST fell within the yield slabs of 700- 1,600 kg made tea per ha per year in the high-country (70.1 %) and Uva (77.4 %) while it was in the yield slabs of 400- 1,300 kg made tea in mid- (86.7 %) and low-country (85.3 %). At the corporate level, a bulk (72.9 %) of it was in the yield slabs of 400- 1,300 kg made tea. Very little OST yielded above 1,600 kg made tea per ha. More OST yielded below 700 kg per ha in mid- and low-country (22.6 % & 38.1 % respectively) than in high-country and Uva ((15.9 % & 14.2 % respectively).

**Table 2.8. Different Yield Slabs in Elevation Ranges**

**(a) OST**

Yield Slabs of Tea	High	Uva	Mid	Low	TOTAL	
	%	%	%	%	Ha	%
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>	<b>17166</b>	<b>18306</b>	<b>2567</b>	<b>3656</b>	<b>Ha</b>	<b>%</b>
> 3000 kg	0.17	0.00	0.00	0.00	29	0.1
2500 – 3000 kg	0.35	0.08	0.39	0.00	87	0.2
2201 – 2500 kg	0.80	1.55	0.00	0.19	430	1.0
1901 – 2200 kg	3.29	1.86	0.66	0.76	950	2.3
1601 – 1900 kg	9.37	4.96	3.39	2.43	2,691	6.5
1301 – 1600 kg	15.07	16.81	7.14	6.16	6,072	14.5
1001 – 1300 kg	28.70	30.74	26.55	18.53	11,912	28.6
701 – 1000 kg	26.32	29.85	39.29	33.80	12,226	29.3
401 – 700 kg	13.22	12.20	20.88	33.04	6,245	15.0
< 400 kg	2.71	1.95	1.70	5.09	1,052	2.5
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>41,694</b>	<b>100</b>

In VP tea, a bulk of it fell within the yield slabs of 2,200- 3,000 kg made tea per ha per year in the high-country (54.4 %); while it was in the yield slabs of 1,300- 2,200 kg made tea per ha per year in Uva (52.2 %); and in the yield slabs of 1,000-1,900 kg in mid-country (53.3 %) and low-country (44.9 %). More VP tea yielded below 1,000 kg per ha in mid- and low-country (8.7 % & 21.4 % respectively) than in high-country and Uva ((3.4 % & 5.2 % respectively). Details are as given below:

**(b) VP Tea**

Yield Slabs of Tea	High %	Uva %	Mid %	Low %	TOTAL	
					Ha	%
<b>Ha&gt;&gt;&gt;&gt;&gt;&gt;&gt;&gt;</b>	<b>16873</b>	<b>6946</b>	<b>3514</b>	<b>9162</b>	<b>Ha</b>	<b>%</b>
> 3000 kg	12.04	3.30	4.57	2.09	<b>2,612</b>	<b>7.16</b>
2500 – 3000 kg	19.91	10.89	7.41	9.32	<b>5,230</b>	<b>14.33</b>
2201 – 2500 kg	17.37	15.89	12.99	9.04	<b>5,320</b>	<b>14.58</b>
1901 – 2200 kg	17.12	16.77	13.08	13.29	<b>5,731</b>	<b>15.70</b>
1601 – 1900 kg	14.40	18.17	18.58	14.84	<b>5,704</b>	<b>15.63</b>
1301 – 1600 kg	10.61	17.30	20.63	15.22	<b>5,112</b>	<b>14.01</b>
1001 – 1300 kg	5.20	12.44	14.06	14.84	<b>3,596</b>	<b>9.85</b>
701 – 1000 kg	2.44	4.04	7.08	11.04	<b>1,952</b>	<b>5.35</b>
401 – 700 kg	0.57	0.64	1.60	7.42	<b>877</b>	<b>2.40</b>
< 400 kg	0.34	0.56	0.00	2.90	<b>360</b>	<b>0.99</b>
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>36,494</b>	<b>100</b>

As seen in the Table below, when the combined average was considered, a bulk of the tea in most elevation ranges fell within the yield slabs of 700-1,600 kg made tea per ha per year. Those estates yielding below an overall average of 700 kg made tea per ha per year, and there are 7 such estates, should be identified<sup>3</sup> and the necessary measures to ameliorate the cause must be instituted. This could perhaps turn such estates from loss makers to profit centers.

<sup>3</sup> Please see Annex V & VI for a list of estates with the lowest yields of OST and VP

### (c) COMBINED AVERAGE

Yield Slabs of Tea	High %	Uva %	Mid %	Low %	TOTAL	
					Ha	%
> 3000 kg	6.05	0.91	2.64	1.49	2,641	3.38
2500 – 3000 kg	10.05	3.05	4.45	6.66	5,317	6.80
2201 – 2500 kg	9.02	5.49	7.51	6.52	5,750	7.35
1901 – 2200 kg	10.15	5.96	7.84	9.72	6,681	8.55
1601 – 1900 kg	11.86	8.59	12.17	11.30	8,395	10.74
1301 – 1600 kg	12.86	16.94	14.93	12.64	11,184	14.30
1001 – 1300 kg	17.05	25.72	19.33	15.89	15,507	19.83
701 – 1000 kg	14.48	22.75	20.67	17.53	14,178	18.13
401 – 700 kg	6.95	9.02	9.74	14.73	7,122	9.11
< 400 kg	1.53	1.57	0.72	3.52	1,413	1.81
<b>TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>78,188</b>	<b>100</b>

#### 2.4. Age Category of Tea

From Table 2.9, it is seen that a bulk of the OST is over 60 years old in the high-country, Uva and mid-country, whilst in the low-country, only about half is over 60 years. Though tea younger than 60 years, commonly termed “post-war” seedling, has been planted extensively in the low-country, much of it (45.7 %) is over 40 years old and is perhaps declining in productivity through operational limiting factors such as live-wood termites and collar/branch canker.

**Table 2.9. Age Category of Tea in the Elevation Ranges**

Type of Tea	High	Uva	Mid	Low	TOTAL	
	%	%	%	%	Ha	%
<b>OST</b>						
> 60 Years	97.03	93.42	92.02	49.50	<b>37,920</b>	<b>90.97</b>
41 – 60 Years	2.31	6.52	6.54	45.70	<b>3,428</b>	<b>8.22</b>
< 40 Years	0.66	0.06	1.44	4.80	<b>337</b>	<b>0.81</b>
<b>OST TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>41,685</b>	<b>100</b>
<b>VP Tea</b>						
> 40 Years	3.76	9.69	7.17	5.40	<b>2,037</b>	<b>5.58</b>
31 – 40 Years	22.19	26.54	39.41	24.63	<b>9,232</b>	<b>25.30</b>
21 – 30 Years	30.60	29.40	24.53	24.92	<b>10,353</b>	<b>28.37</b>
11 – 20 Years	30.24	22.01	22.86	34.29	<b>10,582</b>	<b>29.00</b>
< 10 Years	13.21	12.36	6.03	10.76	<b>4,291</b>	<b>11.75</b>
<b>VP TOTAL</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>36,494</b>	<b>100</b>

When the totality of VP tea is considered, over half the area is seen to have been established between 11-30 years ago. However, a further 30% is older than 30 years and perhaps would show signs of decline in productivity in the near future. In the different elevation ranges, there is evidence of relatively more older VP tea in the mid-country (46.6 % being older than 30 years) than elsewhere.

### **2.5. Pace of Replanting in Elevation Ranges (1993-2002)**

The extent of replanting undertaken by the Corporate Tea Sector over the past 10 years in the different elevation ranges is as indicated in Table 2.10.

From this Table, it is evident that the pace of replanting during the past decade was the greatest in the low country, at 0.98 % per annum of the total tea extent, followed by high-country at 0.81 %, mid-country at 0.49 %, and was the lowest in Uva, at 0.44 % per annum. Overall, it was 0.70 %.

