Assam Tea Corporation

Operational Assessment Report

February 18, 2008

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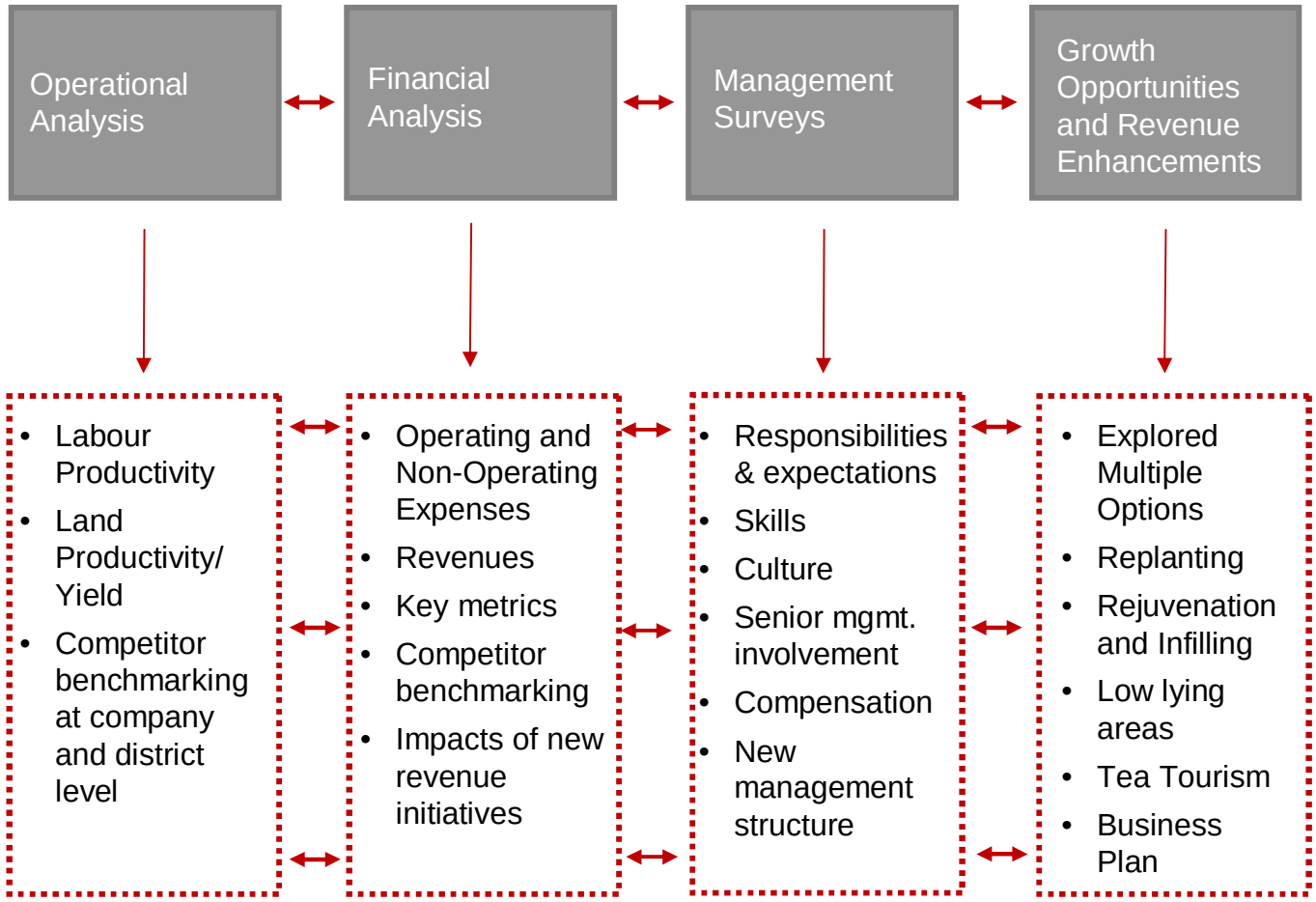
P&A Associates' mission was to develop an outline of options for the advancement of economic viability of ATC

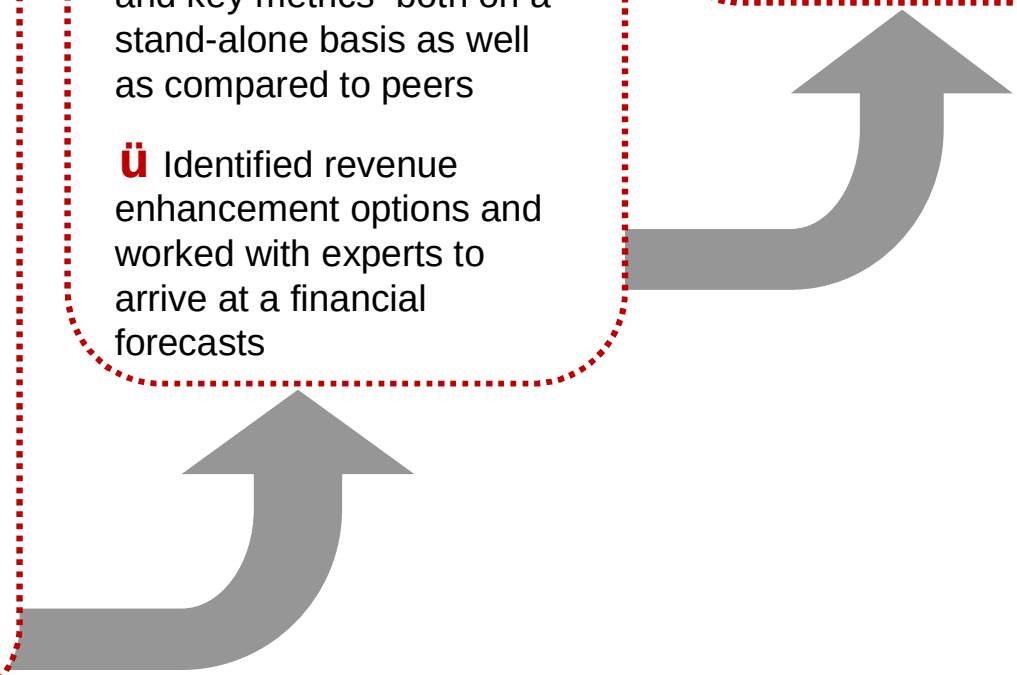


We have executed our mandate in a multi-step process

- Reviewed the company's financial statements for the 2005 and 2006 fiscal years
- Reviewed the operational data from all of the company's tea estates
- Reviewed various consultants' reports previously prepared for ATC
- Reviewed operating statistics vis-à-vis comparable companies at both the company level as well as the district level
- Surveyed estate managers

- Develop list of findings and observations in Phase I
- Created summary of the management survey
- Analyzed performance and key metrics both on a stand-alone basis as well as compared to peers
- Identified revenue enhancement options and worked with experts to arrive at a financial forecasts

Based on these completed tasks, we have prepared this report summarizing our findings and observations, recommendations and next step action plans



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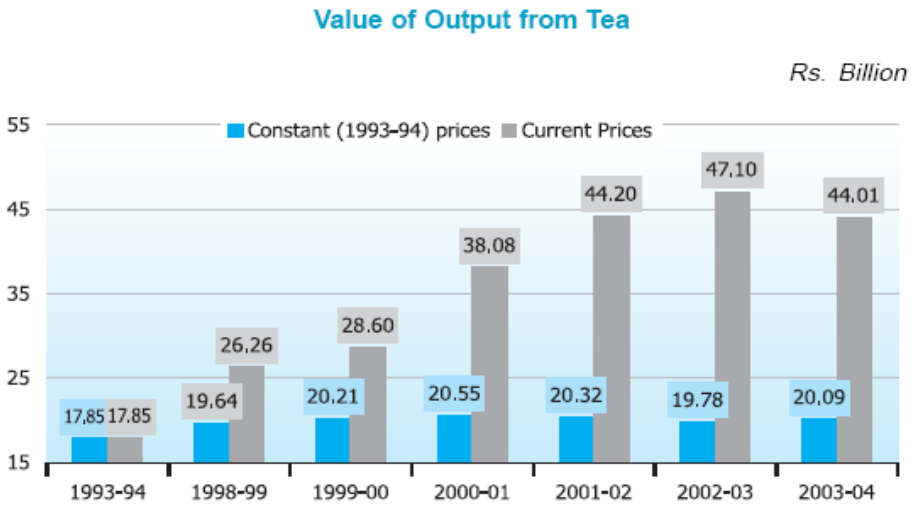
Industry Overview: Importance of Tea to the Indian Economy and the Cyclicality in the Industry

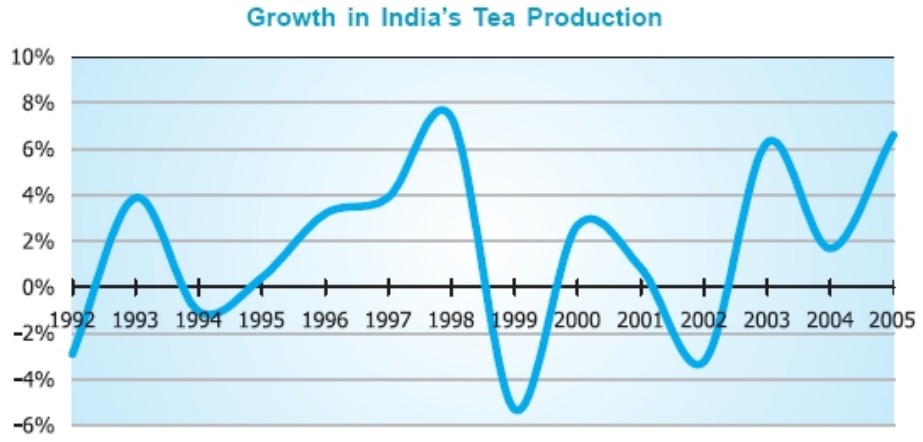
Importance to the Indian Economy

- Country's primary beverage (85% penetration)
- India is the largest manufacturer of tea in the world
  - 28% of world production
  - 13% of world exports
- Second Largest Industry in terms of employment (1 million directly, 2 million indirectly)
- Value of output from tea (at constant, 1994-95 prices) has remained at around Rs. 20 billion over 2000-04

Cyclicality

- The industry's output is affected by the variables that affect all agro-commodities i.e. rainfall and temperature
- Quality of the raw material, green leaf changes from season to season
- Tea production has stabilized from the volatility levels seen during the 1999-2002 period





Source: ICRA Research Analysis 2006

Industry Overview: Prices and Outlook Positive

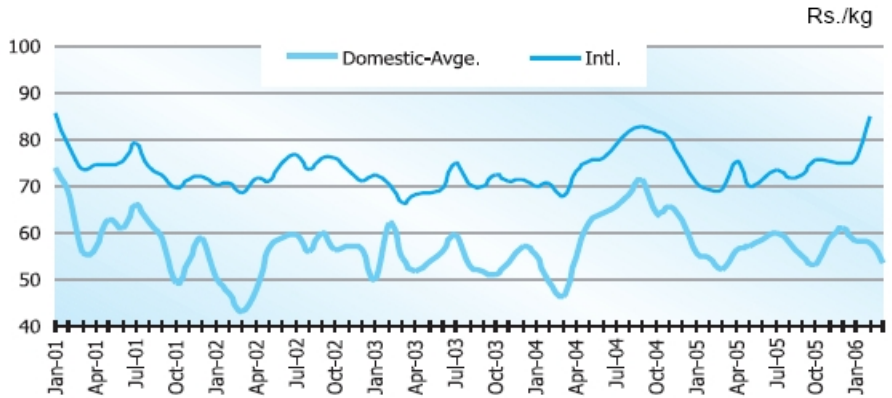
Price and Supply

- Unlike other commodities, tea price cycles have no linkage with the general economic cycles, but with agro-climatic conditions.
- The oversupply in the markets caused prices to drop significantly starting 2001; price improvements seen since 2004-2005
- Erosion of market shares in the total beverages market and an oversupply of around 0.1 mt. likely to depress prices in the medium term

Outlook

- World black tea production is projected to grow by 1.9% per annum to 3.1 million tonnes in 2017, mainly due to improvements in yields
- In India, output is expected to grow by 1.6% per annum during this period
- In India, tea production increased 3.9% in 2005 to 0.93 million tonnes, as compared with a 3-year compound average growth rate (CAGR) of 3.9%
- While production levels have recovered from 1999-2002 period, price levels and consumption remain unsupportive

