

C H A P T E R - VIIITEA INDUSTRY IN WEST BENGAL:TERAI VIS-A-VIS DUARS AND DARJEELING

This study of Terai tea industry would remain incomplete unless a comparative position of Terai with Duars and Hill-tracts of Darjeeling (hereinafter referred to as Darjeeling) is discussed. Hence important financial ratios regarding profitability, solvency and liquidity of Terai tea industry have been compared with that of Duars and Darjeeling — the other two tea belts in West Bengal. For the purpose of this comparison, samples on stratified random sample technique have been drawn up from the Darjeeling covering its four parts — North, South, East and West and also from the Duars area covering its three parts — Eastern, Central and Western [Annexure IV (ii)]. Though sample units so obtained from the Duars and the Darjeeling areas are not representative but as their selection is based on stratified random sampling technique, these samples represent the minimum bias and, thereby, reflect the true conditions of the belts concerned.

The financial variables of all the three regions, by and large, indicate the same overall pattern — the profitability is a decreasing function of time, the solvency is always subject to the mercy of creditors and, thereby, the liquidity poses a big question mark.

PROFITABILITY RATIOSGROSS PROFIT RATIO.

The regions, as a whole, disclose a declining trend of profitability, the gross profit is sluggish. The GPNS has declined — the rate of decline being highest in Terai followed by Duars and Darjeeling. The variability of gross profit margin, however, shows a different picture — highest variability in Duars closely followed by Darjeeling. The reasons for variability are more or less the same — increasing marginal cost coupled with declining volume of output. The latter was mainly caused by the vagaries of nature. Darjeeling, particularly, suffered from hail storm <sup>(1)</sup> in 1978. The severe draught condition prevailed during 1980 and 1981. The market also depressed during second-half of the octennium (1978-81). All this caused a negative GP in a number of concerns (Table-VIII.1) and Table - VIII.2).

TABLE - VIII.1Number of Companies showing negative G.P.

Region	1974	1975	1976	1977	1978	1979	1980	1981
Terai	0	0	0	0	2	2	11	5
Duars	0	0	0	0	2	4	4	4
Darjeeling	0	2	1	0	3	2	2	2

(Please see next page)

Gross profit to Net sales (GPNS).

Year	Terai	Duars	Darjeeling	Mean (Wt. Bengal)
1974	0.2537	0.2181	0.1510	0.2173
1975	0.2216	0.1721	0.0926	0.1746
1976	0.2356	0.2141	0.1022	0.2062
1977	0.2784	0.1883	0.2447	0.2167
1978	0.0788	0.0721	0.0064	0.0683
1979	0.1275	0.0281	0.0935	0.0601
1980	0.0156	(-) 0.0257	0.0316	(-) 0.0091
1981	0.0073	0.0148	0.0125	0.0125
Mean	0.1523	0.1102	0.0918	0.1206
C.V.	0.6717	0.8376	0.8094	0.7142
bt	(-) 0.039	(-) 0.0367	(-) 0.0183	

NET PROFIT RATIO.

The return on sales as an indicator of profitability also discloses a dismal picture. The declining trend of NPNS can be observed in all the three regions as GP practically left little or no margin to recover indirect charges and expenses including financial costs. With respect to the time function of the ratio values and the mean values, the relative position of the three areas are perfectly in consonance with GPNS though variability in the ratio values (Co-efficient of variations) is much wide and quite remarkable

Darjeeling suffered most followed by Terai and Duars. The reasons are the highest unit cost of Darjeeling tea. Despite the highest price fetched in the world market, yield per hectare in Darjeeling is lowest amongst the three (about 37 per cent of Duars and 41 per cent of Terai). This lowest yield rate coupled with highest transport cost and lowest labour productivity resulted in highest unit cost. <sup>(2)</sup> Even fetching of the highest unit sales revenue had not kept pace with the increasing unit costs. The managerial efficiency in this respect, also, is not above criticism and reveal inefficient and improper utilisation of the fund. During the last 10 years the unit cost of Darjeeling gardens has increased by 95 per cent in the case of high-yield gardens and by 140 per cent in the case of low-yield gardens as compared to 50 per cent and 55 per cent respectively in the case of Duars. <sup>(3)</sup> This is inspite of the fact that the Darjeeling enjoys lowest labour rate compared to other two regions <sup>(4)</sup> (Table-VIII.3).