**Table 2.10 Area Replanted during past Decade (1993-2002)**

Age Category	High (Ha)	Uva (Ha)	Mid (Ha)	Low (Ha)	TOTAL (Ha)
Total Tea Ha	<b>35,432</b>	<b>25,919</b>	<b>6,358</b>	<b>13,883</b>	<b>81,592</b>
VP 4-10 Yrs old	2,235	858	212	986	<b>4,291</b>
VP < 4 Yrs old	636	276	97	374	<b>1,383</b>
<b>TOTAL</b>	<b>2,871</b>	<b>1,134</b>	<b>309</b>	<b>1,360</b>	<b>5,674</b>
Annual RP (ha)	<b>287.1</b>	<b>113.4</b>	<b>30.9</b>	<b>136.0</b>	<b>567.4</b>
Annual RP as % Of Total Tea Ha	<b>0.81</b>	<b>0.44</b>	<b>0.49</b>	<b>0.98</b>	<b>0.70</b>

**Note: 1.** RP indicates replanting

**Note 2.** Total tea ha is assumed to be about the same over the past decade.

Based on the tea extent in each of the elevation ranges and assuming that 2 % of it should be ideally replanted each year, the pace of replanting needs to be stepped up as follows if productivity is to be sustained over the long term, as discussed under item 1.5 above:

**Table 2.11. Present Rate and Optimal Rate of Replanting**

	Present RP rate		Optimal RP rate	
	Ha	%	Ha	%
High-country	287.1	0.81	708.6	2.0
Uva Region	113.4	0.44	518.3	2.0
Mid-country	30.9	0.49	127.1	2.0
Low-country	136.0	0.98	277.7	2.0
<b>Corporate</b>	<b>567.4</b>	<b>0.70</b>	<b>1631.8</b>	<b>2.0</b>

## 2.6. Worker Utilization

Worker utilization and worker productivity, during the period 1998-2002, in the different elevation ranges are as follows:

**Table 2.12. Average Worker Utilization during 1998-2002**

	Av. Green Leaf Intake (kg/MD)	Worker Utilization (Av. Per ha/year)		Av annual Worker Out-turn
		Total	Pluckers	
<b>High-country</b>	16.74	621	413	79 %
<b>Uva Region</b>	16.25	522	334	73 %
<b>Mid-country</b>	18.02	548	341	74 %
<b>Low-country</b>	20.88	562	272	69 %
<b>AVERAGE</b>	<b>17.97</b>	<b>563</b>	<b>340</b>	<b>74 %</b>

Though overall intake per plucker over the last five years was 18.0 kg green leaf per day, the highest being in the low country and the lowest in Uva region. Overall worker utilization was the highest in high country and the lowest in Uva, while pluckers utilized was highest in the high country and lowest in low country.

## SECTION III

### PERFORMANCE IN THE PLANTING DISTRICTS

For this discussion, the 304 tea estates managed by the Corporate Sector were assigned to the respective planting districts. Often, it necessitated including some estates from outside the immediate boundaries of the respective districts. In such instances it was ensured that the agro-climate was similar. There were also instances when 2-3 planting districts, with near similar agro-climate, were combined. A total of 14 such districts or groups of districts are identified.

#### 3.1. Land Utilization

**Table 3.1: Planting Districts and Estate Information**

	No. of Estates	Total Est ha	Cultivated ha		
			All crops	Tea only	% Tea
<b>DIM</b>	47	18,865	16,007	14,149	88.4
<b>DIC</b>	29	16,634	12,508	10,296	82.3
<b>MAS</b>	15	6,812	5,393	4,808	89.2
<b>NEL/PUN/PUS</b>	21	10,406	8,027	6,856	85.4
<b>MDK/DOL/KOT</b>	13	7,876	5,615	3,616	64.4
<b>UDP/MRT</b>	24	10,466	8,137	7,191	88.4
<b>BAD/NGW</b>	32	18,039	13,299	10,729	80.7
<b>HAP/MAD/PAS</b>	30	20,690	14,410	10,063	69.8
<b>BAL</b>	9	4,373	3,363	2,314	68.8
<b>RAT</b>	23	16,735	11,025	4,014	36.4
<b>KAL</b>	10	6,206	3,886	776	20.0
<b>KLV/KEG</b>	20	13,271	7,757	1,885	24.3
<b>GAL/MAT</b>	17	10,422	6,788	1,740	25.6
<b>MOK/RAK</b>	14	10,658	4,678	3,154	67.4
<b>TOTAL/AV</b>	<b>304</b>	<b>171,454</b>	<b>120,894</b>	<b>81,592</b>	<b>67.5</b>

From the details of land use given in Table 3.1, it is evident that only 67.5 % of the total cultivated area is under tea cultivation. Of the area cultivated, at least 5 planting districts (Ratnapura, Kalutara, Kelani Valley/Kegalle and Galle/ Matara), all in the low-country, have less than 40% of the area under tea cultivation. A further 4 districts (Madulkelle/ Dolosbage/

Kotmale, Balangoda, Haputale/Madulsima/ Passara and Morawak Korale/Rakwana) had between 41-70% of the cultivated area under tea. Only 6 districts (Dimbula, Dickoya, Maskeliya, Nuwara Eliya/ Pundaloya/Pussellawa, Udapussellawa/Maturata and Badulla/ New Galway) had more than 80% of the cultivated area under tea. Details are as given below:

### 3.2. Tea Area and Productivity

Though the overall VP tea in bearing was 53.5%, as seen from Table 3.2, about 3 planting districts in the low -country (Kalutara, Kelani Valley/Kegalle and Galle/Matara) had about 80% or more of the tea under VP. A further 2 districts, also in the low-country (Ratnapura and Morawak Korale/ Rakwana, had between 60-70% of the tea under VP.

All the high- and mid-country planting districts had between 50-60% of the area under VP tea. Details are as given in Table 3.2 below:

**Table 3.2. Tea Area and Productivity in the Districts**

PLANTING DISTRICT	% Tea Area		YPH per Year			
	OST	VP	Total	OST	VP	AV.
<b>DIM</b>	51.87	48.13	<b>100</b>	1,090	2,282	<b>1,664</b>
<b>DIC</b>	45.14	54.86	<b>100</b>	1,181	2,143	<b>1,718</b>
<b>MAS</b>	42.95	57.05	<b>100</b>	1,166	2,518	<b>1,937</b>
<b>NEL/PUN/PUS</b>	51.89	48.11	<b>100</b>	1,125	2,005	<b>1,548</b>
<b>MDK/DOL/KOT</b>	41.42	58.58	<b>100</b>	971	1,765	<b>1,436</b>
<b>UDP/MRT</b>	76.14	23.32	<b>100</b>	982	1,762	<b>1,168</b>
<b>BAD/NGW</b>	69.47	30.53	<b>100</b>	1,104	1,718	<b>1,291</b>
<b>HAP/MAD/PAS</b>	73.50	26.50	<b>100</b>	1,007	1,891	<b>1,241</b>
<b>BAL</b>	44.46	55.54	<b>100</b>	914	1,789	<b>1,400</b>
<b>RAT</b>	31.11	68.89	<b>100</b>	712	1,297	<b>1,115</b>
<b>KAL</b>	20.61	79.39	<b>100</b>	451	1,365	<b>1,177</b>
<b>KLV/KEG</b>	6.54	93.46	<b>100</b>	853	1,363	<b>1,330</b>
<b>GAL/MAT</b>	9.98	90.02	<b>100</b>	780	1,524	<b>1,450</b>
<b>MOK/RAK</b>	37.71	62.29	<b>100</b>	783	1,719	<b>1,366</b>
<b>TOTAL/AV.</b>	<b>53.47</b>	<b>46.53</b>	<b>100</b>	<b>1,050</b>	<b>1,927</b>	<b>1,459</b>

However the three districts within the north-east monsoon zone, in the Uva planting district (Udapussellawa/Maturata, Badulla/New Galway and Haputale/Madulsima/Passara), had only between 20-30% of their tea area under VP.

The highest overall yields in the districts were in Maskeliya, with 1,937 kg per ha per year, followed by Dickoya with 1,718 kg and Dimbula with 1,664 kg. The lowest yielding district was Ratnapura with 1,115 kg, and this was followed by Udupussellawa/Maturata with 1,168 kg and Kalutara with 1,177 kg.

The highest VP yields in the districts were in Maskeliya with 2,518 kg per ha per year, followed by Dimbula with 2,282 kg and Dickoya with 2,143 kg. The lowest yielding district for VP tea was Ratnapura with 1,297 kg, followed by Kelani Valley/Kegalle with 1,363 kg and Kalutara with 1,365 kg.

The highest OST yields in the districts were in Dickoya, with 1,181 kg per ha per year, followed by Maskeliya with 1,166 kg and Nuwara Eliya/Pundaloya/Pussellawa with 1,125 kg. The lowest yielding district was Kalutara with 451 kg, followed by Ratnapura with 712 kg and Galle/Matara with 780 kg.