International and Domestic Prices of Tea



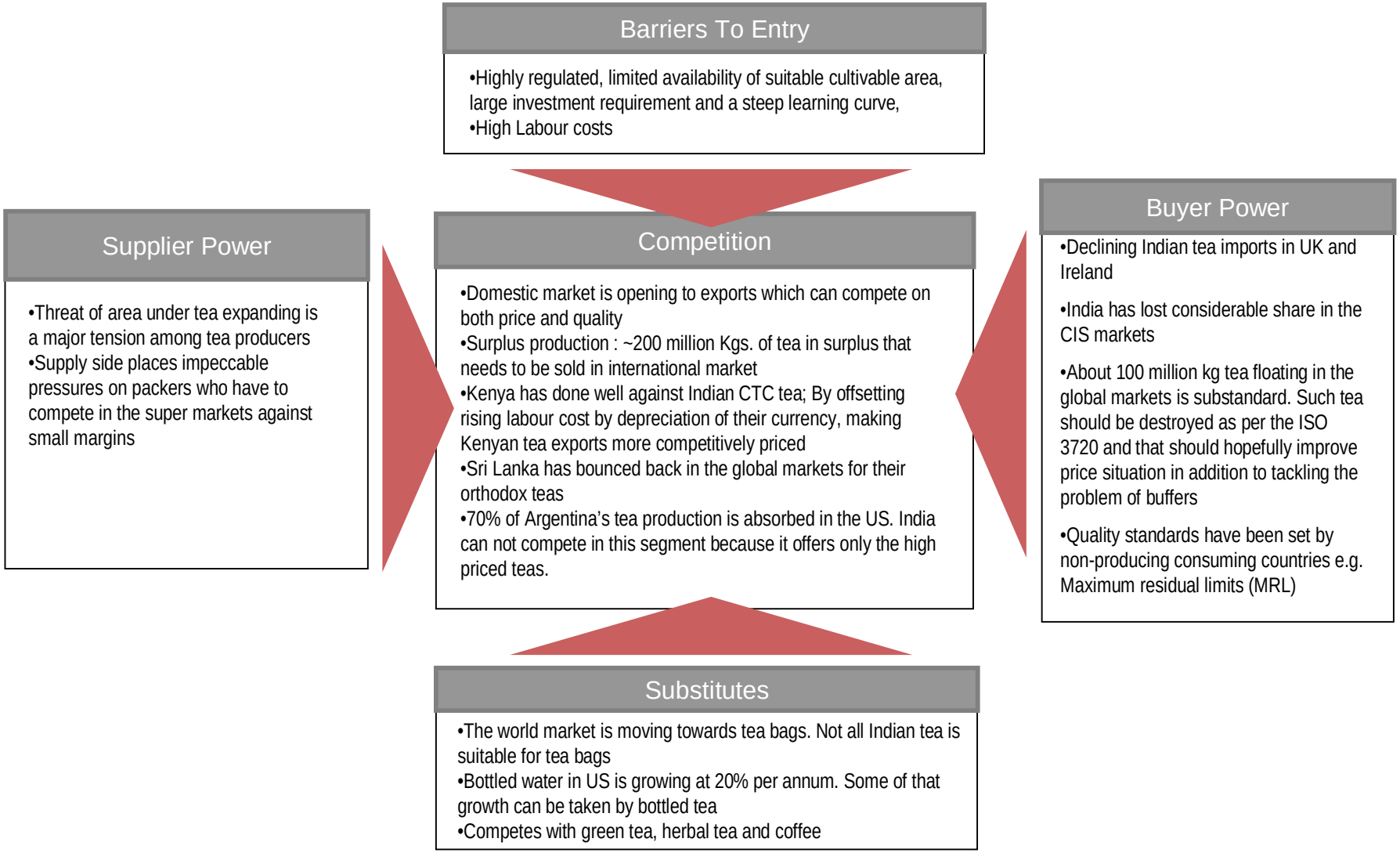
India's Tea Production

Thousand tonnes

	2001	2002	2003	2004	2005	3-year CAGR
Assam	450	433	435	436	474	3.1%
West Bengal	191	190	201	215	215	4.2%
Others	10	9	13	12	12	9.0%
North India	**651**	**632**	**648**	**662**	**701**	**3.5%**
Tamil Nadu	131	129	167	163	155	6.2%
Kerala	66	60	58	62	67	3.9%
Karnataka	5	6	5	6	5	-2.3%
South India	**203**	**194**	**230**	**231**	**227**	**5.3%**
Total	**854**	**826**	**878**	**893**	**928**	**4.0%**

Source: FAO, ICRA Research Analysis 2006

Industry Overview: Porter's 5-Forces Analysis of the Indian Tea Industry Indicates High Competition



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Company Overview

History & Locations

- Assam Tea Corporation (ATC) was established in 1972 as a state government undertaking
- 17 gardens spread over the six districts of Golaghat, Jorhat, Karimganj, Nowgaon, Sibsagar and Sonitpur

Land & Plantation

- Gross Area of 14,383 Hectares
- Area under tea of 7,028 Hectares
- Less than 1% of tea bushes are under 5 yrs old, 21% between 5 yrs. and 30 yrs., and remaining 78% more than 30 yrs. old
- Produced a total of 20,436 thousand Kg. of Green Leaf in 2006
- At a recovery rate of 22.5%, yield in terms of made tea was 724 Kg/Hectare

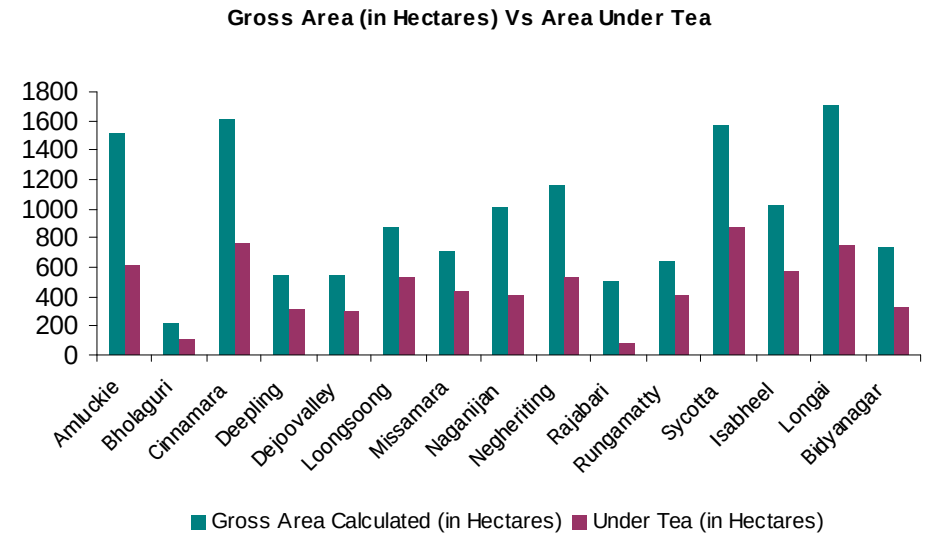
Workforce

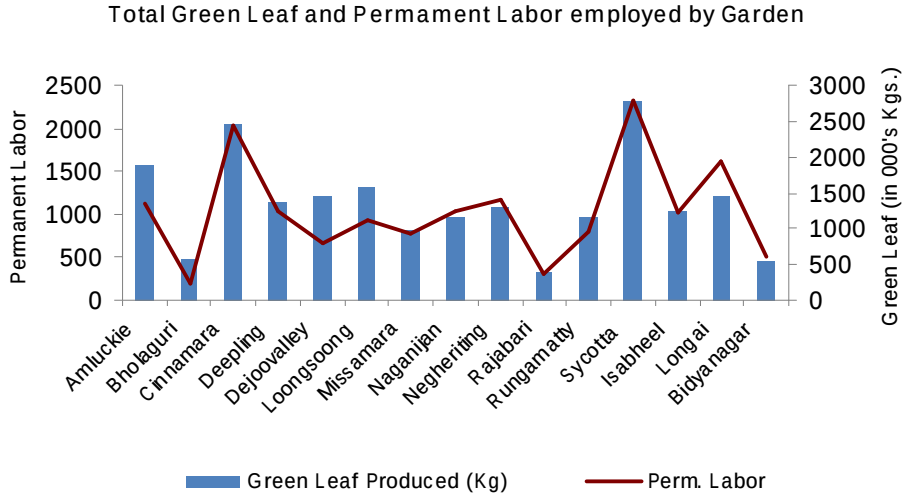
- Approx. 15,600 permanent labour in its workforce as of 2006
- Permanent Labour to Area Under Tea Ratio of 2.2

Financials

- Over-leveraged; unable to meet its debt commitments
- High wages and fixed cost
- Revenues stagnant

Company Overview: Key Metrics by Garden

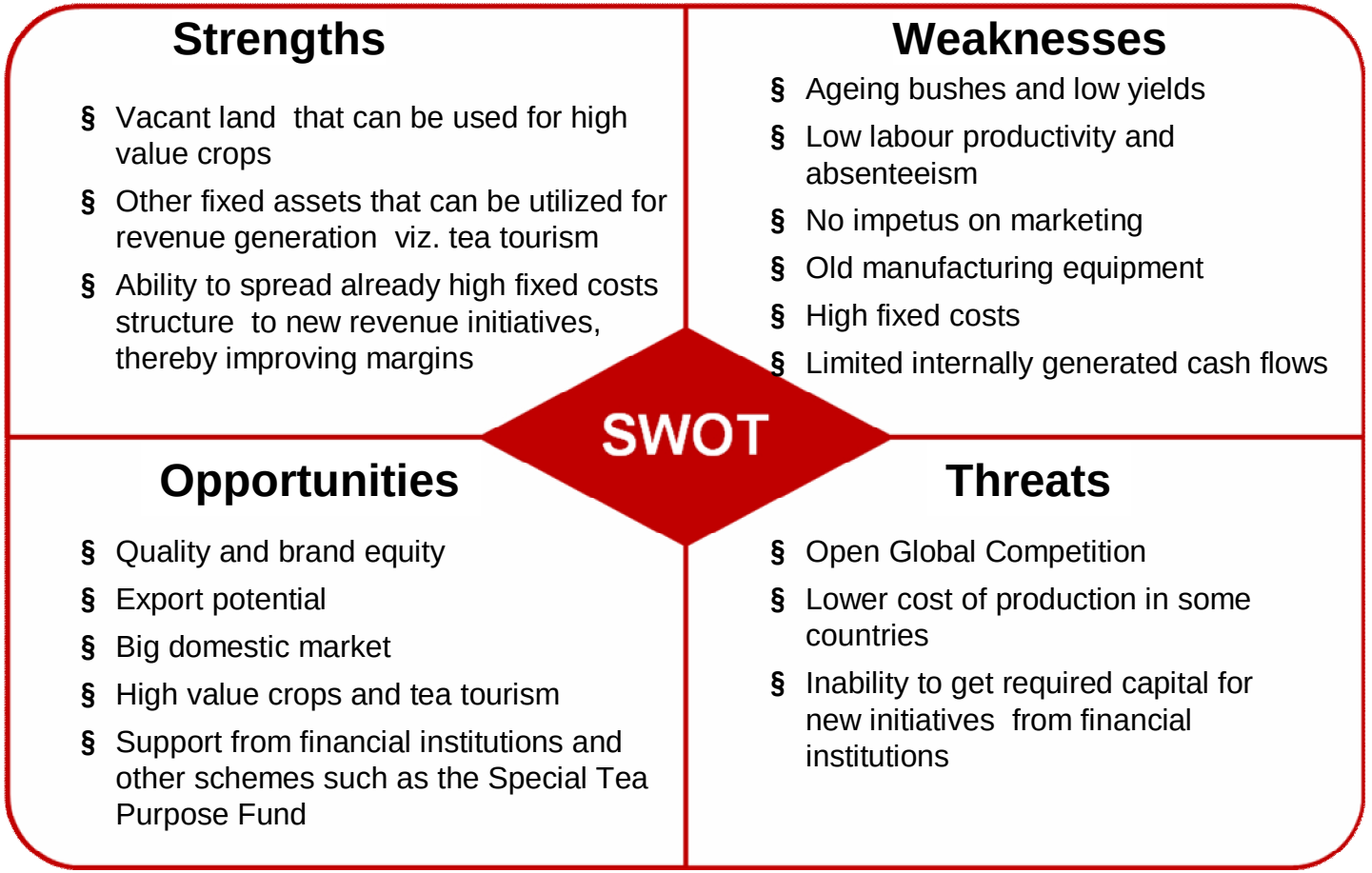




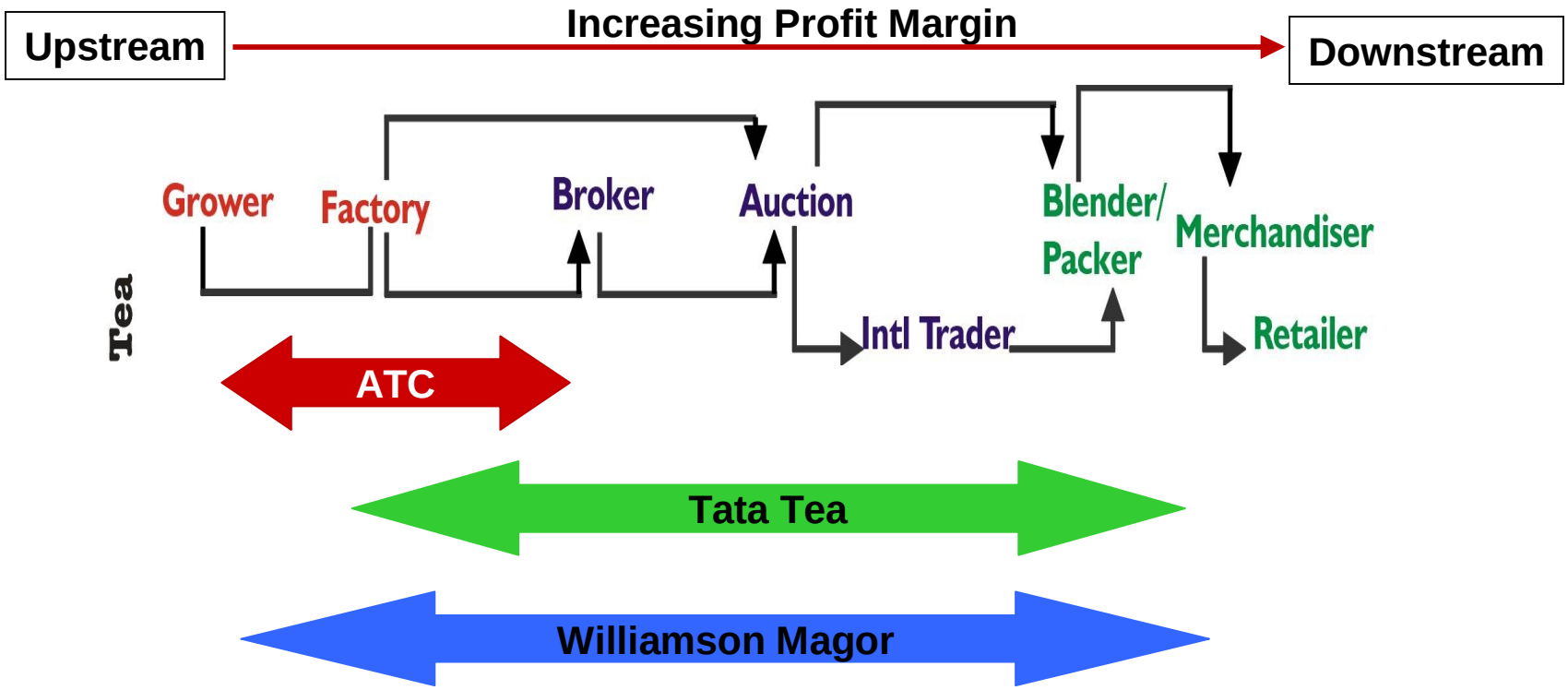
Land Utilization and Productivity at a Snapshot