(Please see next page)

TABLE VIII.3Net Profit to Net sales (NPNS).

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	0.0733	0.0751	0.0280	0.0677
1975	0.0204	0.0394	(-)0.0203	0.0276
1976	0.0747	0.0488	0.0031	0.0497
1977	0.0711	0.0485	0.1235	0.0624
1978	(-) 0.0723	0.0061	(-) 0.0849	(-)0.0219
1979	(-) 0.0457	(-)0.0083	0.0026	(-)0.0165
1980	(-) 0.1373	(-)0.0498	(-) 0.0433	(-)0.0709
1981	(-) 0.1159	(-)0.0643	(-) 0.0880	(-)0.0807
Mean	(-) 0.0164	0.0119	0.0099	0.0022
C.V.	(-) 4.9721	3.9328	6.4387	24.8769
bt	(-) 0.3128	(-)0.0195	(-) 0.0135	

NET PROFIT ASSET RATIO.

The trend of the return on net assets is quite sad and it is especially so, if separately examined for the second-half of the octennium. The time function of ratio values for each of the three regions is negative. The disproportionate increment in non-operating assets especially in land and cultivation can be made responsible for it. Though selling inactivities seem to be equally, if not more, responsible, the management can not be blamed for this

as ~~selling~~ functions of all the three regions are largely conducted through auction centres (about 61 per cent of total production <sup>(5)</sup> is sold through these centres).

The position of Darjeeling is worst amongst the three because of its topography. The cost of infrastructure facilities for gardens in hill areas is too high. However, due to climatic conditions plant and machinery remain less idle in the Darjeeling belt as compared to Terai and Duars. (The fuller utilisation of capacity,<sup>is</sup> however, a distant hope because of the seasonality of the industry). Irrespective of regions, it is very much apparent that the 'tea grant area' remains largely unutilized or under-utilized leading to negative time function of the return on net assets (Table-VIII.4).

TABLE - VIII.4

Net profit to Net Assets (NPNA)

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	0.0698	0.0715	0.0372	0.0673
1975	0.0173	0.0385	(-) 0.0229	0.0265
1976	0.0696	0.0492	0.0040	0.0504
1977	0.0769	0.0550	0.1912	0.0720
1978	(-)0.0665	0.0056	(-) 0.0830	(-) 0.0263
1979	(-)0.0369	(-) 0.0073	0.0035	(-) 0.0147
1980	(-)0.1196	(-) 0.0445	(-) 0.0554	(-) 0.0651
1981	(-)0.1312	(-) 0.0638	(-) 0.1238	(-) 0.0856
Mean	(-)0.0151	0.0130	(-) 0.0062	0.0082
C.V.	(-)5.8543	3.5276	(-)14.3671	6.8218
bt	(-)0.0304	(-) 0.0188	(-) 0.0186	

The similar behaviour of financial variables has been, by and large, caused by the close proximity of regions. Examination of NPNW along with NPNA (Table-VIII.4) and their comparative positions indicate that in all the three regions assets are largely financed from external sources of fund. The NW of each of the regions has deteriorated but in a different fashion because of differing variations in their profit earning capacities. To check and control this condition managerial initiative has been less effective.

#### NET PROFIT & WORTH INDEX.

A high positive correlation between NPNS (Table-VIII.4) and NPNW (Table-VIII.5) in all the three areas reveals the prevalence of similar conditions. The reasons for causing of such condition are also the same - decrease in NP, increased in cost of goods sold and decline in the volume of output due to unfavourable natural weather/climatic conditions.