### 3.2. Yielding Ability of Tea<sup>4</sup>

**Table 3.3. Productivity slabs of Tea in the Districts (Based on Year 2002 figures)**

(a) OST

PLANTING DISTRICT	YIELD SLABS (%)					Total
	> 2500	1900-2500	1300-1900	1000-1300	< 1000	
DIM	0.76	4.32	23.09	58.43	13.40	100
DIC	0.78	7.36	25.37	42.50	23.99	100
MAS	0.15	1.90	29.30	56.47	12.18	100
NEL/PUN/PUS	0.00	0.86	26.67	60.93	11.54	100
MDK/DOL/KOT	0.69	1.17	6.64	67.18	24.32	100
UDP/MRT	0.15	2.37	25.47	61.57	10.44	100
BAD/NGW	0.10	6.49	20.97	57.47	14.97	100
HAP/MAD/PAS	0.00	0.47	17.34	64.41	17.78	100
BAL	0.00	0.95	17.27	70.40	11.38	100
RAT	0.00	1.47	2.33	42.64	53.56	100
KAL	0.00	0.00	4.91	19.71	75.38	100
KLK/KEG	0.00	0.00	9.53	64.55	25.92	100
GAL/MAT	0.00	0.00	16.07	23.10	60.83	100
MOK/RAK	0.00	0.77	6.54	52.83	39.86	100
TOTAL/AV.	0.28	3.31	21.02	57.89	17.50	100

<sup>4</sup> What is discussed here is a collation of achieved cycle yield slabs reported by individual estates, in each district, for a field or a portion thereof, where separate records have been maintained.

OST yielding over 2,500 kg made tea per ha per year is seen only in the districts of Dimbula, Dickoya, Maskeliya, Madulkelle/Dolosbage/Kotmale and Udupussellawa/ Maturata, and that too in insignificant proportions. More than 50 % of OST areas in Ratnapura district yields below 1,000 kg. (Though the same is true for Kalutara and Galle/Matara, they have only < 10% in OST).

A larger percent of VP tea yielding above 2,500 kg made tea per ha per year was seen only in the planting districts of Dimbula, Dickoya and in Maskeliya, and to some extent in Nuwara Eliya/Pundaloya/Pussellawa, Haputale/Madulsima/ Passara and Balangoda. Appreciable percent of VP tea in the districts of Ratnapura, Kalutara and Gale/Matara were seen to yield below 1,000 kg made tea per ha per year, Details are as given in the table below:

**(b) VP TEA**

PLANTING DISTRICT	YIELD SLABS (%)					Total
	> 2500	1900-2500	1300-1900	1000-1300	< 1000	
<b>DIM</b>	36.35	38.26	21.50	3.55	0.34	<b>100</b>
<b>DIC</b>	25.92	33.62	26.95	11.69	1.82	<b>100</b>
<b>MAS</b>	46.17	29.20	16.29	7.39	0.95	<b>100</b>
<b>NEL/PUN/PUS</b>	18.20	33.45	36.19	11.31	0.85	<b>100</b>
<b>MDK/DOL/KOT</b>	9.30	20.89	43.78	24.56	1.47	<b>100</b>
<b>UDP/MRT</b>	11.07	38.93	37.65	12.00	0.35	<b>100</b>
<b>BAD/NGW</b>	11.00	26.52	40.39	21.41	0.68	<b>100</b>
<b>HAP/MAD/PAS</b>	18.56	34.86	30.32	13.92	2.34	<b>100</b>
<b>BAL</b>	18.73	37.61	29.41	12.83	1.42	<b>100</b>
<b>RAT</b>	10.48	16.19	20.80	31.74	20.79	<b>100</b>
<b>KAL</b>	8.78	28.22	20.35	29.25	13.40	<b>100</b>
<b>KLV/KEG</b>	10.69	15.95	34.11	27.19	12.06	<b>100</b>
<b>GAL/MAT</b>	12.29	21.21	29.06	30.50	6.94	<b>100</b>
<b>MOK/RAK</b>	8.43	25.36	43.16	20.99	2.06	<b>100</b>
<b>TOTAL/AV.</b>	<b>21.49</b>	<b>30.28</b>	<b>29.64</b>	<b>15.20</b>	<b>3.39</b>	<b>100</b>

When the combined average is considered (see Table below), larger percent of relatively high yielding tea is seen in the districts of Dimbula, Dickoya, and Maskeliya and to some extent in Balangoda and Galle/Matara (the latter district comes in because of its restricted extents under OST).

(c) COMBINED

PLANTING DISTRICT	YIELD SLABS (%)					
	> 2500	1900-2500	1300-1900	1000-1300	< 1000	Total
DIM	17.89	20.65	22.32	32.02	7.12	100
DIC	14.80	22.02	26.25	25.31	11.62	100
MAS	26.40	17.47	21.88	28.47	5.78	100
NEL/PUN/PUS	8.76	16.54	31.25	37.06	6.39	100
MDK/DOL/KOT	5.73	12.72	28.40	42.21	10.94	100
UDP/MRT	2.76	11.10	28.38	49.74	8.02	100
BAD/NGW	3.42	12.60	26.90	46.46	10.62	100
HAP/MAD/PAS	4.92	9.58	20.78	51.03	13.69	100
BAL	10.40	21.31	24.02	38.43	5.84	100
RAT	7.22	11.62	15.05	35.13	30.98	100
KAL	6.97	22.40	17.17	27.29	26.17	100
KL/KEG	9.99	14.90	32.51	29.64	12.96	100
GAL/MAT	11.06	19.10	27.76	29.76	12.32	100
MOK/RAK	5.25	16.09	29.35	32.99	16.32	100
TOTAL/AV.	10.18	15.90	25.04	37.97	10.91	100

In districts where more than 10 % of the total area in bearing was seen to yield below 1,000 kg made tea per ha per year, the low-yielding estates should be identified and their viability needs to be investigated and necessary amelioration measures be undertaken to bring such areas into economic viability.

### 3.4. Age Category of Tea<sup>5</sup>

OST in all the districts are largely over 60 years old except in the districts of the low-country, where OST is largely in the age group of 41-60 years. However, Ratnapura and Morawak Korale/Rakwana have about a third of their tea over 60 years old. Details are given in the Table below:

<sup>5</sup> For a fuller analysis of age-class of tea in the planting districts, please see Annex VII.

**Table 3.4. Age Category of Tea in the Districts**

AGRO-ZONE	O S T in Bearing %				V P in Bearing %				
	>60 Yrs	41- 60	<40 Yrs		>30 Yrs	21- 30	11- 20	<10 Yrs	
<b>DIM</b>	96.7	1.9	1.4	<b>100</b>	26.3	28.2	30.5	15.0	<b>100</b>
<b>DIC</b>	98.7	1.0	0.3	<b>100</b>	19.9	34.7	35.4	10.0	<b>100</b>
<b>MAS</b>	94.7	5.3	0	<b>100</b>	20.8	34.7	32.1	12.4	<b>100</b>
<b>NEL/PUN/PUS</b>	94.4	5.6	0	<b>100</b>	40.8	26.4	19.0	13.8	<b>100</b>
<b>MDK/DOL/KOT</b>	90.8	6.6	2.6	<b>100</b>	52.0	21.3	22.3	4.4	<b>100</b>
<b>UDP/MRT</b>	90.8	9.2	0	<b>100</b>	38.1	28.9	17.6	15.4	<b>100</b>
<b>BAD/NGW</b>	95.1	4.8	0.1	<b>100</b>	41.5	28.5	20.9	9.1	<b>100</b>
<b>HAP/MAD/PAS</b>	95.1	4.9	0	<b>100</b>	32.1	29.0	25.2	13.7	<b>100</b>
<b>BAL</b>	97.7	2.3	0	<b>100</b>	42.9	29.8	22.9	4.4	<b>100</b>
<b>RAT</b>	35.7	57.0	7.3	<b>100</b>	42.3	25.8	23.3	8.6	<b>100</b>
<b>KAL</b>	7.6	5.3	87.1	<b>100</b>	7.5	17.4	46.1	29.0	<b>100</b>
<b>KLV/KEG</b>	0.0	88.9	11.1	<b>100</b>	29.0	24.8	36.8	9.4	<b>100</b>
<b>GAL/MAT</b>	13.4	86.6	0	<b>100</b>	3.4	21.7	54.9	20.0	<b>100</b>
<b>MOK/RAK</b>	35.6	62.0	2.4	<b>100</b>	31.9	25.1	35.9	7.1	<b>100</b>
<b>TOTAL/AV.</b>	91.0	8.2	0.8	100	30.9	28.4	29.0	11.7	100

In VP tea, Galle/Matara and Kalutara have over 90% under 30 years old, while all other agro-zones have about 30 – 60 % of their VPs older than 30 years, and perhaps declining in productivity.