- On an average, 49% of the Gross Area is Area Under Tea
- Huge Disparity in the proportion of Area Under Tea between estates
  - Rungamatty, Missamara and Loongsoong have the highest % of Area Under Tea
  - Rajabari has the lowest % of Area under Tea
- Significant Differences in Labour and Green Leaf Produced ratio between estates
  - Amluckie, Deejoovalley and Loongsoong have higher Green Leaf Tea production given the proportional level of Permanent Labour.
  - Longai has lower Green Leaf production, given the Permanent Labour level

“SWOT” (Strength, Weakness, Opportunities and Threats) Analysis

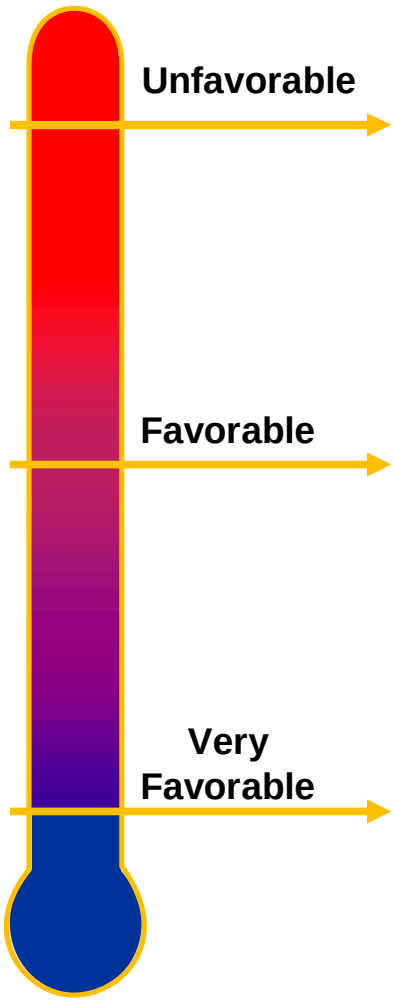


Value Chain Analysis: Imperative for ATC to Move Downstream in the Chain through Marketing Channels to Improve Margins and Build Brand



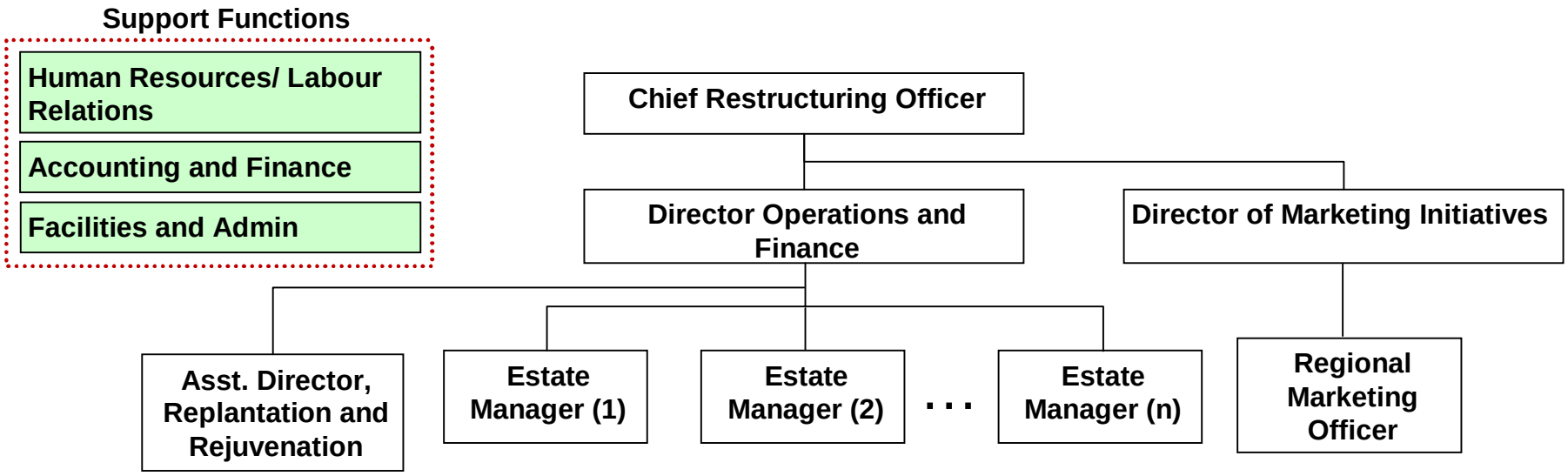
- While ATC is confined to the upstream in the value chain where the margins are thin, most bigger players span the entire value chain
- FMCG companies like Tata Tea have tried to move downstream by selling or reducing stake in their plantations and concentrating more on brand building

Management Response Thermometer: Highlights Need for a Management Structure Focused on ATC's Turnaround



- **Most managers feel that current financial condition of ATC and management style are the biggest hurdles to ATC's success**
  - All mangers concur that management style is a hindrance to ATC's success
- **Most managers feel adequately compensated**
  - Managers feel they have the required level of company resources to develop their managerial skills
  - Mangers feel that they have the option to reward deserving staff
- **An overwhelming majority of managers are optimistic about ATC's future and believe in the steps taken by senior management**
  - Managers feel they have the required level of independence to make most decisions

Company Management Structure Recommendation



- The above Organization Chart is for illustrative purposes only and suggests one way to organize the senior management team to be effective in the restructuring initiative
- The turnaround must be spearheaded by a Chief Restructuring Officer, who shall have overall responsibility for the initiatives recommended for ATC's turnaround
- The Asst. Director of Replantation and Rejuvenation (R&R) will be a dedicated personnel responsible for working collaboratively with each estate manager and supervising the R&R projects in each estate and also reporting the progress made on the same to the Director of Operations & Finance
- The retail/wholesale marketing initiative in western India will be under the leadership of the Director of Marketing Initiatives

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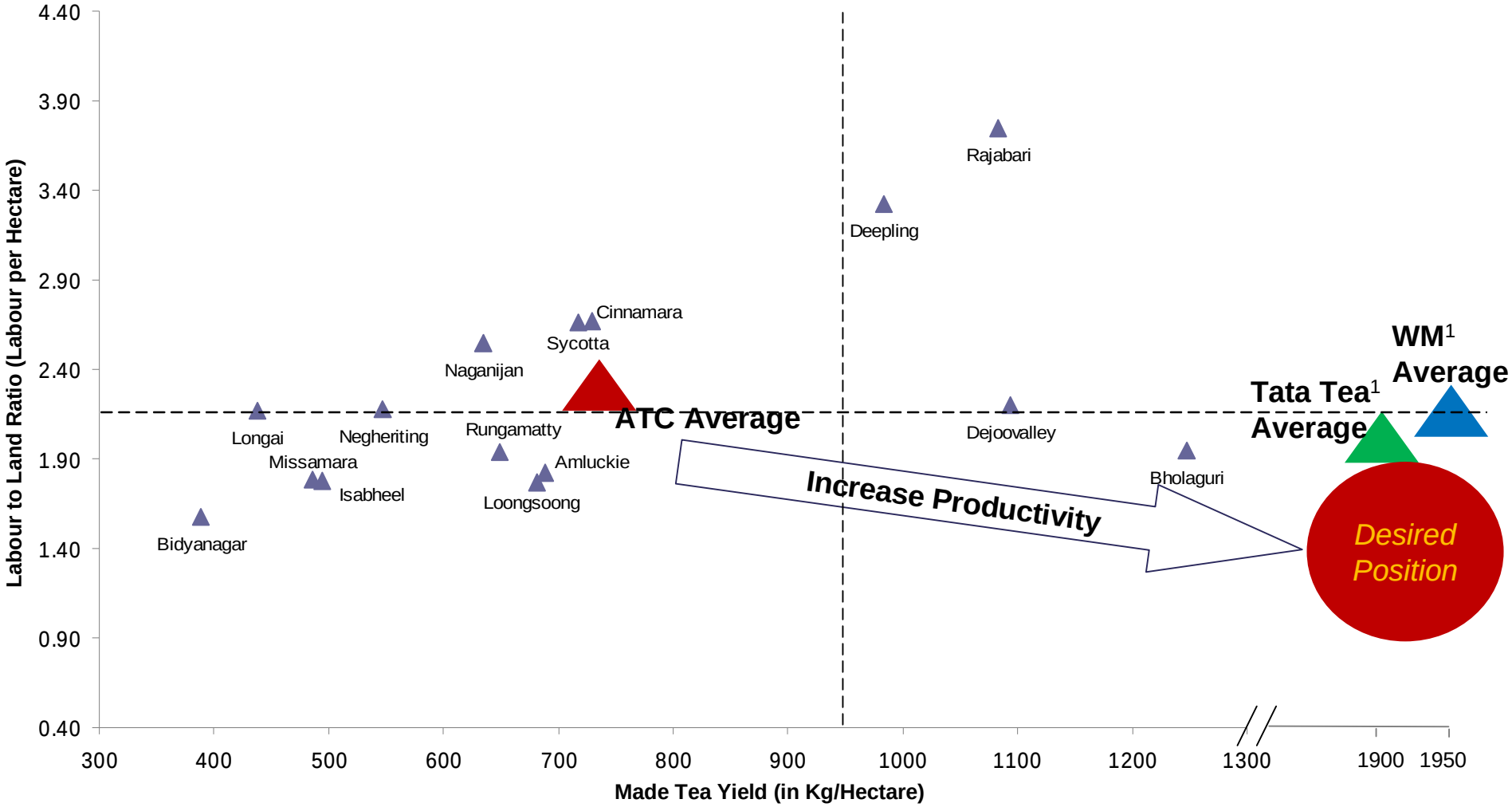
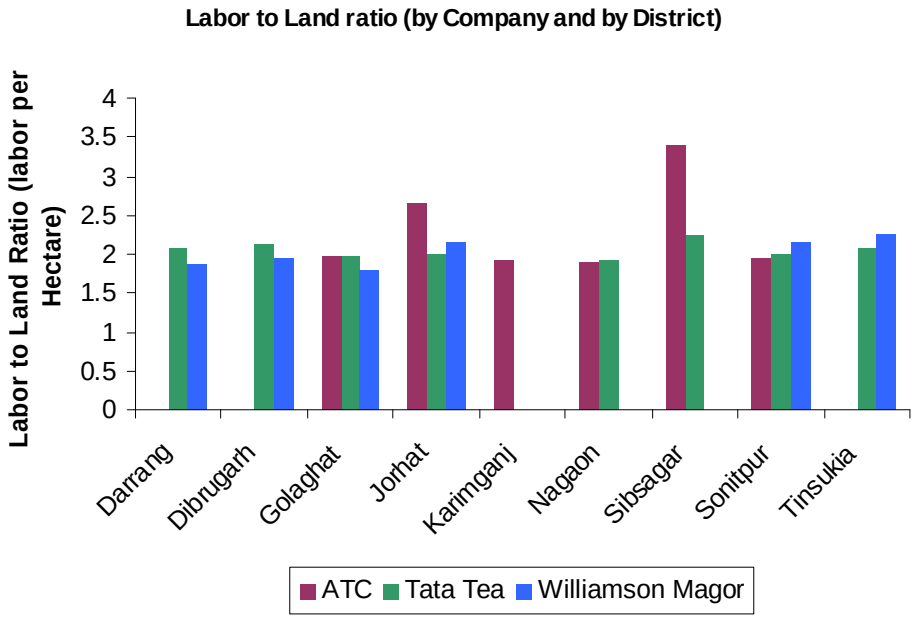
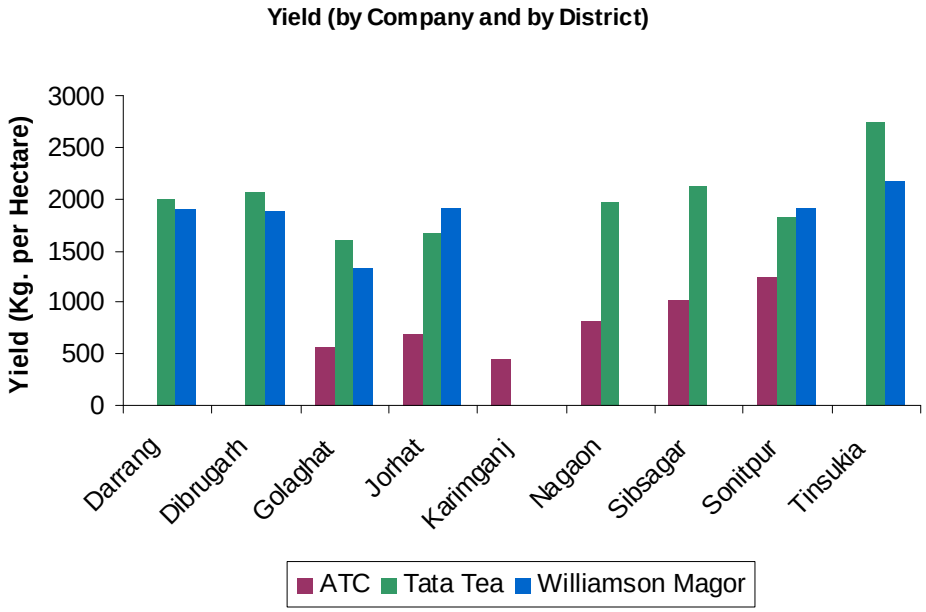
ATC Must Increase its Yield Substantially While Maintaining or Improving its Labour Productivity to meet Industry Standards