The net worth of industry in all the three regions has declined; though at different time periods within the octennium. The negative time function of the ratio values asserts a definite erosion of capital but comparative position of Duars<sup>1</sup> was the best and Terai's the worst. The position of NW of the latter region disclosed a negative position during 1981. The NW position of Darjeeling was erratic.

Despite the best NW position of Duars the co-efficient

of variation was highest followed by Darjeeling and Terai. The mean values deviated widely from year to year and was much prominent in Darjeeling. On the whole, the condition of Terai was much depressive and was closely followed by Darjeeling (Table-VIII.5).

TABLE-VIII.5

Net Profit to Net Worth (NPNW)

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	0.2061	0.1957	0.1028	0.1880
1975	0.0458	0.0987	(-) 0.0666	0.0692
1976	0.2167	0.1309	0.0142	0.1430
1977	0.2424	0.1591	0.4420	0.2086
1978	(-)0.3434	0.0201	(-) 0.2928	(-) 0.0792
1979	(-)0.2553	(-) 0.0275	0.0128	(-) 0.0634
1980	(-)1.9519	(-) 0.2155	(-) 0.3282	(-) 0.3938
1981	2.0852*	(-) 0.2837	(-) 1.8485	(-) 0.8508
Mean	(-)0.4906	0.0028	0.2455	(-) 0.0973
C.V.	(-)1.8466	67.4390	(-) 2.6315	3.4807
bt	(-)0.0983	(-) 0.0743	(-) 0.1870	

\*both the variables are negative.

A number of companies disclosed a negative NW or the margin of net assets over outside liabilities was much thin (Table-VIII.6).

TABLE-VIII.6

Number of Companies showing negative NW.

	1974	1975	1976	1977	1978	1979	1980	1981
Tenai	1	1	1	1	3	3	8	9
Duars	0	0	0	0	0	0	2	1
Darjeeling	0	1	1	1	1	1	2	3

SOLVENCY RATIOS

WORTH LIABILITY INDEX.

The use of long-term debt capital as a source of fund is conspicuously minimum in all the regions. The tea companies in all the three regions largely depend on internal sources for long-term uses. The NWFL of all three regions was more or less better during first-half of the octennium (1974-77); but the time function was different -- an increasing one in Terai and Darjeeling and a decreasing one in Duars. The conditions of Darjeeling virtually declined but for the contribution of price-boom (during 1977) and, thus, the trend was influenced to be a rising one. During the second-half (1978-81) the overall condition of all the regions sharply declined. Duars declined fastly followed by Terai and Darjeeling (Table-VIII.7). The comparative condition of Terai was the worst (negative NW during 1981). The variability in the values

of NWFL is indicative of prevalence of inconsistencies and incoherencies in the capital structure of the tea companies irrespective of region.

TABLE-VIII.7

Net worth to Fixed Liability (NWFL)

Year	Terai	Duars	Darjeeling	Mean
1974	4.6053	22.9066	6.1081	9.9812
1975	9.3022	22.9909	6.1348	13.9224
1976	11.9992	21.3967	5.5565	15.3129
1977	12.5697	20.4007	11.6932	16.6167
1978	2.8067	7.9466	9.0992	5.8919
1979	1.5635	4.4694	2.4203	3.2081
1980	0.7341	3.1124	1.0518	2.1136
1981	(-) 0.7025*	5.0870	0.5052	1.8300
Mean	5.3598	13.5388	5.3211	8.6097
C.V.	0.9122	0.6287	0.6842	0.6671
bt.	(-) 1.4413	(-) 3.4210	(-) 0.9124	

\*NW is negative

FIXED ASSET LIABILITY INDEX.

The FAFL condition of all the three regions is apparently satisfactory. Though the ratio values are healthy in terms of financial management principles as they always disclose a

value double that of unity with a mean value too much above the unity, the conditions are far from satisfactory. The high values of co-efficient of variation and declining time function points towards this. The FL could not keep pace with its counterpart FA and has moved just in opposite direction. The differences in parameter values are due to wide difference of characteristic features between the areas. However, a sharp contrast between the pre-boom (1974-77) and post-boom (1981) periods are much distinct. Only Darjeeling deviates by adding one year more in its pre-boom span (Table-VIII.8).