### **3.5. Pace of Replanting in the Districts (1993-2002)**

The extent of replanting undertaken in the different tea planting districts by the corporate sector over the past 10 years is as indicated below:

**Table 3.5 Area Replanted during past Decade (1993-2002)**

<b>AGRO-ZONES</b>	<b>Total Tea ha</b>	<b>VP 4-10 Yrs</b>	<b>VP &lt; 4 Yrs</b>	<b>Total VP &lt;10 Yrs</b>	<b>Annual RP ha</b>	<b>An. RP as % of Total ha</b>
<b>DIM</b>	<b>14149</b>	<b>983</b>	<b>255</b>	<b>1238</b>	<b>123.8</b>	<b>0.87</b>
<b>DIC</b>	<b>10296</b>	<b>560</b>	<b>197</b>	<b>756</b>	<b>75.6</b>	<b>0.74</b>
<b>MAS</b>	<b>4808</b>	<b>326</b>	<b>99</b>	<b>425</b>	<b>42.5</b>	<b>0.88</b>
<b>NEL/PUN/PUS</b>	<b>6856</b>	<b>444</b>	<b>140</b>	<b>584</b>	<b>58.4</b>	<b>0.85</b>
<b>MDK/DOL/KOT</b>	<b>3616</b>	<b>89</b>	<b>28</b>	<b>117</b>	<b>11.7</b>	<b>0.32</b>
<b>UDP/MRT</b>	<b>7190</b>	<b>259</b>	<b>68</b>	<b>327</b>	<b>32.7</b>	<b>0.45</b>
<b>BAD/NGW</b>	<b>10729</b>	<b>293</b>	<b>69</b>	<b>362</b>	<b>36.2</b>	<b>0.34</b>
<b>HAP/MAD/PAS</b>	<b>10063</b>	<b>353</b>	<b>154</b>	<b>507</b>	<b>50.7</b>	<b>0.50</b>
<b>BAL</b>	<b>2314</b>	<b>55</b>	<b>18</b>	<b>73</b>	<b>7.3</b>	<b>0.32</b>
<b>RAT</b>	<b>4014</b>	<b>217</b>	<b>126</b>	<b>343</b>	<b>34.3</b>	<b>0.85</b>
<b>KAL</b>	<b>776</b>	<b>148</b>	<b>45</b>	<b>193</b>	<b>19.3</b>	<b>2.48</b>
<b>KLV/KEG</b>	<b>1885</b>	<b>154</b>	<b>49</b>	<b>203</b>	<b>20.3</b>	<b>1.08</b>
<b>GAL/MAT</b>	<b>1740</b>	<b>281</b>	<b>79</b>	<b>360</b>	<b>36.0</b>	<b>2.07</b>
<b>MOK/RAK</b>	<b>3154</b>	<b>130</b>	<b>56</b>	<b>186</b>	<b>18.6</b>	<b>0.59</b>
<b>TOTAL/AV.</b>	<b>81592</b>	<b>4291</b>	<b>1383</b>	<b>5674</b>	<b>567.4</b>	<b>0.70</b>

From the above Table it is evident that the pace of replanting during the past decade was the greatest in some of the low country districts of Kalutara, Galle/Matara and Kelani Valley/Kegalle. But what must be realized is that these areas have limited extents of tea and small extents replanted appear as large on a percent basis.

Of serious concern are the agro-zones of Badulla/New Galway and Udupussellawa/Maturata where the rate of replanting is low, even though their tea extent is appreciable. Also, the existing VP teas are also relatively old with well over 30% being greater than 30 years from planting. The reluctance towards undertaking large-scale replanting is generally attributed to the ability of estates in Uva district to be able to produce better seasonal quality teas from OST than VP. What should be of greater concern is the long-term sustainability of tea productivity in the region and achieving overall viability, through replanting with selected clones.

### 3.6. Worker Utilization

An analysis of worker utilization and worker productivity, during the period 1998-2002, in the different planting districts are as depicted in Table 3.6.

As indicated under Section II item 2.6, the intake per plucker was generally the highest in the agro-zones located in the low-country, average in those of the high- and mid-country and the lowest in Uva. The trend cannot be any different for the planting districts as seen from the Table below:

**Table 3.6. Average Worker Utilization during 1998-2002**

AGRO-ZONES	Av. Green Leaf Intake (kg/MT)	Worker Utilization (Av. Per ha/year)		Average Worker Outturn
		Total	Pluckers	
<b>DIM</b>	17.12	607	394	78
<b>DIC</b>	17.19	654	424	80
<b>MAS</b>	16.53	688	498	79
<b>NEL/PUN/PUS</b>	16.48	583	388	75
<b>MDK/DOL/KOT</b>	18.59	523	326	74
<b>UDP/MRT</b>	16.18	520	325	76
<b>BAD/NGW</b>	16.90	497	322	75
<b>HAP/MAD/PAS</b>	15.48	546	353	74
<b>BAL</b>	20.69	574	280	64
<b>RAT</b>	20.70	562	257	65
<b>KAL</b>	19.29	565	261	74
<b>KLV/KEG</b>	21.39	622	315	73
<b>GAL/MAT</b>	22.51	561	290	73
<b>MOK/RAK</b>	20.34	506	257	70
<b>TOTAL</b>	<b>17.97</b>	<b>563</b>	<b>340</b>	<b>74</b>

In the low-country districts, intake was the highest in Galle/Matara, while within the high-country districts it was in Dickoya and in the Uva region it was in Badulla.

Worker utilization was the highest in Maskeliya and the lowest in Badulla. Plucker utilization was the highest again in Maskeliya and the lowest in the low-country districts.

Out-turn of workers were relatively poor in the districts of the low-country.

## **ANNEX I**

### **AGRO-ZONES**

**WUI:** Wet Up-country regions with 75% expectancy of 3,125 mm annual rainfall and 75% expectancy of dryness during half of January and whole of February.

**WU2:** Wet Up-country regions with 75% expectancy of 1,875 mm annual rainfall and 75% expectancy of dryness during half of January, whole of February and half of March.

**WU3:** Wet Up-country regions with 75% expectancy of 1,375 mm annual rainfall and 75% expectancy of dryness during half of January, whole of February and half of March.

**WM1:** Wet Mid-country regions with 75% expectancy of 3,125 mm annual rainfall and 75% expectancy of dryness during half of January and whole of February.

**WM2:** Wet Mid-country regions with 75% expectancy of 1,375 mm annual rainfall and 75% expectancy of dryness during half of January, whole of February and half of March.

**WM3:** Wet Mid-country regions with 75% expectancy of 1,250 mm annual rainfall and 75% expectancy of dryness during half of January, whole of February, half of March and half of August.

**WL1:** Wet Low-country regions with 75% expectancy of 2,500 mm annual rainfall and 75% expectancy of dryness during half of January and whole of February.

**WL2:** Wet Low-country regions with 75% expectancy of 1,875 mm annual rainfall and 75% expectancy of dryness during whole months of January and whole of February.

**WL3:** Wet Mid-country regions with 75% expectancy of 1,500 mm annual rainfall and 75% expectancy of dryness during half of January, whole of February, half of March and whole of August.

**WL4:** Wet Mid-country regions with 75% expectancy of 1,500 mm annual rainfall and 75% expectancy of dryness during half of January, whole of February, half of March and whole of August.

**IU1:** Intermediate Up-country regions with 75% expectancy of 2,125 mm annual rainfall and 75% expectancy of dryness during half of March, half of July, whole of August and half of September.

**IU2:** Intermediate Up-country regions with 75% expectancy of 1,375 mm annual rainfall and 75% expectancy of dryness during half of February, half of March, half of May and whole months of June, July, August and September.

**IU3:** Intermediate Up-country regions with 75% expectancy of 1,125 mm annual rainfall and 75% expectancy of dryness during February, half of March and whole months of June, July and August, and half of September.

**IM1:** Intermediate Mid-country regions with 75% expectancy of 1,375 mm annual rainfall and 75% expectancy of dryness during March, half of May, whole months of June, July and August and half of September.

**IM2:** Intermediate Mid-country regions with 75% expectancy of 1,125 mm annual rainfall and 75% expectancy of dryness during half of January and whole months of February, June, July, August and September.

**IM3:** Intermediate Mid-country regions with 75% expectancy of 875 mm annual rainfall and 75% expectancy of dryness during February, March, half of May and whole months of June, July and August and September.