[1] Average Yield and Labour Ratio for all estates per data reported on company websites

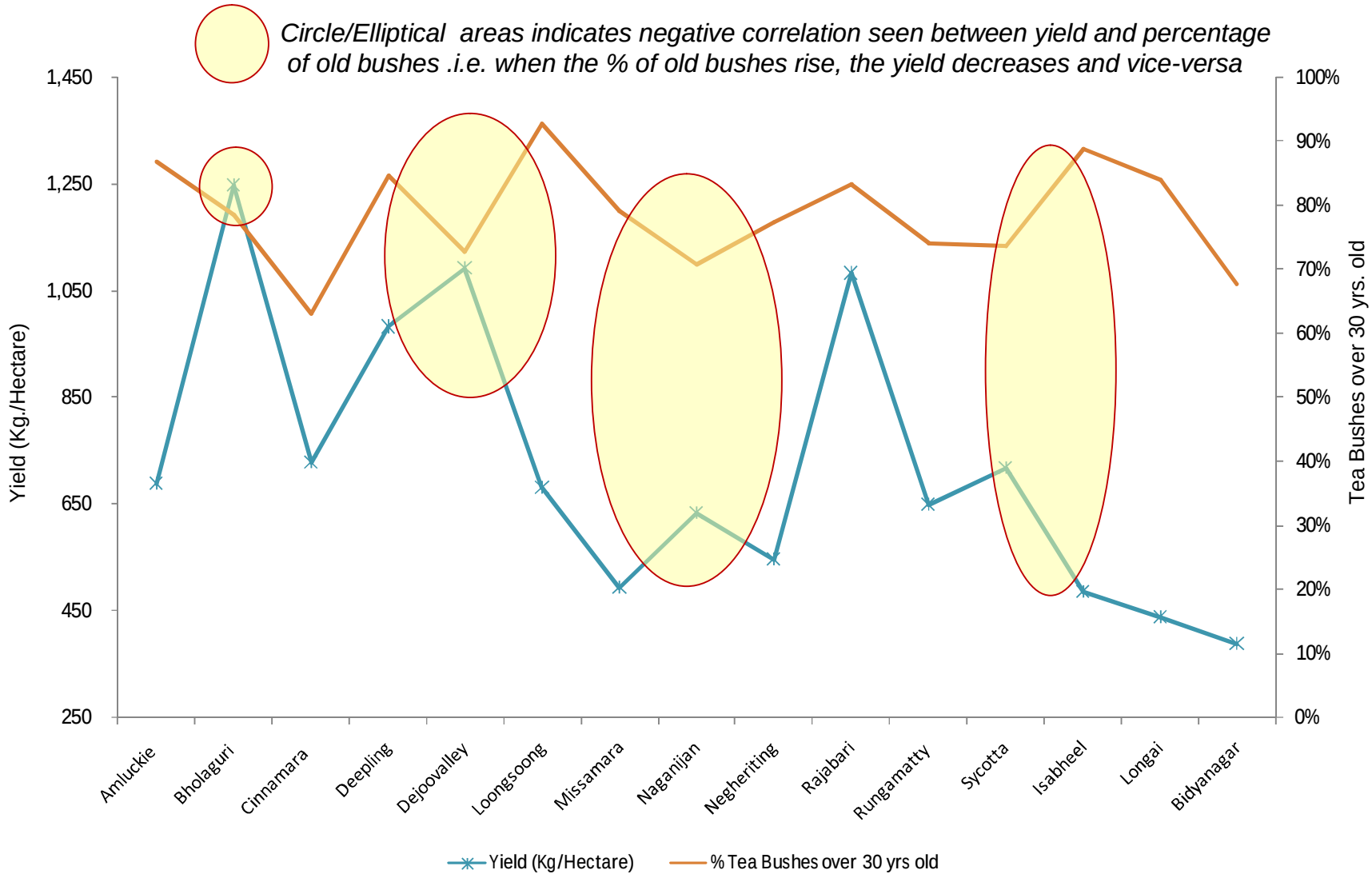
Operational & Financial Performance Overview: Productivity and Yield





- ATC has higher labour to land ratio in Jorhat and Sibsagar districts compared to Tata Tea and Williamson Magor
- ATC yield in terms of made tea per hectare is the lowest amongst its peer group

High Negative Correlation between the Yield and Age of Bushes Indicative of the Need for Replantation and Rejuvenation



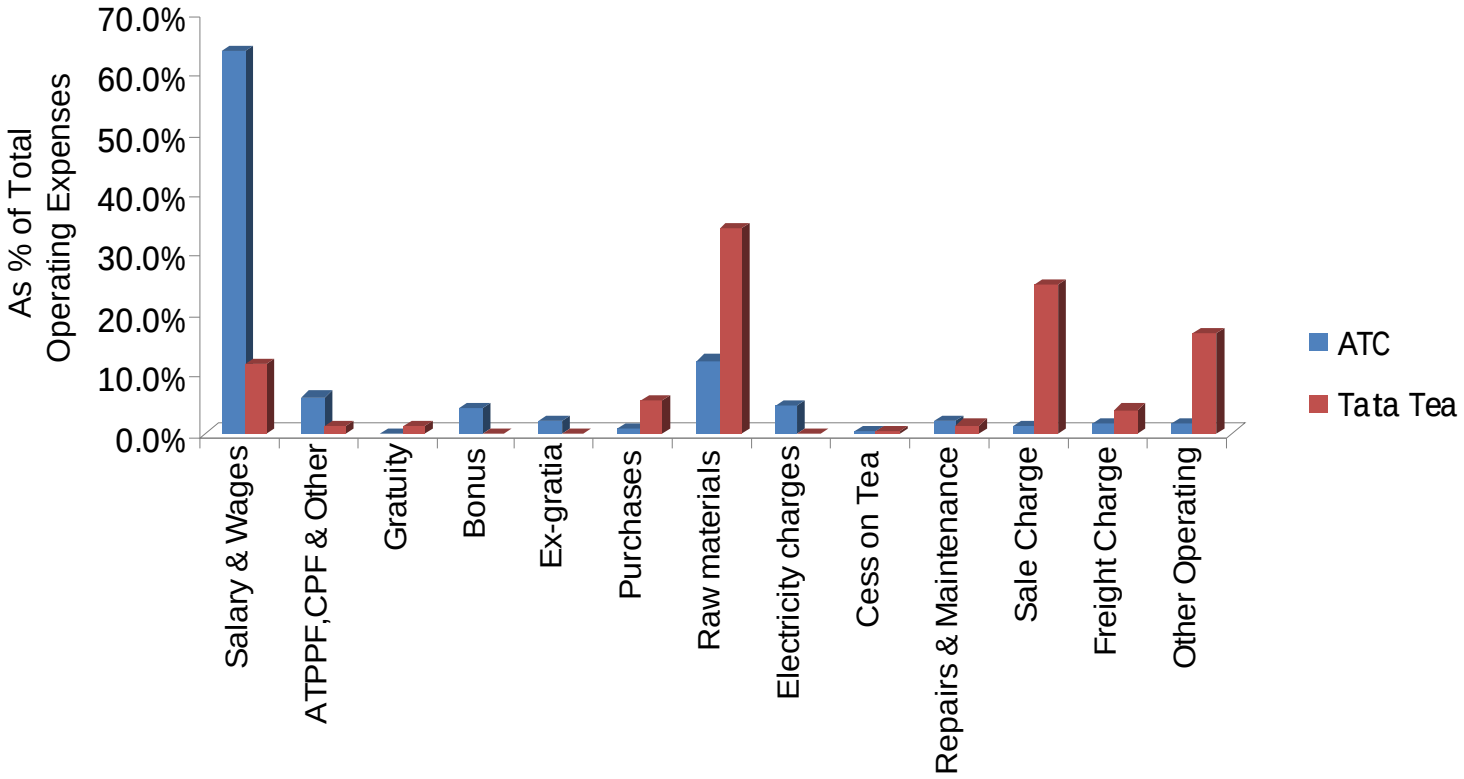
Operational & Financial Performance Overview: Financial Statements

ATC Profit & Loss Statement (Rs in '000, Year Ending Mar)	2006	2005
Sales and services	238,372	120,992
Other Revenues	39,392	-
Total Revenues	**277,764**	**120,992**
Salary & Wages	(240,302)	(199,339)
ATPPF,CPF & Other Funds	(22,998)	(25,271)
Gratuity	-	(110)
Bonus	(15,807)	(13,381)
Ex-gratia	(7,535)	(10,003)
Purchases	(2,798)	-
Raw materials/other consumption	(45,575)	(1,733)
Electricity charges	(16,738)	(170)
Cess on Tea	(1,616)	(28)
Repairs & Maintenance	(7,468)	(1,579)
Sale Charge	(4,700)	(113)
Freight Charge	(6,072)	-
Other Operating Expenses	(5,720)	(3,645)
Total Operating Expenses	**(377,329)**	**(255,371)**
Interest Expense	(55,877)	(46,169)
Tax	(5,778)	(4,627)
Depreciation	(2,890)	(3,518)
Increase/ Decrease in Stock	8,498	5,631
Total Expenses	(433,377)	(304,053)
Profit/(Loss) for the year	**(155,612)**	**(183,061)**

ATC Balance Sheet (Rs in '000, Yr Ending Mar 31)	2006	2005
Shareholders' Funds	295,395	295,395
Loan Funds	877,499	1,136,703
TOTAL LIABILITIES	**1,172,894**	**1,432,098**
Net Fixed Assets	111,564	124,359
Investments	11	11
Cash	4,385	15,798
Debtors	11,837	11,575
Inventory	25,280	14,297
Loans & advances	408,984	404,854
Other current assets	154,697	151,163
Current liabilities and provisions	(1,613,851)	(1,473,813)
Net Current Assets	**(1,008,667)**	**(876,126)**
Profit and loss account	2,069,987	2,183,855
TOTAL ASSETS	**1,172,894**	**1,432,098**

- ATC has significantly negative Operating Income
- ATC's accumulated losses makes it highly leveraged (i.e. high proportion of debt)
- ATC's revenues have to increase 1.56 times to meet its current interest obligations, assuming operating expenses remain flat

Breakdown of Operating Expenses by Category vs. Tata Tea



ATC's operating expenses breakdown by category shows proportionately higher fixed costs relating to salary, wages and related labour related expenses as compared to Tata Tea

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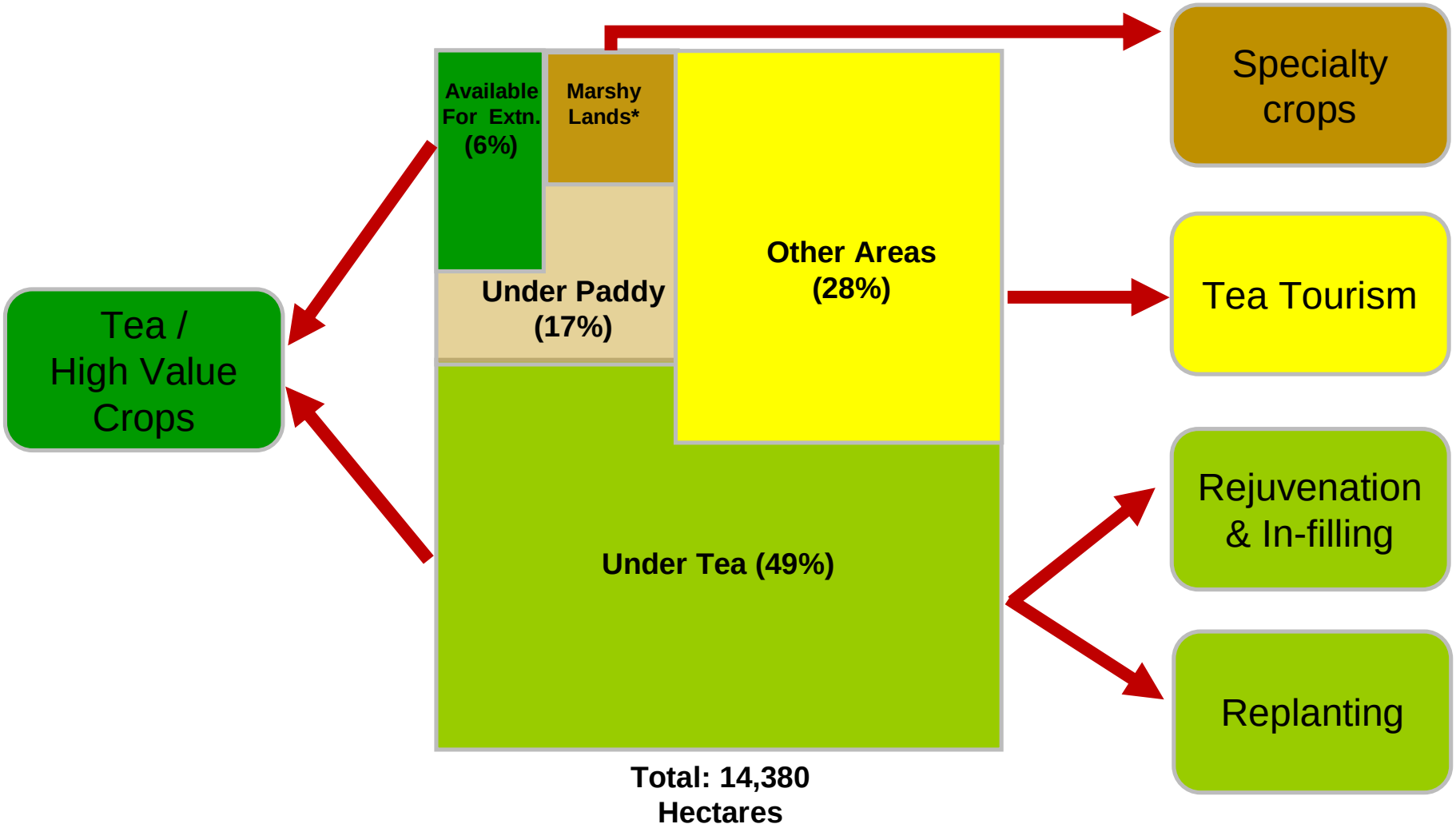
Revenue Growth Opportunities: Strategy for Utilizing the Land Area