TABLE-VIII.8

Fixed Assets to Fixed liability (FAFL)

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	5.7052	24.6540	10.0486	11.7744
1975	9.9565	23.6359	10.2159	15.2851
1976	14.8402	22.5733	10.4299	17.7452
1977	15.4916	21.1196	14.0388	18.2789
1978	5.5109	9.1691	15.0731	7.9967
1979	4.1006	5.6083	4.6404	4.9647
1980	4.1614	5.7361	2.9409	4.8447
1981	4.5705	11.6003	3.9933	7.2547
Mean	8.0421	15.5121	8.9226	11.0181
C.V.	0.6048	0.4994	0.4815	0.4703
bt.	(-) 0.9419	(-) 2.9014	(-) 1.1321	

Tea companies of all the regions are heavily burdened with debts and TLNS (Table-VIII.9). This is more prominent in current zone and condition of Duars is critical followed by Terai and Darjeeling (Table-VIII.8 and VIII.10). All the regions face insolvency risk primarily from the current zone. Compared to sales growth, liabilities have increased at a higher rate. The mean variability of TLNS between regions is perfectly in consonance with rate of net contribution of their sales (Table-VIII.3).

The liability sales index is in consonance with the average unit price fetched by the respective areas. Comparatively the condition in Darjeeling is the best followed by Terai and Duars.

TABLE-VIII.9Total liability to Net Sales (TLNS)

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	1.1294	1.0510	0.7897	1.0326
1975	1.2664	1.0225	0.9527	1.0735
1976	1.1240	0.9925	0.8485	1.0075
1977	0.9568	0.8833	0.6778	0.8786
1978	1.1698	1.0827	1.1163	1.1081
1979	1.3325	1.1379	0.8674	1.1575
1980	1.3052	1.1386	0.9192	1.1562
1981	1.1226	1.0716	0.9230	1.0697
Mean	1.1758	1.0474	0.8868	1.0571
C.V.	0.0955	0.0749	0.1348	0.079
bt	0.0117	0.0162	0.0150	

TABLE VIII.10Fixed Liability to Current Liability (FLCL)

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	0.1213	0.0258	0.1022	0.0586
1975	0.0622	0.0286	0.0940	0.0450
1976	0.0412	0.0289	0.0761	0.0370
1977	0.0384	0.0265	0.0697	0.0328
1978	0.0944	0.0511	0.0455	0.0062
1979	0.1215	0.0877	0.1645	0.1034
1980	0.0971	0.0911	0.2392	0.1032
1981	0.0921	0.0408	0.1656	0.0651
Mean	0.0835	0.0476	0.1196	<del>0.0651</del>
C.V.	0.3674	0.5351	0.5057	0.4854
bt	0.0032	0.0074	0.0168	

LIABILITY WORKING CAPITAL RATIO.

The permanent working capital from internal sources is almost non-existent in all the regions. To run current operations, the total dependence on short-term sources is a common feature. The long-term external sources of fund (FL) have been used disproportionately for activities in the current zone.

The comparative position of Duars is precarious. The density of fixed liability (FL/CL) has largely deteriorated (Table-VIII.10) as larger part of funds were transferred to current zone (Table-VIII.8). The position is more or less the same in other two

regions of which Darjeeling depicts a comparatively better pictures (Table-VIII.11).

In all the regions with the increase of pressure on WC the FL has swelled as throughout the octennium the WC balance is negative in Terai and Darjeeling and so also in Duars; with the exception of two years (1975 and 1977) having a very thin margin over CL.

This led the management to resort to short-term borrowings and thus irrespective of region, CL became exuberant in the finance structure. The density of FL as an external source is highest in Darjeeling followed by Terai and Duars.

TABLE VIII.11

Fixed Liability to Working Capital (FLWC).