## ESTATES IN THE HIGHEST YIELD SLABS FOR OST

### YPH In Descending Order for OST

OST ON ESTATES YIELDING OVER 2,000 kg MT per ha per Year

	Estate & RPC		Agro eco. Zone	Planting Dists	TOTAL ESTATE Seedling	TOTAL ESTATE VP	% VP	ESTATE YPH FOR 2002		
					Ha	Ha		OST	VP	EST AV.
1	Gonakelle	Namunukula Pl.	IM2	PAS	280.90	136.00	32.62	<b>2,038</b>	861	1,244
2	Eildon Hall	Horana Pl.	WU2	DIM	45.91	79.98	63.53	<b>1,976</b>	3,141	2,716
3	Dunsinane	Elpitiya Pl.	WU2	PUN	499.25	76.00	13.21	<b>1,841</b>	3,048	2,013
4	Neluwa	MalwattePl.	IU3	BAD	193.94	66.06	25.41	<b>1,729</b>	2,233	1,858
5	Uva Highlands	MalwattePl.	IU3	BAD	273.75	60.25	18.04	<b>1,728</b>	2,501	1,865
6	Ingestre	Kelani Valley Pl.	WU2	DIC	245.25	187.50	43.33	<b>1,722</b>	2,856	2,214
7	Chelsea	MalwattePl.	IU3	BAD	126.22	31.82	20.13	<b>1,694</b>	1,868	1,728
8	Balmoral	Agrapatna Pl.	WU2	DIM	179.67	147.07	45.01	<b>1,683</b>	3,015	2,283
9	Loinorn Group	Bogawantalawa Pl.	WU2	DIC	373.75	359.75	49.05	<b>1,632</b>	2,320	1,968
10	Hugoland	MalwattePl.	IU2	UDP	75.06	34.89	31.73	<b>1,628</b>	2,257	1,829
11	Aislaby	MalwattePl.	IU3	BAD	270.98	54.02	16.62	<b>1,624</b>	2,077	1,690
12	Tillicoultry	Horana Pl.	WU2	DIM	130.25	132.75	50.48	<b>1,552</b>	2,476	2,017
13	Kotiyagalla/ B'wantalawa	Bogawantalawa Pl.	WU2	DIC	351.39	421.58	54.54	<b>1,545</b>	2,414	2,002
14	Brunswick	Maskeliya Pl.	WU1	MAS	240.06	271.04	53.03	<b>1,529</b>	3,208	2,406

## ESTATES IN THE HIGHEST YIELD SLABS FOR VP

## YPH In Descending Order for VP

VP TEA On ESTATES YIELDING OVER 2,500 kg MT per ha per Year

	Estate & RPC		Agro eco. Zone	Planting Dists	TOTAL ESTATE Seedling	TOTAL ESTATE VP	% VP	ESTATE YPH FOR 2002		
					Ha	Ha		OST	VP	EST AV.
1	Brunswick	Maskeliya Pl.	WU1	MAS	240.06	271.04	53.03	1,529	3,208	2,406
2	Fairlawn	Horana Pl.	WU1	MAS	168.00	167.35	49.90	1,213	3,166	2,187
3	Eildon Hall	Horana Pl.	WU2	DIM	45.91	79.98	63.53	1,976	3,141	2,716
4	Dunsinane	Elpitiya Pl.	WU2	PUN	499.25	76.00	13.21	1,841	3,048	2,013
5	Balmoral	Agrapatna Pl.	WU2	DIM	179.67	147.07	45.01	1,683	3,015	2,283
6	Ingestre	Kelani Valley Pl.	WU2	DIC	245.25	187.50	43.33	1,722	2,856	2,214
7	Mahaousa	Udapussellawa Pl.	IU1	MDK	45.08	88.85	66.34	679	2,818	2,101
8	Chrystler's Farm	Kotagala Pl.	WU2	DIM	0.00	113.50	100.00	0	2,816	2,816
9	Gouravilla	Horana Pl.	WU1	MAS	96.00	203.49	67.95	1,021	2,757	2,198
10	Logie	Talawakelle Pl.	WU2	DIM	154.57	97.62	38.71	983	2,739	1,663
11	Stockholm	Horana Pl.	WU1	MAS	84.25	147.05	63.58	1,421	2,727	2,308
12	Uda-Radella	Kelani Valley Pl.	WU2	DIM	109.50	73.10	40.03	1,043	2,705	1,704
13	Glenugie/Deeside	Maskeliya Pl.	WU1	MAS	60.75	183.75	75.15	709	2,663	2,238
14	Fernlands	Elpitiya Pl.	WU2	PUN	219.50	146.98	40.11	1,170	2,640	1,761
15	Great Western	Talawakelle Pl.	WU2	DIM	233.60	167.30	41.73	686	2,638	1,501
16	El Teb	Madulsima Pl.	IM2	PAS	175.88	216.22	55.14	996	2,628	1,904
17	Mattakelle	Talawakelle Pl.	WU2	DIM	55.23	188.73	77.36	1,333	2,611	2,312
18	Wanarajah	Bogawantalawa Pl.	WU2	DIC	218.50	162.25	42.61	1,039	2,585	1,507
19	Glentilt	Maskeliya Pl.	WU1	MAS	131.89	181.51	57.92	1,138	2,539	1,945
20	Craigie Lea	Kotagala Pl.	WU2	DIM	80.75	167.75	67.51	1,349	2,528	2,145
21	Stonycliff	Kotagala Pl.	WU2	DIM	109.75	267.25	70.89	776	2,527	2,016
22	St.Clair	Maskeliya Pl.	WU2	DIM	126.51	168.37	57.10	998	2,525	1,862
23	Holmwood	Agrapatna Pl.	WU2	DIM	136.11	65.65	32.54	1,008	2,502	1,480
24	Uva Highlands	MalwattePl.	IU3	BAD	273.75	60.25	18.04	1,728	2,501	1,865

## ESTATES IN THE HIGHEST YIELD SLABS FOR OVERALL YIELD

**OVERALL ESTATE YPH (In Descending Order)**

**ESTATES YIELDING OVER 1,900 kg MT per ha per Year**

	Estate & RPC		Agro eco. Zone	Plan ting Dists	TOTAL ESTATE Seedling	TOTAL ESTATE VP	% VP	ESTATE YPH FOR 2002		
								OST	VP	EST AV.
1	Chrystler's Farm	Kotagala Pl.	WU2	DIM	0.00	113.50	100.00	0	2,816	2,816
2	Eildon Hall	Horana Pl.	WU2	DIM	45.91	79.98	63.53	1,976	3,141	2,716
3	Brunswick	Maskeliya Pl.	WU1	MAS	240.06	271.04	53.03	1,529	3,208	2,406
4	Mattakelle	Talawakelle Pl.	WU2	DIM	55.23	188.73	77.36	1,333	2,611	2,312
5	Stockholm	Horana Pl.	WU1	MAS	84.25	147.05	63.58	1,421	2,727	2,308
6	Balmoral	Agrapatna Pl.	WU2	DIM	179.67	147.07	45.01	1,683	3,015	2,283
7	Glenugie/Deeside	Maskeliya Pl.	WU1	MAS	60.75	183.75	75.15	709	2,663	2,238
8	Mayfield	Kotagala Pl.	WU2	DIM	15.25	219.75	93.51	1,367	2,282	2,221
9	Ingestre	Kelani Valley Pl.	WU2	DIC	245.25	187.50	43.33	1,722	2,856	2,214
10	Gouravilla	Horana Pl.	WU1	MAS	96.00	203.49	67.95	1,021	2,757	2,198
11	Fairlawn	Horana Pl.	WU1	MAS	168.00	167.35	49.90	1,213	3,166	2,187
12	Drayton	Kotagala Pl.	WU2	DIM	57.25	398.75	87.45	901	2,371	2,184
13	Meddakanda	Balangoda Pl.	WM3	BAL	23.00	212.90	90.25	1,159	2,263	2,153
14	Craigie Lea	Kotagala Pl.	WU2	DIM	80.75	167.75	67.51	1,349	2,528	2,145
15	Talgaswella	Elpitiya Pl.	WL1	GAL	0.00	61.63	100.00	0	2,140	2,140
16	Mahaousa	Udapussellawa Pl.	IU1	MDK	45.08	88.85	66.34	679	2,818	2,101
17	Lippakelle	Watawala Pl.	WU2	DIM	14.25	58.00	80.28	1,487	2,224	2,078
18	Talangaha	Watawala Pl.	WL2	GAL	0.00	112.16	100.00	0	2,077	2,077
19	Deviturai	Elpitiya Pl.	WL4	GAL	0.00	117.00	100.00	0	2,030	2,030
20	Talawakelle	Maskeliya Pl.	WU2	DIM	88.12	206.83	70.12	1,292	2,340	2,022
21	Tillicoultry	Horana Pl.	WU2	DIM	130.25	132.75	50.48	1,552	2,476	2,017
22	Stonycliff	Kotagala Pl.	WU2	DIM	109.75	267.25	70.89	776	2,527	2,016
23	Dunsinane	Elpitiya Pl.	WU2	PUN	499.25	76.00	13.21	1,841	3,048	2,013
24	New Peacock	Elpitiya Pl.	WU2	PUS	57.35	242.51	80.87	916	2,357	2,010
25	Dambattenne	Agrapatna Pl.	IM2	HAP	126.10	256.25	67.02	1,118	2,459	2,009
26	Kotiyagalla/B'wantalawa	Bogawantalawa Pl.	WU2	DIC	351.39	421.58	54.54	1,545	2,414	2,002
27	Troup	Maskeliya Pl.	WU2	DIM	71.26	132.64	65.05	1,138	2,493	2,000
28	Miriswatte	Namunukula Pl.	WL1	KAL	0.00	27.75	100.00	0	1,978	1,978
29	Lelwala	Elpitiya Pl.	WL2	GAL	0.00	63.51	100.00	0	1,971	1,971
30	Loiorn Group	Bogawantalawa Pl.	WU2	DIC	373.75	359.75	49.05	1,632	2,320	1,968
31	Battalgalla	Kelani Valley Pl.	WU2	DIC	57.00	119.75	67.75	1,136	2,340	1,957
32	Strathspey Group	Maskeliya Pl.	WU1	MAS	214.80	283.81	56.92	1,257	2,474	1,946
33	Glentilt	Maskeliya Pl.	WU1	MAS	131.89	181.51	57.92	1,138	2,539	1,945
34	Abbotsleigh	Watawala Pl.	WU2	DIC	160.32	147.69	47.95	1,487	2,473	1,934
35	Waltrim	Watawala Pl.	WU2	DIM	135.25	298.00	68.78	1,499	2,096	1,910
36	Annfield	Kelani Valley Pl.	WU2	DIC	109.50	174.00	61.38	1,102	2,361	1,910
37	El Teb	Madulsima Pl.	IM2	PAS	175.88	216.22	55.14	996	2,628	1,904