* 10% of Area Under Paddy assumed to be marshy/low-lying area suitable for specialty crops

Economics of Replantation

Assumptions

- Labour Cost: Rs. 50/Man-day, increasing at 2% per year; total labour cost increase by 2% from year 6
- Green Leaf Sale Price (Rs./Kg): 10, increasing at 2% per year
- Yield: High yield grows uniformly from year 7 onwards to reach 3000 Kg. of Made Tea per Hectare in Year 12; low yield have the same average growth rate during this period
- Recovery Rate (green leaf to made tea): 22.5%
- Long Term Growth Rate: 3%
- Discount Rate for NPV: 10%

Yield Estimate (in Kg of Green Leaf/ Hectare)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
High Yield	0	1,000	3,000	4,000	6,000	7,000	8,056	9,111	10,167	11,222	12,278	13,333
Low Yield	0	500	2,000	3,000	4,000	5,500	6,329	7,159	7,988	8,817	9,647	10,476

Income from Extension area in Rs./Hectare: High Yield	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Terminal Value
Sales of Green Leaf	-	10,200	31,212	42,448	64,946	77,286	90,719	104,658	119,119	134,116	149,665	165,783	
Labor Costs	(18,000)	(49,725)	(14,826)	(10,612)	(9,201)	(9,385)	(9,572)	(9,764)	(9,959)	(10,158)	(10,361)	(10,569)	
Material Costs	(1,000)	(42,200)	(9,000)	(6,900)	(5,000)	(5,100)	(5,202)	(5,306)	(5,412)	(5,520)	(5,631)	(5,743)	
Income from High Yield Areas (in Rs./Hectare)	**(19,000)**	**(81,725)**	**7,386**	**24,936**	**50,745**	**62,801**	**75,944**	**89,588**	**103,747**	**118,437**	**133,673**	**149,471**	**2,073,109**
NPV (@ 10% discount rate) (in Rs./Hectare)	**870,136**												

Economics of Rejuvenation and In-filling

Assumptions

- Labour Cost: Rs. 50/Man-day, increasing at 2% per year; total labour cost increase by 2% from year 6
- Green Leaf Sale Price (Rs./Kg): 10, increasing at 2% per year
- Yield: Yield from young in-fills grows uniformly from year 7 onwards to reach 3000 Kg. of Made Tea per Hectare in Year 12; yield from old bushes remain flat at 8500 Kg of Green Leaf per Hectare
- Recovery Rate (green leaf to made tea): 22.5%
- Long Term Growth Rate: 3%
- Discount Rate for NPV: 10%

Yield Estimate (in Kg of Green Leaf/ Hectare)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Pruning Type	RJ	UP	DS	UP	LP	UP	DS					
From Old bushes	2,000	4,000	3,250	7,000	4,500	10,500	8,500	8,500	8,500	8,500	8,500	8,500
From Young in-fills	-	1,000	6,000	9,750	10,000	11,000	10,000	10,667	11,333	12,000	12,667	13,333
Combined Yield (at 50% vacancy rate)	**1,000**	**2,500**	**4,625**	**8,375**	**7,250**	**10,750**	**9,250**	**9,583**	**9,917**	**10,250**	**10,583**	**10,917**

Income from Rejuvenated & Infilled area (in Rs./Hect	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Terminal Value
Sales of Green Leaf	10,000	25,500	48,119	88,876	78,476	118,689	104,170	110,082	116,190	122,497	129,010	135,735	
Labor Costs	(18,000)	(30,345)	(16,386)	(12,734)	(10,824)	(11,041)	(11,262)	(11,487)	(11,717)	(11,951)	(12,190)	(12,434)	
Material Costs	(1,000)	(28,700)	(8,300)	(6,500)	(10,150)	(10,353)	(10,560)	(10,771)	(10,987)	(11,206)	(11,431)	(11,659)	
Income from Rejuvenated & Infilled area (in Rs./Hect	**(9,000)**	**(33,545)**	**23,432**	**69,642**	**57,502**	**97,295**	**82,348**	**87,824**	**93,486**	**99,340**	**105,390**	**111,642**	**1,548,434**
NPV (@ 10% discount rate) (in Rs./Hectare)	**802,104**												

Area Under Tea – Replanting and Rejuvenation Options Explored

Option 1

- 40% Replantation, remaining 60% Rejuvenation and Infilling, in a staggered manner with a 3-year completion
- Staggered implementation approach
  - Replantation - 20%, 10%, 10% respectively for three years
  - Rejuvenation and Infilling - 20%, 20%, 20% respectively for three years
- Rationale for the approach
  - Better long term results because of the replantation
  - Ability to get/utilize Special Tea Purpose Fund when available

Option 2

- 100% Rejuvenation and Infilling, in a staggered manner with a 4-year completion
- Staggered implementation approach
  - 40%, 20%, 20%, 20% respectively for four years
- Rationale for the approach
  - Less expensive in the short term
  - Medium term results comparable to replantation

Economics of Growing Tea in the Available for Extension Area

Assumptions

- Labour Cost: Rs. 50/Man-day, increasing at 2% per year; total labour cost increase by 2% from year 6
- Green Leaf Sale Price (Rs./Kg): 10, increasing at 2% per year
- Yield: High yield grows uniformly from year 7 onwards to reach 3000 Kg. of Made Tea per Hectare in Year 12; low yield have the same average growth rate during this period
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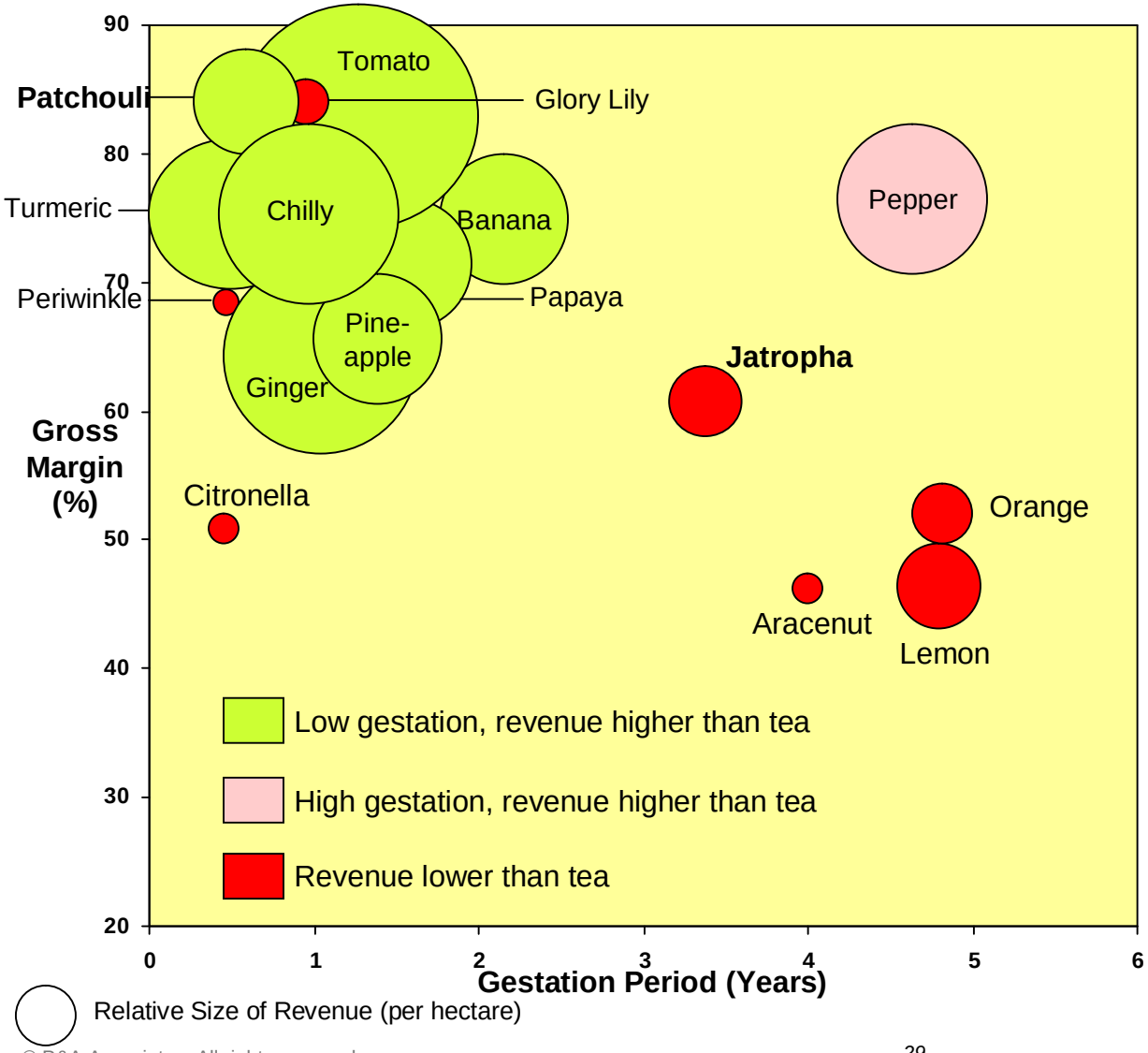
Low Yield	0	500	2,000	3,000	4,000	5,500	6,329	7,159	7,988	8,817	9,647	10,476

Income from Extension area in Rs./Hectare	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Terminal Value
High Yield													
Sales of Green Leaf	-	10,200	31,212	42,448	64,946	77,286	90,719	104,658	119,119	134,116	149,665	165,783	
Labor Costs	(51,450)	(14,331)	(9,780)	(9,445)	(9,417)	(9,606)	(9,798)	(9,994)	(10,193)	(10,397)	(10,605)	(10,817)	
Material Costs	(43,960)	(9,000)	(10,650)	(5,550)	(6,000)	(6,120)	(6,242)	(6,367)	(6,495)	(6,624)	(6,757)	(6,892)	
Income from High Yield Areas (in Rs./Hectare)	**(95,410)**	**(13,131)**	**10,782**	**27,454**	**49,529**	**61,560**	**74,679**	**88,297**	**102,431**	**117,094**	**132,303**	**148,074**	**2,053,728**
NPV (@ 10% discount rate) (in Rs./Hectare)	**851,309**												

Economics of Growing High Value Crops in the Available Areas



- ATC should consider moving to a more profitable model of alternative high value crops in addition to tea
- Such models have been successfully implemented by competitors such as Tata Tea
- ATC can use available for extension areas and other such areas (e.g. roadside, marshy areas etc.) for cultivation of high value crops
- ATC can either grow such high value crops on its own or enter into a lease or profit sharing arrangement with other entities
  - Profit sharing/lease revenues in addition to the sharing compensation burden of ATC labourers that the entities will be required to employ

Source: Tata Tea Investor Conference 2006, P&A Analyses

Economics of Growing Jatropha

Rationale for Growing Jatropha

- § Seed contains 30 to 35 percent oil
- § Plantations expected to yield over 50 years
- § Expected to yield many times in a year
- § Can be propagated through cuttings
- § Needs minimum inputs
- § Additional revenues from intercrops
- § High profit margins
- § High international demand
- § Successfully implemented by Williamson Magor (Biodiesel JV With UK's D1 Oils)

Assumptions

- § Number of plants / ha = 1333 at 3 x 2.5 m spacing
- § Revenues @ Rs. 6.00/kg dry seed
- § Long Term Growth Rate: 5%
- § Discount Rate for NPV: 10%

Yield and income

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Terminal Value
Dry seed yield, Kg	-	-	1,500	2,500	5,000	5,500	6,000	
Revenues @ Rs. 6.00/kg dry seed	-	-	9,000	15,000	30,000	33,000	36,000	
Expenses	(28,244)	(9,975)	(11,025)	(12,600)	(12,600)	(13,650)	(13,650)	
Income from Jatropha block cultivation (in Rs/ Hectare)	**(28,244)**	**(9,975)**	**(2,025)**	**2,400**	**17,400**	**19,350**	**22,350**	**469,350**

NPV (@ 10% discount rate) (in Rs./Hectare) **218,349**

Source: ICRISAT, P&A Analyses

Implementation Summary for Alternative Crops

Jatropha

ØJatropha will be grown in block plantation and where ever feasible suitable intercrop will be grown as under crop.
ØAlong the roadsides and in the boundaries Jatropha will be grown at 2.5 meters apart.
ØIn low lying boundaries Karanj (Pongamia Pinnata) will be planted at 5 meters apart.
ØIn block plantation of Jatropha some suitable intercrops (shade loving) will be grown in the interspaces.
ØThe low lying strips (marshy areas that may be available) will be utilized to cultivate species like Acorus Calamus (10 months crop) and Cyperus Scariosus (2 year's cycle).
ØIn the block plantation patchouli will be taken as short term and Sarpagandha (2 years) / Satavari (2 years cycle) / Bhoot Jalakia as intercrops upto 5 years.