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	(-) 0.6359	(-) 0.9766	(-) 0.3305	(-) 0.5995
1975	(-) 0.2479	6.2654	(-) 0.2819	(-) 0.4535
1976	(-) 0.2025	(-) 3.3809	(-) 0.2459	(-) 0.4028
1977	(-) 0.2194	22.2649	(-) 0.6346	(-) 0.6010
1978	(-) 0.4007	(-) 3.7208	(-) 0.1921	(-) 0.6793
1979	(-) 0.4762	(-) 5.7710	(-) 0.5489	(-) 0.5770
1980	(-) 0.3218	(-) 0.8967	(-) 1.0777	(-) 0.5388
1981	(-) 0.2119	(-) 0.1779	(-) 0.3908	(-) 0.2144
Mean	(-) 0.3395	1.7008	(-) 0.4687	(-) 0.5083
C.V.	(-) 0.4274	4.9725	(-) 0.5719	(-) 0.2715
bt	0.0190	(-) 0.7545	(-) 0.0549	

LIQUIDITY RATIOSCURRENT RATIO.

The negative WC balances have aggravated the risk of insolvency to a maximum extent (Table - VIII.12). The illiquidity has been aggravated to such an extent that a number of companies became sick and a few of them were closed — in few cases Government has been forced to take-over management of a few. The condition of Darjeeling is the worst and closely followed by Terai. Despite fetching the highest price Darjeeling's WC condition has deteriorated and 'sickness', 'closure' and 'take-over' all could be observed there. In Terai the CA could not catch up even 83 per cent level of CL. The condition of illiquidity was so poor that a number of companies were unable to meet even the wage bill. The condition of Duars was also not much different from the other two. For want of current funds important preparatory works of cultivation such as pruning, manuring, drainage, spraying of pesticides, fungicides etc., have been abandoned.

(Please see next page)

TABLE - VIII.12Current Assets to Current liabilities (CA/CL).

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	0.8092	0.9736	0.6985	0.9022
1975	0.7489	1.0046	0.7167	0.9008
1976	0.7963	0.9914	0.6903	0.9083
1977	0.8248	1.0012	0.8901	0.9455
1978	0.7644	0.9863	0.7633	0.9080
1979	0.7449	0.9848	0.6986	0.8209
1980	0.6983	0.8984	0.7780	0.8085
1981	0.5654	0.7704	0.5764	0.6962
Mean	0.7440	0.9513	0.7265	0.8613
C.V.	0.1040	(-) 0.0812	(-) 0.1194	0.0884
bt	(-) 0.0259	(-) 0.0277	(-) 0.0077	

QUICK RATIO.

The net-liquid position of the tea industry in all the three regions reveals an alarming condition. The condition of Terai is the worst followed by Darjeeling and Duars. The position of Cash was bad and remains, by and large, constant. Non-cash assets have swelled. Holding of excessive inventory assets is a predominant feature. Inventories have piled up and so the short-term creditors. The mean value of QR could not reach even 44 per cent level of CL

(Table-VIII.13).

TABLE - VIII.13Quick Assets to Current liabilities (OACR).

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	0.4341	0.3133	0.3411	0.3478
1975	0.3199	0.3540	0.3631	0.3449
1976	0.3699	0.4574	0.3501	0.4229
1977	0.3669	0.5056	0.6621	0.4787
1978	0.3272	0.4972	0.4933	0.4504
1979	0.3187	0.5156	0.4387	0.4388
1980	0.2447	0.4476	0.4885	0.3900
1981	0.2220	0.4232	0.3509	0.3593
Mean	0.3254	0.4393	0.4325	0.4054
C.V.	0.1968	0.1556	0.2406	0.1200
bt (-)	0.0245	0.0167	0.0084	

WORKING CAPITAL TURNOVER.

There is not a single company in any of three regions which has not undergone the sad experience of negative WC (Table-VIII.14). The acute shortage was worst in the last stage of octennium (1981) - negative WC has sharply jumped (Table-VIII.15). The WC is a non-match of selling function in each of the regions of West Bengal. The condition worsened in the last year of the

octennium. Comparatively, however, Duars disclosed a slightly different picture. Its NSWC values during 1975, 1976 and 1977 have been largely influed by the meagreness of the size of WC; its mean value, the co-efficient of time function and co-efficient of variation reveal a biased picture (Table-VIII.16).