## ESTATES IN THE LOWEST YIELD SLABS FOR OST

YPH IN ASCENDING ORDER FOR LOWEST YIELDING OST  
OST ON ESTATES YIELDING BELOW 700 KG MADE TEA PER HA PER YEAR

	Estate & RPC			Agro eco. Zone	Plan ting Dist	AVERAGE OST YPH (kg MT/ha/yr)	OVERALL ESTATE YPH	OST YIELDING BELOW 1,000 kg MT/ HA/ YEAR					
								701 - 1000		401 - 700		< 400	
								Ha	%	Ha	%	Ha	%
1	Dumbara	Kalutara	Horana Pl.	WL1	RAT	236	731		0.0	75.00	100.0		0.0
2	Andapana	Matara	Maturata Pl.	WL2	MAT	265	982	5.00	1.9	0.00	0.0		0.0
3	Koslanda	Badulla	Maskeliya Pl.	IM2	HAP	294	307		0.0		0.0	184.29	62.7
4	Millakande	Kalutara	Horana Pl.	WL1	KAL	371	1,868		0.0	5.70	100.0		0.0
5	Pelawatte	Kalutara	Namunukula Pl.	WL1	KAL	412	1,217	3.75	0.9	21.96	5.3	44.88	10.9
6	Gikiyanakande	Kalutara	Kotagala Pl.	WL1	KAL	420	703	10.00	2.4		0.0		0.0
7	Galbode	Ratnapura	Hapugastenne Pl.	WL1	RAT	425	1,417	7.25	100.0		0.0		0.0
8	Hunuwella	Ratnapura	Kahawatte Pl.	WM1	RAT	455	739	13.81	3.0	50.51	11.1		0.0
9	Venture	N' Eliya	Madulsima Pl.	WU2	DIC	459	671	24.00	5.2	139.98	30.5		0.0
10	Sanquhar	Kandy	Pussellawa Pl.	WU2	PUS	506	517		0.0	76.30	15.1	13.88	2.7
11	Rayigam	Kalutara	Kotagala Pl.	WL1	KAL	533	715		0.0	14.53	2.7	1.01	0.2
12	Wellandura	Ratnapura	Kahawatte Pl.	WL2	RAT	548	700	15.85	2.9	43.54	7.9	17.42	3.2
13	Pelmadulla	Ratnapura	Kahawatte Pl.	WL2	RAT	554	699	18.50	3.3	64.30	11.6	15.50	2.8
14	Aighburth	Ratnapura	Hapugastenne Pl.	WM3	RAK	556	730	44.64	21.9	115.15	56.4	12.85	6.3
15	Vogan	Kalutara	Kotagala Pl.	WL1	KAL	557	888	12.34	2.2	11.68	2.1		0.0
16	Dammeria	Badulla	Hapugastenne Pl.	IM2	PAS	586	825	37.17	13.8	189.13	70.4	33.84	12.6
17	Springwood	Ratnapura	Hapugastenne Pl.	WM3	RAK	589	1,048	33.50	28.2	64.75	54.5	20.50	17.3
18	Hulandawa	Galle	Namunukula Pl.	WL1	GAL	604	1,279	7.17	1.2	16.84	2.8		0.0
19	Galamuduna	Kandy	Kahawatte Pl.	WM2	DOL	619	1,383	7.82	1.3	10.02	1.6	14.07	2.3
20	Kelliewatte	N' Eliya	Kotagala Pl.	WU2	DIM	636	1,653	30.96	4.9	5.23	0.8		0.0
21	Hatherleigh	Ratnapura	Hapugastenne Pl.	WM3	RAK	636	1,144	29.50	24.0	63.35	51.6	21.91	17.8
22	Houpe	Ratnapura	Kahawatte Pl.	WM1	RAT	636	847	73.59	11.6	113.85	17.9		0.0
23	Mount Vernon	N' Eliya	Kotagala Pl.	WU2	DIM	637	1,515	71.70	11.3	57.60	9.0	9.43	1.5
24	Verellapatana	Badulla	Madulsima Pl.	IM2	MAD	638	1,212	83.67	13.1	58.24	9.1		0.0
25	Niriella	Ratnapura	Agalawatte Pl.	WL1	RAT	640	929		0.0	3.00	100.0		0.0
26	Invery	N' Eliya	Kelani Valley Pl.	WU2	DIC	640	1,239		0.0	110.93	17.3		0.0
27	Cocogalla	Badulla	Madulsima Pl.	IM2	MAD	641	838	66.97	10.4	44.06	6.9	26.33	4.1
28	Ekkeralle	Ratnapura	Kahawatte Pl.	WM1	RAT	644	898		0.0	38.05	5.9	8.74	1.4
29	Geragama,	Kandy	Pussellawa Pl.	WM3	ALG	650	1,605	30.87	4.7		0.0		0.0
30	Wewesse	Badulla	Balangoda Pl.	IU3	BAD	670	1,134	78.40	33.5	60.50	25.9		0.0
31	Lankaberiya	Ratnapura	Maturata Pl.	WM3	RAK	679	878	32.75	4.8	46.25	6.8		0.0
32	Mahaousa	Kandy	Udapussellawa Pl.	IU1	MDK	679	2,101	45.08	6.6		0.0		0.0
33	Pingarawa/Toncombe	Badulla	Namunukula Pl.	IU3	BAD	683	847	157.25	23.0	36.03	5.3		0.0
34	Somerset	N' Eliya	Talawakelle Pl.	WU2	DIM	683	1,566	58.71	8.6	67.41	9.9		0.0
35	Cecilton	Ratnapura	Balangoda Pl.	WM3	BAL	685	1,131	78.53	51.3	66.91	43.7		0.0
36	Great Western	N' Eliya	Talawakelle Pl.	WU2	DIM	686	1,501	92.70	13.5	110.50	16.1	30.40	4.4
37	Carolina	N' Eliya	Watawala Pl.	WU2	DIC(L)	688	1,318		0.0	38.49	5.6		0.0
38	Wigton	N' Eliya	Watawala Pl.	WU2	DIC(L)	698	1,237	68.85	9.9	7.45	1.1		0.0

- Note: 1. Data supplied by Gikiyanakande and Gonakell for OST is incorrect  
2. % under yield slabs indicate % of total OST and/or VP  
3. OST YPH is considered below 700 kg per ha while VP tea is considered below 1,000 kg