Intercrops

ØPatchouli-(Pogostemon Cablin): Patchouli a shade loving plant which perform well under 30 – 40% shade and can be grown profitably upto 50% shade will be cultivated in the interspaces for 1st two years.
ØSarpagandha-(Rauvolfia serpentine): Another shade loving plant whose root is the economic part will be grown in between the row spaces in 3rd year to 5th year and after that due to the development of root network further cultivation of a root crop will not be suitable.
ØPippali-(Piper Longum): Pippali is a shade loving perennial species having very good demand. It starts generating income from 6 months onwards and can be maintained economically for 3-4 years

Low Lying Marshy Areas

ØNagarmotha (Cyperus Scariosus): Its root / rhizome yields essential oil on steam distillation of perfumery importance. It is generally exploited from natural population mostly from Madhya Pradesh and few other places of the country. But with depletion of natural sources its importance for cultivation in waste lands is emerging. Recently its market price has gone up to 10,000 – 12,000 per kg of essential oil. It is normally harvested in the 2nd year of plantation. Practically it requires no maintenance. It is neither a palatable species for wild elephant nor farm animals.
ØBachh or Sweet Flag –(Acorus Calamus): Another species that is also grown under similar situations. It has also a very good market demand both as dry rhizome or extracted essential oil.

ATC Should Explore Tea Tourism as an Additional Revenue Stream

Tea Trails – Sri Lanka

The Dilmah Tea Brand in Sri Lanka

- **Successfully launched Tea Trails – a luxury vacation**
- **Replete with rolling green hills, plantation bungalows, high tea and exquisite service**
- **http://www.teatrails.com/dilmahtea.htm**

Glenburn Tea Estate - India

The Glenburn Tea Estate near Darjeeling

- **Has been very successfully transformed into an upscale tourist getaway**
- **http://www.glenburnteaestate.com/**

Purvi Discovery - India

Purvi Discovery Pvt. Ltd., Dibrugarh

- **Operates in northeast India**
- **Provides a "Tea Heritage" tour and a luxurious stay in one of the "Chang Bungalows" as the highlight of their holiday package**

§ Tea Tourism is a proven concept that has been successfully implemented elsewhere

§ ATC should consider similar options in relation to its underutilized bungalows

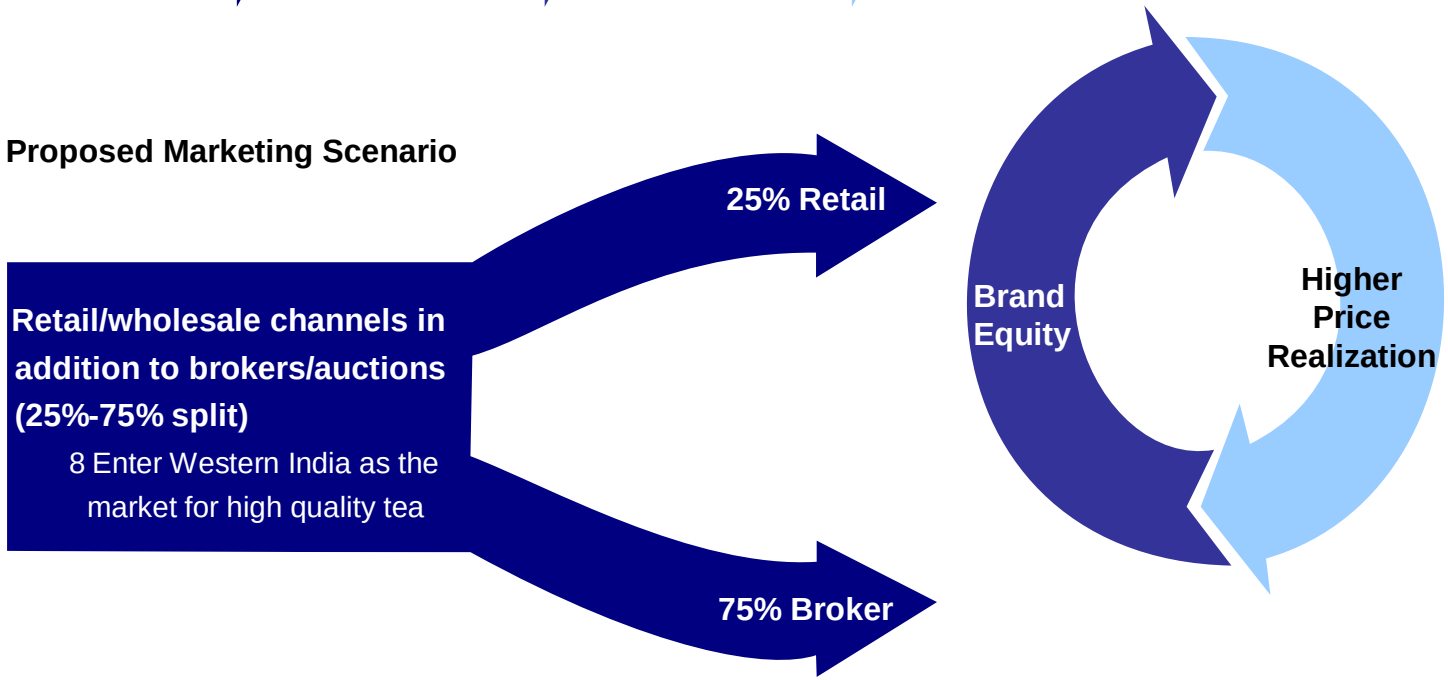
- ATC may enter into leasing or profit sharing agreement with a third-parties for its bungalows especially in Jorhat and Golaghat districts (e.g. Cinnamara)

Source: Tea and Coffee Trade Journal, April 2007

New Marketing Impetus to Aid Brand-Building and Higher Price Realization

Current Marketing Scenario

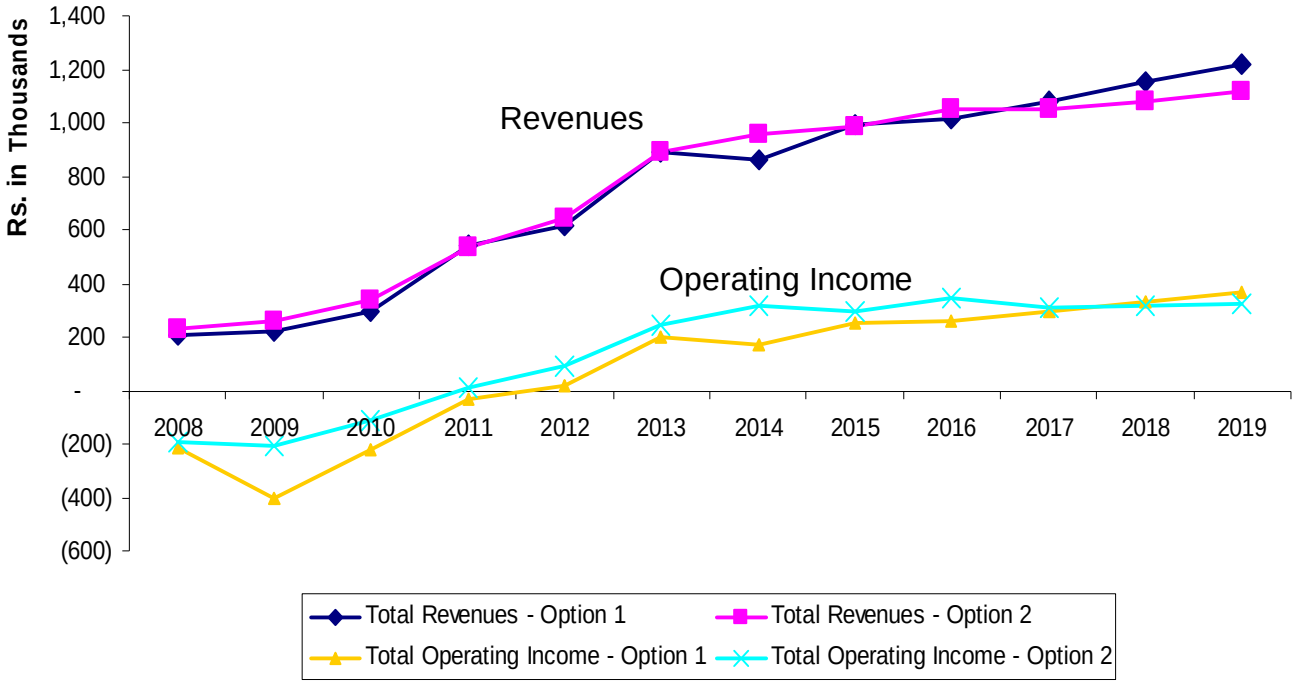
Proposed Marketing Scenario



Summary Business Plan - Replanting and Rejuvenation Initiative to Return ATC to Operating Profit in 3-4 Years

Assumptions

- § Revenue Streams
  - Tea in the area under tea
  - Jatropha and Patchouli in extension areas
  - No other revenue stream considered here
- § Expenses
  - Grow at 2% or as a percent of revenues (proportionate to 2006 levels)
- § Price of made tea – Assumed to remain at latest 2006-07 level as per GTAC report



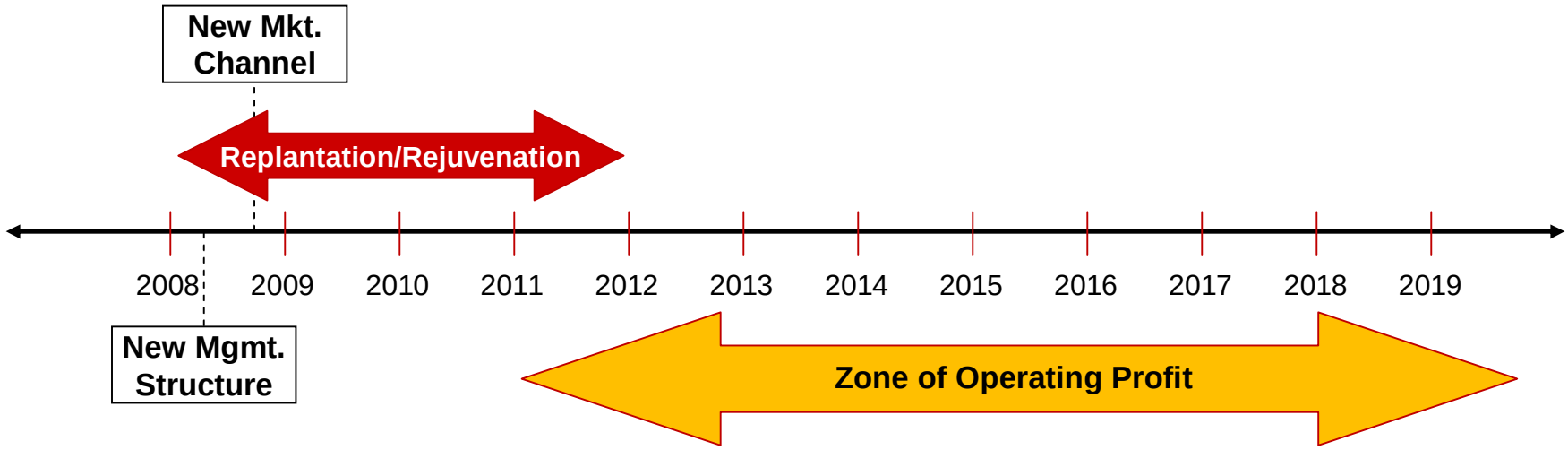
Option 1: Replantation (40%), Rejuvenation (60%)
Option 2: Rejuvenation (100%)

- Long term benefits of replanting over rejuvenation
- 3-4 years to operating profit
- Can be accelerated by further cost reductions and other revenue streams (e.g. tea tourism, additional crops etc.) not considered here
- Shall be able to meet non-operating expenses such as interest expenses one year after returning to profit
  - Need to work with financial institutions for outstanding debt in the interim (e.g. interest accrual)

Summary and Conclusion

Recommendations

- § Replantation and Rejuvenation: 3-4 year staggered approach (2 options)
- § High Value Crops in Extension and other available areas
- § Management Structure: Focused on Turnaround
- § Marketing: New Direct to Market Channel in Western India



Ø 3-4 Years to return to operating profit
Ø More than Rs. 60 crores in revenues and between Rs. 2-9 crores in operating profit by 2012

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Appendix - Economics of Replantation

Labor Man-days for Replantation (in Rs./Hectare)	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Land Preparation & Guatemala planting	360	0	0	0	0
Other Land Preparation	0	240	0	0	0
Planting of Tea plants	0	550	80	30	0
Planting of Shade plants	0	70	15	0	0
Weed Control	0	60	60	60	60
Plant protection.	0	25	30	30	30
Fertilizer & soil care	0	30	50	50	50
Young tea upkeep	0	0	50	30	30
Total Man-days for Replantation (in Rs./Hectare)	**360**	**975**	**285**	**200**	**170**
Total Labor Cost for Replantation (in Rs./Hectare)	**18,000**	**49,725**	**14,826**	**10,612**	**9,201**