TABLE VIII.14

Companies showing negative WC.

	1974	1975	1976	1977	1978	1979	1980	1981
Terai*	12	13	15	14	14	15	14	13
Duars	6	5	4	5	6	7	9	11
Darjeeling	5	4	4	3	4	4	4	5

(\* See note below Table - II.2, Page-45).

TABLE VIII.15

Comparative growth index of NS and WC

	1981		1981	
	Base 1980 = 100		Base Mean Value (1974-81) = 100	
	WC	NS	WC	NS
Terai	148.42	118.33	242.37	68.12
Duars	239.37	135.35	512.03	228.44
Darjeeling	218.79	105.50	365.84	131.92

(Please see next page)

TABLE - VIII.16Net Sales to working capital (NSWC)

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	(-) 8.2383	(-)58.2904	(-) 7.6087	(-)16.6070
1975	(-) 5.1733	361.1886	(-) 6.6981	(-)15.8300
1976	(-) 7.0486	(-)193.9663	(-) 6.2776	(-)17.7327
1977	(-) 9.3991	1489.1258	(-)26.5478	(-)33.3648
1978	(-) 5.3428	(-)98.0391	(-) 6.0297	(-)14.4428
1979	(-) 4.1623	(-)85.8054	(-) 6.4180	(-) 7.1241
1980	(-) 3.3589	(-)12.0890	(-) 8.5972	(-) 6.3271
1981	(-) 2.6794	(-) 5.4001	(-) 4.1457	(-) 4.1368
Mean	(-) 5.6753	174.5905	(-) 9.0406	(-)14.4457
C.V.	(-) 0.3906	2.9778	(-) 0.7438	(-) 6.0001
bt	0.7226	(-)32.8433	0.4147	

INVENTORY TURNOVER.

A slow inventory turnover has been the essential feature of all the regions. The comparative position of Darjeeling is the worst followed by Terai and Duars. This slow turnover has reduced the much needed liquidity of tea companies and [Annexure-I (x) and (xi)] has impaired the financial soundness of the tea companies (Table-VIII.17).

(Please see next page)

TABLE VIII.17Inventory Turnover (INVTB)

Year	Terai	Duars	Darjeeling	Mean (West Bengal)
1974	2.5101	1.5697	7.5244	2.1500
1975	2.5631	1.7973	4.5251	2.1674
1976	2.6303	2.2634	4.8971	2.5232
1977	3.0269	2.6194	5.5578	2.8904
1978	2.8886	2.0414	3.7858	2.4141
1979	2.3152	2.1892	3.9935	2.4035
1980	2.3739	2.8098	4.0711	2.7001
1981	2.8965	2.9090	4.2922	2.3077
Mean	2.6506	2.2749	4.8309	2.4446
C.V.	0.0920	0.1962	0.2376	0.0976
bt	0.0080	0.0091	0.1787	

On the whole, the performance of tea companies in all the three regions of West Bengal moves in the same direction. The differing topographical and climatic conditions do make a difference in industry conditions in these regions but the differences are hardly qualitative. Only a **difference** degree is noticed. The tea industry in West Bengal has reached to a point of crisis from where within the prevailing industry structure, return is almost an impossibility. That crisis in Terai tea belt is more severe than that of Duars and Darjeeling is hardly matter of solace.

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References and Notes:

1. Indian Tea Planters' Association "Detailed Report of the year 1978", Jalpaiguri, 1978 - p. 3.
  2. Tea Board of India, "Tea Statistics, 1979-80," Calcutta, p. 123.
  3. Goradia, Profull, "Profiles of Tea", Oxford & IBH Publishing Company, Calcutta, 1979, p.99.
  4. Tea Board of India, op. cit., p. 126.
  5. \_\_\_\_\_, Tea Statistics 1981-82, p. 69.
  6. \_\_\_\_\_, Ibid., p. 15.
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