## YPH IN ASCENDING ORDER FOR LOWEST YIELDING VP

## VP ON ESTATES YIELDING BELOW 700 KG MADE TEA PER HA PER YEAR

	Estate & RPC			Agro eco. Zone	Planting Dists	OVERALL ESTATE YPH	AVERAGE VP YPH	VP YIELDING BELOW 1,000 kg MT/ HA/ YEAR					
								701 - 1000		401 - 700		< 400	
								Ha	%	Ha	%	Ha	%
1	Penrith	Ratnapura	Pussellawa Pl.	WLI	KLV	292	292	2.44	10.9		0.0	20.03	89.1
2	Koslanda	Badulla	Maskeliya Pl.	IM2	HAP	388	307		0.0		0.0	29.62	100.0
3	Sanquhar	Kandy	Pussellawa Pl.	WU2	PUS	556	517		0.0	26.22	100.0		0.0
4	Sirikandura	Kalutara	Namunukula Pl.	WL1	KAL	624	624		0.0	15.75	100.0		0.0
5	Galatura	Ratnapura	Balangoda Pl.	WL1	RAT	747	739	2.42	70.8		0.0		0.0
6	Wellandura	Ratnapura	Kahawatte Pl.	WL2	RAT	767	700	53.12	29.8	95.14	53.4		0.0
7	Gikiyanakande	Kalutara	Kotagala Pl.	WL1	KAL	775	703						
8	Poronuwa	Ratnapura	Kahawatte Pl.	WM1	RAT	792	782	21.38	26.0	33.65	40.8	4.86	5.9
9	Rayigam	Kalutara	Kotagala Pl.	WL1	KAL	794	715	30.20	28.3	12.86	12.0	21.34	20.0
10	Anhettigama	Ratnapura	Bogawantalawa Pl.	WL1	KLV	820	820	6.80	40.5	3.75	22.3		0.0
11	Pelmadulla	Ratnapura	Kahawatte Pl.	WL2	RAT	827	699	19.72	16.9	41.50	35.6	15.25	13.1
12	Gonakelle	Badulla	Namunukula Pl.	IM2	PAS	861	1,244						
13	Opatha	Ratnapura	Kahawatte Pl.	WL2	RAT	865	838	43.73	26.9	65.35	40.2	7.15	4.4
14	Kelani	Ratnapura	Kelani Valley Pl.	WL1	KLV	883	876	6.23	14.3	14.09	32.2	3.70	8.5
15	Akuressa & Hallella	Matara	Namunukula Pl.	WL2	MAT	902	902	12.31	12.2	36.89	36.5	8.52	8.4
16	Wilpita	Matara	Maturata Pl.	WL2	MAT	904	904	14.25	27.9		0.0		0.0
17	Noori	Ratnapura	Bogawantalawa Pl.	WL1	KLV	909	909	22.82	33.2	7.29	10.6		0.0
18	Maliboda	Ratnapura	Bogawantalawa Pl.	WL1	KLV	929	929	24.71	15.6	26.15	16.5	50.22	31.7
19	Eduragalla	Kalutara	Kotagala Pl.	WL1	KAL	937	937	7.68	42.2	3.10	17.0		0.0
20	Niriella	Ratnapura	Agalawatte Pl.	WL1	RAT	957	929	3.25	10.7	15.50	50.8		0.0
21	Dumbara	Kalutara	Horana Pl.	WL1	RAT	967	731	16.75	23.7		0.0	41.00	58.0
22	Bramley	N' Eliya	Maturata Pl.	IU2	MRT	971	792	4.00	14.2		0.0		0.0
23	Ederapolla	Ratnapura	Kelani Valley Pl.	WL1	KLV	971	882	8.00	23.4	9.50	27.7		0.0
24	Venture	N' Eliya	Madulsima Pl.	WU2	DIC	972	671	16.29	14.4	8.50	7.5		0.0
25	Hunuwella	Ratnapura	Kahawatte Pl.	WM1	RAT	973	739	9.73	10.7	5.78	6.4		0.0
26	Beauvis/Idulgashinne	Badulla	Agrapatna Pl.	IM2	HAP	977	953	21.00	56.0		0.0		0.0