Materials Cost for Replantation (in Rs./Hectare)	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Tea Plants (@Rs. 1.60 /plant)	0	24000	3200	2400	0
Shade Plants	0	3000	1000	0	0
Weed control	0	2000	1800	1500	1500
Plant Protection	0	1200	1500	1500	1500
Fertilizer	1000	12000	1500	1500	2000
Total Material Cost for Replantation (in Rs./Hectare)	**1,000**	**42,200**	**9,000**	**6,900**	**5,000**

Appendix - Economics of Rejuvenation and In-filling

Labor Man-days for Rejuvenation/Infilling Area	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Land Preparation & Guatemala planting	360	0	0	0	0
Medium Pruning & bush sanitation	0	180	60	40	20
Planting of Tea plants	0	250	50	30	10
Planting of Shade plants	0	50	15	0	0
Weed Control	0	60	60	60	60
Plant protection.	0	25	30	30	30
Fertilizer & soil care	0	30	50	50	50
Young tea upkeep	0	0	50	30	30
Total Man-days for Rejuvenation and Infilling Area	**360**	**595**	**315**	**240**	**200**
Total Labor Cost for Rejuvenation/Infilling Area (in Rs./Hectare)	**18,000**	**30,345**	**16,386**	**12,734**	**10,824**

Materials Cost for Rejuvenation/Infilling Area (in Rs./Hectare)	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Tea Plants (@Rs. 1.60 /plant)	0	12000	3000	2000	3500
Shade Plants	0	1500	500	0	250
Weed control	0	2000	1800	1500	2400
Plant Protection	0	1200	1500	1500	2250
Fertilizer	1000	12000	1500	1500	1750
Total Material Cost for Rejuvenation/Infilling Area (in Rs./Hectare)	**1,000**	**28,700**	**8,300**	**6,500**	**10,150**

Appendix - Economics of Growing Tea in Available for Extension Area

Labor Man-days for Extension Area	Year 1	Year 2	Year 3	Year 4	Year 5
Clearing /Levelling Land	125	-	-	-	-
Soil/Land Preparation	50	-	-	-	-
Drainage	65	-	-	-	-
Surveying	10	-	-	-	-
Organic matter application	30	-	-	-	-
Pitting @125 holes/m.d	120	12	6	-	-
Filling pits @200 holes/m.d.	75	8	4	-	-
Transportation @300 plants/m.d.	50	5	3	-	-
Planting @75 plants/m.d. (Including staking)	200	20	10	-	-
Fertiliser application @1000 plants/m.d.	15	2	1	-	-
Planting Shade trees :		-	-	-	-
Permanent	10	-	-	-	-
Temporary	20				
Mulching @300 plants/m.d. per round	150	50	-	-	-
Pruning/Tipping	10	20	30	40	40
Manual cultivation @30 m.d. round / chemical weed control	60	120	90	90	90
Application of plant protection chemicals @4 m.d./round	12	12	12	16	16
Application of fertilisers @4 m.d./round	12	12	12	12	12
Shade maintenance @5 m.d./round	15	10	10	10	6
Maintenance of drainage fencing etc.	-	10	10	10	10
Total Man-days for Extension Area	**1029**	**281**	**188**	**178**	**174**
Total Labor Cost for Extension Area (in Rs./Hectare)	**51,450**	**14,331**	**9,780**	**9,445**	**9,417**

Materials Cost for Extension Area (in Rs./Hectare)	Year 1	Year 2	Year 3	Year 4	Year 5
Organic matter	11,250	0	0	0	0
Mulching materials (collection from neighbouring areas/ forests) (25 to 30 tons/ha)	0	0	0	0	0
Tea planting materials	27,000	4,500	2,250	0	0
Shade tree planting materials (including 10% for gap filling)					
Permanent sp.	980	0	0	0	0
Temporary sp.	1730	0	0	0	0
Fertilizers	1,500	3,000	6,000	3,000	3,000
Plant Protection Chemicals	1,500	1,500	1,800	1,800	2,100
Weedicides	0	0	600	750	900
Total Material Cost for Extension Area (in Rs./Hectare)	**43,960**	**9,000**	**10,650**	**5,550**	**6,000**

Appendix - Economics of Jatropha

Economics of block cultivation of Jatropha
Number of plants / ha = 1333 at 3 x 2.5 m spacing

Cost Parameters (in Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Cost of 1400 seedlings including gap filling @ Rs. 3.50/each	4,900	-	-	-	-	-	-
Site development-Jungle cuttings etc.	1,500	-	-	-	-	-	-
Initial land preparation	3,000	-	-	-	-	-	-
Pit digging (45 x 45 x 30 cm) & refilling=1333 x 3	3,999	-	-	-	-	-	-
Application of Bio-control agents & bio-fertilizers	1,000	-	-	-	-	-	-
Cost of FYM @ 2-3 kg/pit	3,000	3,500	3,500	3,500	3,500	3,500	3,500
Cost of composite fertilizers (NPK) @ 50-100 g/pit	1,500	2,000	2,000	3,000	3,000	3,000	3,000
Cost of planting & gap filling	3,500	-	-	-	-	-	-
Protective watering immediately after planting	500	-	-	-	-	-	-
Pruning & trimming	1,500	1,500	1,000	1,000	1,000	1,000	1,000
Plant protection measures	500	500	500	500	500	500	500
Intercultural operations	2,000	2,000	2,000	1,500	1,500	1,500	1,500
Harvesting & post harvest processing like fruit drying, seed d	-	-	1,500	2,500	2,500	3,500	3,500
Contingencies @ 5%	1,345	475	525	600	600	650	650
Total Expenditure (in Rs./ Hectare)	**28,244**	**9,975**	**11,025**	**12,600**	**12,600**	**13,650**	**13,650**

Appendix – Revenue Opportunities from Intercrops/Other crops

Patchouli

Cost parameters	**Amount/Rs.**
Poly bag rooted cuttings 35000 including 5% gap filling & transport @ Rs. 0.75/seedlings	26250
Manures & Fertilizers (Annexure-I)	10875
Pesticides, Fungicides, Bio-control agents, growth hormones, vermin wash etc.	5000
Cost of diesel or Electricity charges for irrigation.	2500
Labour (150 Mandays) @ Rs. 75/MDS	11250
Contingencies @ 5%	2794
Total cost of cultivation	58669
Fresh herb yield/year from 3 cutting (within 9-11 months	18 MT
Dry herb yield at 5.5	3.3 MT
Gross return from dry herb @ Rs. 35/kg	**1,15,500**

Sarpagandha-(*Rauvolfia serpentina*) (20 months)

Cost parameters	**Amount/Rs.**
2.Poly bag raised seedlings 35000 including 5% gap filling @ Rs. 0.75/seedlings and transportation	26250
Manures & Fertilizers	8000
Pesticides, Fungicides, Bio-control agents, etc	3000
Tools and implements	2500
Labour (140 Mandays) @ Rs. 75/MDS	10500
Contingencies @ 5%	2512
Total cost of cultivation	52762
Yield of fresh roots	3.5 MT
Dry yield at 3.5:1 ratio	1.0 MT
Gross return at present market price Rs. 80.00/kg dry root	**80,000**

Appendix – Revenue Opportunities from Intercrops/Other crops

Satmul- (*Asparagus racemosus*) (20 months)

Cost parameters	**Amount/Rs.**
Seed 4 kg @ Rs. 5000	20000
Manures & Fertilizers	8000
Pesticides, Fungicides, Bio-control agents, etc	3000
Tools and implements	2500
Labour (190 Mandays) @ Rs. 75/MDS	14250
Contingencies @ 5%	2388
Total cost of cultivation	50138
Fresh yield of roots	15 MT
Dry yield at 6:1 ratio	2.5 MT
Gross return at present market price Rs. 40/kg	**1,00,000**

N.B: Dry roots of yellow variety sales at Rs. 75 – 100/kg

Sweet Flag-(*Acorus calamus*)-*10 months crop*

Cost parameters	**Amount/Rs.**
Seed material-Fresh rhizome/Growing tips) 6 q @ Rs. 1000/q	6000
Manures & Fertilizers	8000
Tools and implements	2500
Labour (160 Mandays) @ Rs. 75/MDS	12000
Contingencies @ 5%	1425
Total cost of cultivation	29925
Yield of fresh rhizome	15 MT
Dry yield at 6:1 ratio	2.5 MT
Gross return at present market price @ Rs. 25/kg	**62500**

Appendix – Revenue Opportunities from Intercrops/Other crops

Nagar Motha-(*Cyperus scariosus*), *two years crop*

Cost parameters	**Amount/Rs.**
Fresh rhizome 5 q @ Rs. 2000	10000
Manures & Fertilizers	8000
Pesticides, Fungicides, Bio-control agents, etc	3000
Tools and implements	2500
Labour (160 Mandays) @ Rs. 75/MDS	12000
Contingencies @ 5%	1775
Total cost of cultivation	37275
Fresh yield after two years	20 MT
Dry rhizome	4.5 MT
Gross return at present market price @ 20/kg	**90,000**

Appendix – Guwahati Tea Auction Center (GTAC) Price Report of ATC Tea

Comparative GTAC averages (Sale 14 to 05)

	2006-07		2005-06	
Mark	Kg.	Rs.	Kg.	Rs.
Isabheel			115483.4	45.00
Dejoo Valley(DR)				
Naganijan(DR)				
Sycotta	748972.2	71.34	624868.0	70.58
Cinnamara	652996.2	70.30	579555.8	66.65
Negheriting	755472.7	69.68	650563.4	66.07
Amluckie	724854.4	66.39	873702.8	57.86
Loongsoong	315634.1	64.30	323682.9	51.00
Deepling	369632.0	63.48	207272.0	63.26
Longai	511388.3	56.33	503413.9	41.48
Weighted Price		**66.85**		**59.81**
Gross Revenues from Sale		**272,667,746**		**231,963,962**

Appendix – Business Plan Details for Option 1 (40% Replantation, 60% Rejuvenation)

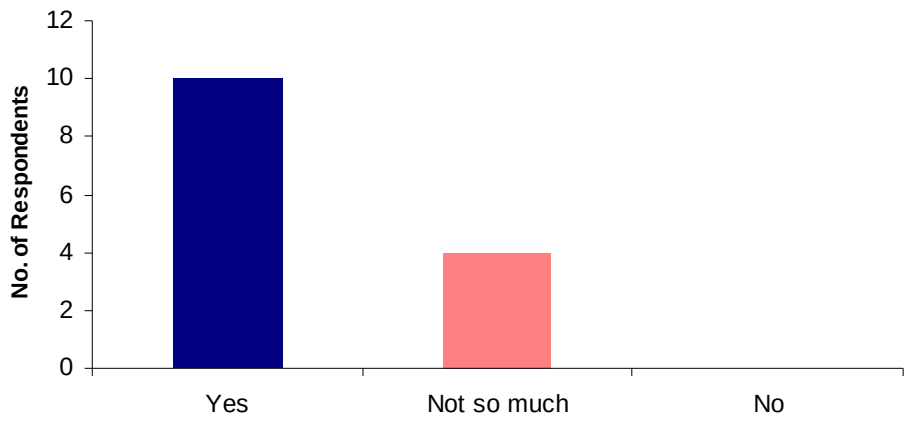
	Assumptions	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Revenues from Tea		205,564	219,060	290,696	533,823	605,175	885,300	852,120	984,254	1,011,268	1,077,042	1,142,815	1,208,589
Revenues from Extension Area	From Jatropha and Patchouli	5007	5007	5398	5658	6308	6438	6568	6568	6568	6568	6568	6568
Total Revenues		**210,571**	**224,067**	**296,093**	**539,480**	**611,483**	**891,738**	**858,688**	**990,822**	**1,017,836**	**1,083,610**	**1,149,383**	**1,215,157**
Salary & Wages - Base	Grows at 2% per year	(245,108)	(250,010)	(255,011)	(260,111)	(265,313)	(270,619)	(276,032)	(281,552)	(287,183)	(292,927)	(298,786)	(304,761)
Additional Labor Cost - Improvement Areas		(50,602)	(244,630)	(104,196)	(74,583)	(64,663)	(65,956)	(67,276)	(68,621)	(69,994)	(71,393)	(72,821)	(74,278)
ATPPF,CPF & Other Funds	Grows at 2% per year	(23,457)	(23,927)	(24,405)	(24,893)	(25,391)	(25,899)	(26,417)	(26,945)	(27,484)	(28,034)	(28,595)	(29,166)
Bonus	Grows at 2% per year	(16,124)	(16,446)	(16,775)	(17,110)	(17,453)	(17,802)	(18,158)	(18,521)	(18,891)	(19,269)	(19,655)	(20,048)
Ex-gratia	Grows at 2% per year	(7,686)	(7,840)	(7,997)	(8,156)	(8,320)	(8,486)	(8,656)	(8,829)	(9,005)	(9,186)	(9,369)	(9,557)
Purchases	As % of revenues	(2,413)	(2,572)	(3,413)	(6,267)	(7,104)	(10,393)	(10,003)	(11,554)	(11,872)	(12,644)	(13,416)	(14,188)
Raw materials/other consumption	As % of revenues	(39,302)	(41,883)	(55,579)	(102,063)	(115,705)	(169,262)	(162,918)	(188,182)	(193,346)	(205,922)	(218,497)	(231,073)
Electricity charges	As % of revenues	(14,434)	(15,382)	(20,411)	(37,483)	(42,493)	(62,162)	(59,832)	(69,110)	(71,007)	(75,626)	(80,244)	(84,862)
Cess on Tea	As % of revenues	(1,393)	(1,485)	(1,970)	(3,618)	(4,102)	(6,001)	(5,776)	(6,671)	(6,855)	(7,300)	(7,746)	(8,192)
Repairs & Maintenance	Grows at 2% per year	(7,617)	(7,770)	(7,925)	(8,084)	(8,245)	(8,410)	(8,578)	(8,750)	(8,925)	(9,103)	(9,285)	(9,471)
Sale Charge	As % of revenues	(4,053)	(4,319)	(5,732)	(10,526)	(11,933)	(17,456)	(16,802)	(19,408)	(19,940)	(21,237)	(22,534)	(23,831)
Freight Charge	As % of revenues	(5,236)	(5,580)	(7,405)	(13,598)	(15,415)	(22,551)	(21,706)	(25,072)	(25,760)	(27,435)	(29,111)	(30,786)
Other Operating Expenses	Grows at 2% per year	(5,835)	(5,951)	(6,071)	(6,192)	(6,316)	(6,442)	(6,571)	(6,702)	(6,836)	(6,973)	(7,113)	(7,255)
Total Operating Expenses		**(423,262)**	**(627,794)**	**(516,889)**	**(572,684)**	**(592,453)**	**(691,440)**	**(688,725)**	**(739,918)**	**(757,099)**	**(787,049)**	**(817,171)**	**(847,467)**
Total Operating Income		**(212,691)**	**(403,727)**	**(220,796)**	**(33,203)**	**19,030**	**200,298**	**169,963**	**250,904**	**260,737**	**296,561**	**332,212**	**367,689**