## ESTATES WITH OVER 50% of VP TEA IN BEARING 30 YEARS OR OLDER IN DESCENDING ORDER

Estate & RPC	Elev Zone	Agri-Eco Zone	Planting Dist	TOTAL ESTATE	TOTAL ESTATE	%VP	TOTAL TEA HA	ESTATE YPH FOR 2002			AGE CATEGORY OF VP TEA IN BEARING							
				Seedling	VP			OST	VP	EST AV.	> 30 yrs	21-30 yrs	11-20 yrs	< 10 yrs	TOTAL			
				Ha	Ha													
1	Gonamatawa	Agrapatna Pl.	UYA	IM2	HAP	164.09	46.75	22.17	210.84	1,153	1,950	1,322	100.00	0.00	0.00	0.00	0.00	100.00
2	Non Parell	Balangoda Pl.	LC	WM3	BAL	250.50	8.50	3.28	259.00	921	1,376	935	100.00	0.00	0.00	0.00	0.00	100.00
3	Dumbara	Horana Pl.	LC	WL1	RAT	75.00	70.75	48.54	145.75	236	967	731	100.00	0.00	0.00	0.00	0.00	100.00
4	Chelsea	MalwattePl.	UYA	IU3	BAD	126.22	31.82	20.13	158.04	1,694	1,868	1,728	100.00	0.00	0.00	0.00	0.00	100.00
5	Sanquhar	Pussellawa Pl.	MC	WU2	PUS	90.18	26.22	22.53	116.40	506	556	517	100.00	0.00	0.00	0.00	0.00	100.00
6	Pedro	Kelani Valley Pl.	UC	WU3	NEL	399.54	133.47	25.04	533.01	1,196	2,308	1,467	100.00	98.13	0.00	0.00	1.87	100.00
7	Wellimada	MalwattePl.	UYA	IU3	NWG	168.78	104.75	38.14	272.85	1,255	1,662	1,403	100.00	92.56	0.00	0.00	7.44	100.00
8	Nuwara Eliya	Kelani Valley Pl.	UC	WU3	NEL	207.57	208.12	50.07	415.69	800	2,101	1,448	100.00	89.43	0.00	0.00	10.57	100.00
9	Kabaragalla	Maturata Pl.	UC	IU2	MRT	104.75	77.75	42.60	192.50	829	1,302	1,030	100.00	86.50	8.36	0.00	5.14	100.00
10	Nayabedde	Agrapatna Pl.	UYA	IM2	HAP	230.91	96.66	29.51	327.57	1,162	2,172	1,425	100.00	82.58	1.90	15.52	0.00	100.00
11	Beauvis/Idulgashinne	Agrapatna Pl.	UYA	IM2	HAP	208.90	37.50	15.41	243.40	950	977	953	100.00	81.33	0.00	18.67	0.00	100.00
12	Poronuma	Kahawatte Pl.	LC	WM1	RAT	65.38	82.38	55.75	147.76									
13	Geragama	Pussellawa Pl.	MC	WM3	ALG	40.49	134.18	76.82	174.57	650	1,908	1,605	79.06	11.23	8.59	1.12	100.00	
14	Pingarawa/Toncombe	Namunukula Pl.	UYA	IU3	BAD	270.60	102.39	27.45	372.99	683	1,293	847	78.72	0.53	15.33	5.42	100.00	
15	Endane	Kahawatte Pl.	LC	WM1	RAT	227.25	195.46	46.24	422.71	931	1,041	986	78.00	8.71	9.28	4.02	100.00	
16	Oodooverre	Hapugastenne Pl.	UYA	IU3	BAD	229.29	139.55	37.83	368.84	952	1,751	1,254	76.25	15.44	8.31	0.00	100.00	
17	Penrith	Pussellawa Pl.	LC	WL1	KLV	0.00	22.47	100.00	22.47		292	292	74.86	0.00	25.14	0.00	100.00	
18	Pambegama	Pussellawa Pl.	LC	WL1	KLV	40.01	186.62	82.35	226.63	903	1,619	1,491	72.99	19.18	7.82	0.00	100.00	
19	Mahakande	Maskelliya Pl.	UYA	IM2	HAP	147.64	35.93	19.57	183.57	810	1,653	975	72.31	26.27	1.42	0.00	100.00	
20	Great Western	Talawakelle Pl.	UC	IU2	DIM	233.60	167.30	41.73	400.90	686	2,638	1,501	71.73	22.83	0.00	5.44	100.00	
21	Madulkelle	Udapussellawa Pl.	MC	WU1	MDK	241.50	110.00	31.29	351.50	1,014	2,236	1,390	71.36	14.55	10.91	3.18	100.00	
22	Rapphanock	Udapussellawa Pl.	UYA	IU2	UDP	195.50	34.75	15.09	230.25	1,082	1,453	1,152	71.22	8.63	9.78	10.36	100.00	
23	Downside	MalwattePl.	UYA	IU3	NWG	158.58	106.42	40.16	265.00	1,375	1,758	1,531	69.30	15.84	14.86	0.00	100.00	
24	Agarsland	Balangoda Pl.	LC	WM3	BAL	0.00	78.81	100.00	78.81	0	1,667	1,667	68.52	7.30	22.28	1.90	100.00	
25	St James	MalwattePl.	UYA	IU3	BAD	179.70	119.55	39.95	299.25	1,370	1,983	1,615	66.96	8.36	24.68	0.00	100.00	
26	Uva Highlands	MalwattePl.	UYA	IU3	BAD	273.75	60.25	18.04	334.00	1,728	2,501	1,865	66.39	23.24	0.00	10.37	100.00	
27	Hugoland	MalwattePl.	UYA	IU2	UDP	75.06	34.89	31.73	109.96	1,628	2,257	1,829	66.32	16.54	14.27	2.87	100.00	
28	Poonagalla	Maskelliya Pl.	UYA	IM2	HAP	384.72	72.20	15.80	456.92	1,140	1,803	1,241	65.39	7.56	25.19	1.86	100.00	
29	Barcepel	Kahawatte Pl.	MC	WU1	KOT	120.39	128.93	51.71	249.32	705	1,267	994	64.82	7.82	27.36	0.00	100.00	
30	Cannavarella	Namunukula Pl.	UYA	IM2	PAS	420.75	52.20	11.04	472.95	916	1,835	1,017	64.66	2.87	29.60	2.87	100.00	
31	Opatha	Kahawatte Pl.	LC	WL2	RAT	50.75	162.75	76.23	212.50	755	865	838	64.45	15.88	14.29	5.38	100.00	
32	Gonapittiya	Maturata Pl.	UC	IU2	MRT	352.50	104.75	22.91	457.25	877	1,374	1,035	64.44	8.59	16.95	10.02	100.00	
33	Wevesse	Balangoda Pl.	UYA	IU3	BAD	233.77	83.53	26.33	317.30	670	2,454	1,134	63.33	23.46	11.61	1.59	100.00	
34	Gonakelle	Namunukula Pl.	UYA	IM2	PAS	280.90	136.00	32.62	416.90	2,038	861	1,244	63.05	14.71	18.57	3.68	100.00	
35	Watapota	Agalawatte Pl.	LC	WL1	RAT	18.63	52.67	73.87	71.30	999	1,175	1,131	62.81	24.76	8.64	3.80	100.00	
36	Lankaberbya	Maturata Pl.	LC	WM3	RAK	79.00	18.50	18.97	97.50	679	1,720	878	62.16	0.00	37.84	0.00	100.00	
37	Glen Alpin	Balangoda Pl.	UYA	IU3	BAD	337.58	87.66	20.61	425.24	787	1,227	874	62.15	18.71	6.50	12.64	100.00	
38	Dyraaba	MalwattePl.	UYA	IU3	BAD	224.81	108.19	32.49	333.00	1,214	1,828	1,417	61.97	15.39	13.86	8.78	100.00	
39	Lellopitiya	Hapugastenne Pl.	LC	WL2	RAT	0.00	44.74	100.00	44.74	0	1,169	1,169	61.22	0.00	25.53	13.25	100.00	
40	Delta	Pussellawa Pl.	MC	WU2	PUS	183.50	94.04	33.88	277.54	1,125	1,583	1,280	61.18	16.82	17.75	4.25	100.00	
41	Depdene	Hapugastenne Pl.	LC	WM3	RAK	94.50	73.45	43.73	167.96	768	1,323	1,023	60.93	0.00	33.63	5.45	100.00	
42	Lippakelle	Watawala Pl.	UC	WU2	DIM	14.25	58.00	80.28	94.25	1,487	2,224	2,078	60.78	34.05	0.00	5.17	100.00	
43	Mahaousa	Udapussellawa Pl.	MC	IU1	MDK	45.08	88.85	66.34	132.93	679	2,818	2,101	60.47	7.34	24.31	7.88	100.00	
44	Diyaagama West	Agrapatna Pl.	UC	WU2	DIM	457.46	202.15	30.65	659.61	1,050	2,140	1,375	60.35	12.61	24.68	2.35	100.00	
45	Imboollipitiya	Kahawatte Pl.	MC	WU1	KOT	81.25	174.75	68.26	256.00	1,136	1,667	1,500	58.94	24.75	15.16	1.14	100.00	
46	Kinellan	Namunukula Pl.	UYA	IU3	BAD	62.94	43.86	40.90	108.50	705	1,693	1,084	57.39	0.00	42.61	0.00	100.00	
47	Wigton	Watawala Pl.	UC	WU2	DIC(L)	94.60	110.35	53.84	264.95	698	1,691	1,237	57.18	10.33	25.15	7.34	100.00	
48	Carollina	Watawala Pl.	UC	WU2	DIC(L)	40.83	187.95	82.15	229.78	688	1,552	1,318	56.68	10.33	18.79	3.91	100.00	
49	Beaumont	Pussellawa Pl.	MC	WU2	PUS	75.99	129.00	62.93	204.99	956	1,734	1,446	56.47	31.21	10.39	1.94	100.00	
50	Labookelle	Agalawatte Pl.	UC	WU2	RAM	88.63	209.58	70.28	299.21	1,130	1,718	1,550	56.10	16.67	16.20	11.03	100.00	
51	Newburgh	Hapugastenne Pl.	UYA	IU3	BAD	187.18	71.67	27.69	258.85	881	1,357	1,004	55.49	28.05	1.40	15.07	100.00	
52	St.Leonards	Maturata Pl.	UYA	IU2	UDP	209.25	52.25	19.98	261.50	759	1,583	920	55.02	21.53	19.62	3.83	100.00	
53	Pettigalla	Balangoda Pl.	LC	WM3	BAL	160.00	103.00	39.16	263.00	1,100	1,999	1,453	54.37	9.71	31.07	4.85	100.00	
54	High Forest	Maturata Pl.	UC	IU2	MRT	267.25	155.75	36.82	423.00	970	1,681	1,232	54.09	26.48	10.59	8.83	100.00	
55	Galamuduna	Kahawatte Pl.	MC	WM2	DOL	40.77	218.82	84.29	259.50	619	1,524	1,383	53.82	16.86	26.58	2.74	100.00	
56	Hapugastenne	Hapugastenne Pl.	LC	WL1	RAT	92.50	460.75	83.28	563.25	932	1,996	1,829	53.63	14.76	16.58	15.03	100.00	
57	Pelmadulla	Kahawatte Pl.	LC	WL2	RAT	102.05	116.58	53.32	218.63	554	827	699	53.53	19.86	26.62	0.00	100.00	
58	Ampitakande	Maskelliya Pl.	UYA	IM2	HAP	161.11	53.19	24.82	214.50	1,115	2,258	1,399	53.51	24.53	18.71	3.25	100.00	
59	Adawatte	Hapugastenne Pl.	UYA	IM2	MAD	81.01	96.05	54.25	177.66	830	2,481	1,729	52.68	14.78	12.59	19.95	100.00	
60	Craighead/Barnagala	Kahawatte Pl.	MC	WM2	DOL	136.85	210.38	60.59	347.23	780	1,682	1,325	52.55	17.82	29.63	0.00	100.00	
61	Glasgow	Agrapatna Pl.	UC	WU2	DIM	192.14	135.77	41.40	327.91	1,239	2,426	1,695	52.49	39.55	7.95	0.00	100.00	
62	Henfold	Watawala Pl.	UC	WU2	DIM	291.00	177.75	37.92	468.75	1,277	2,136	1,584	51.98	26.16	10.69	11.17	100.00	
63	Holyrood	Talawakelle Pl.	UC	WU2	DIM	238.02	116.09	32.78	354.11	906	2,472	1,429	50.46	9.91	19.96	19.67	100.00	
64	Kataboola/Kadielena	Kahawatte Pl.	MC	WU1	KOT	231.97	197.79	46.02	429.76	922	1,843	1,334	50.15	24.98	24.87	0.00	100.00	