Appendix – Business Plan Details for Option 2 (100% Rejuvenation)

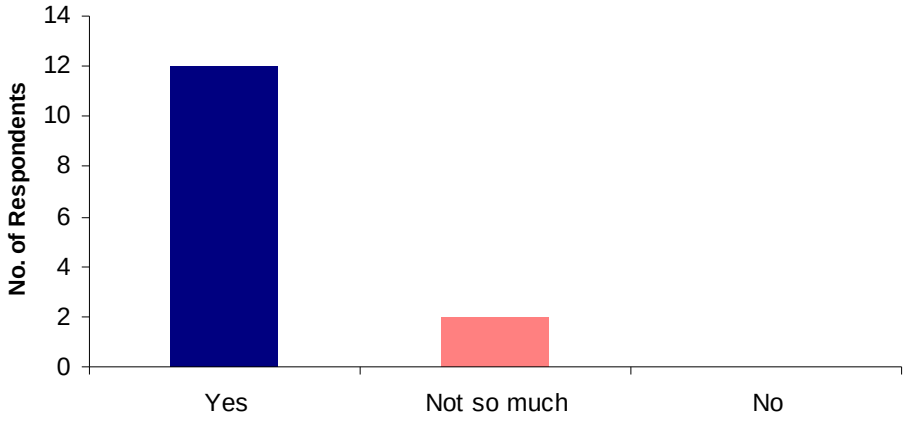
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Revenues from Tea		226,705	249,797	331,028	525,895	634,245	882,657	948,725	981,318	1,044,742	1,041,219	1,076,454	1,111,690
Revenues from Extension Area	From Jatropha and Patchouli	5,007	5,007	5,398	5,658	6,308	6,438	6,568	6,568	6,568	6,568	6,568	6,568
Total Revenues		**231,712**	**254,804**	**336,426**	**531,552**	**640,553**	**889,095**	**955,293**	**987,886**	**1,051,310**	**1,047,787**	**1,083,022**	**1,118,258**
Salary & Wages - Base	Grows at 2% per year	(245,108)	(250,010)	(255,011)	(260,111)	(265,313)	(270,619)	(276,032)	(281,552)	(287,183)	(292,927)	(298,786)	(304,761)
Additional Labor Cost - Improvement Areas		(50,602)	(81,356)	(38,163)	(23,945)	(18,575)	(19,184)	(19,805)	(20,438)	(21,084)	(21,742)	(22,414)	(23,100)
ATPPF,CPF & Other Funds	Grows at 2% per year	(23,457)	(23,927)	(24,405)	(24,893)	(25,391)	(25,899)	(26,417)	(26,945)	(27,484)	(28,034)	(28,595)	(29,166)
Bonus	Grows at 2% per year	(16,124)	(16,446)	(16,775)	(17,110)	(17,453)	(17,802)	(18,158)	(18,521)	(18,891)	(19,269)	(19,655)	(20,048)
Ex-gratia	Grows at 2% per year	(7,686)	(7,840)	(7,997)	(8,156)	(8,320)	(8,486)	(8,656)	(8,829)	(9,005)	(9,186)	(9,369)	(9,557)
Purchases	As % of revenues	(2,413)	(2,572)	(3,413)	(6,267)	(7,104)	(10,393)	(10,003)	(11,554)	(11,872)	(12,644)	(13,416)	(14,188)
Raw materials/other consumption	As % of revenues	(39,302)	(41,883)	(55,579)	(102,063)	(115,705)	(169,262)	(162,918)	(188,182)	(193,346)	(205,922)	(218,497)	(231,073)
Electricity charges	As % of revenues	(14,434)	(15,382)	(20,411)	(37,483)	(42,493)	(62,162)	(59,832)	(69,110)	(71,007)	(75,626)	(80,244)	(84,862)
Cess on Tea	As % of revenues	(1,393)	(1,485)	(1,970)	(3,618)	(4,102)	(6,001)	(5,776)	(6,671)	(6,855)	(7,300)	(7,746)	(8,192)
Repairs & Maintenance	Grows at 2% per year	(7,617)	(7,770)	(7,925)	(8,084)	(8,245)	(8,410)	(8,578)	(8,750)	(8,925)	(9,103)	(9,285)	(9,471)
Sale Charge	As % of revenues	(4,053)	(4,319)	(5,732)	(10,526)	(11,933)	(17,456)	(16,802)	(19,408)	(19,940)	(21,237)	(22,534)	(23,831)
Freight Charge	As % of revenues	(5,236)	(5,580)	(7,405)	(13,598)	(15,415)	(22,551)	(21,706)	(25,072)	(25,760)	(27,435)	(29,111)	(30,786)
Other Operating Expenses	Grows at 2% per year	(5,835)	(5,951)	(6,071)	(6,192)	(6,316)	(6,442)	(6,571)	(6,702)	(6,836)	(6,973)	(7,113)	(7,255)
Total Operating Expenses		**(423,262)**	**(464,519)**	**(450,855)**	**(522,046)**	**(546,365)**	**(644,667)**	**(641,254)**	**(691,734)**	**(708,189)**	**(737,398)**	**(766,764)**	**(796,289)**
Total Operating Income		**(191,549)**	**(209,715)**	**(114,430)**	**9,506**	**94,188**	**244,428**	**314,039**	**296,152**	**343,122**	**310,389**	**316,259**	**321,969**

Appendix – Management Survey Results

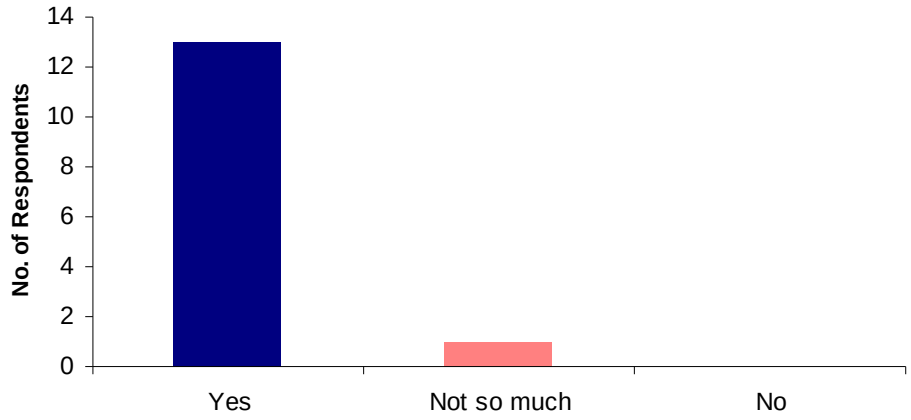
Office & Supervisory Staff is : Co-operative



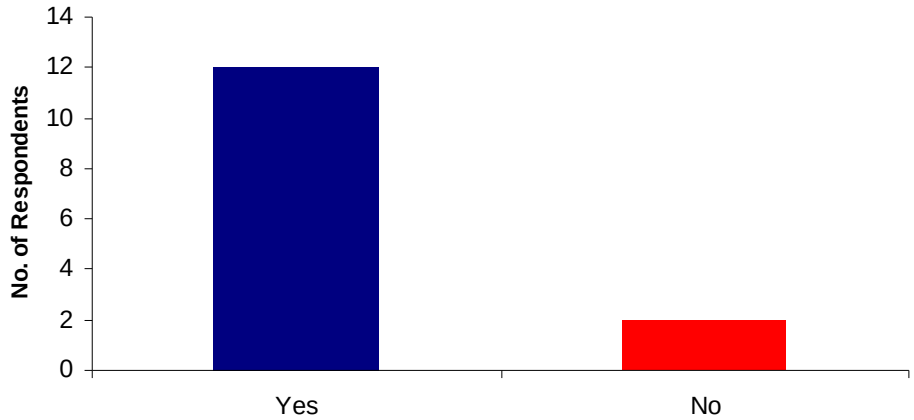
Office & Supervisory Staff is :Willing to Work Hard



Office & Supervisory Staff is : Optimistic about the future of A.T.C. Ltd.

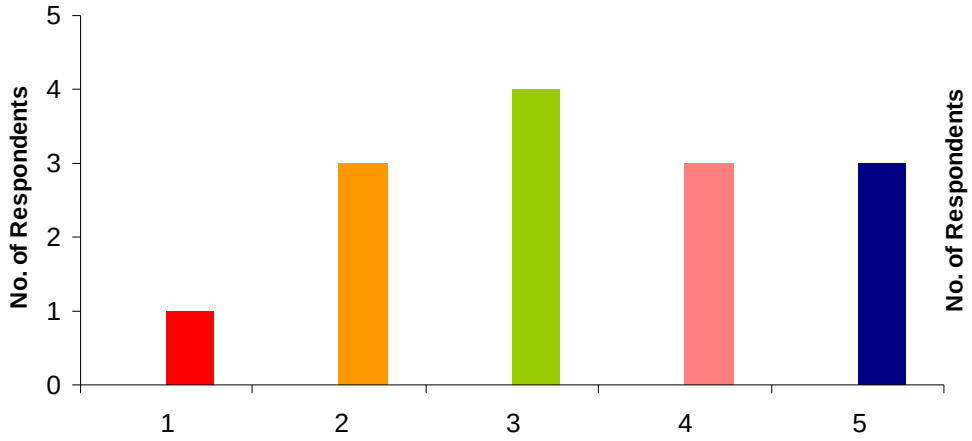


I have an option to reward my good staff

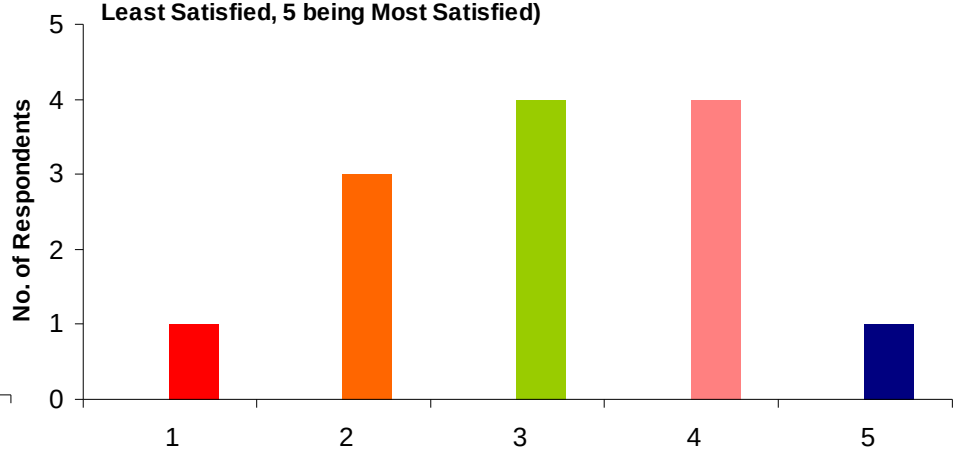


Appendix – Management Survey Results

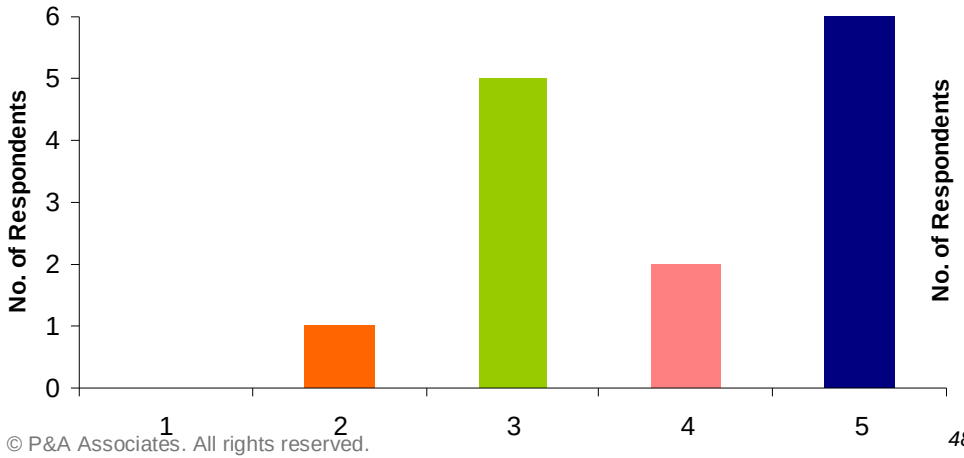
I am adequately compensated.(1 being Least Satisfied, 5 being Most Satisfied)



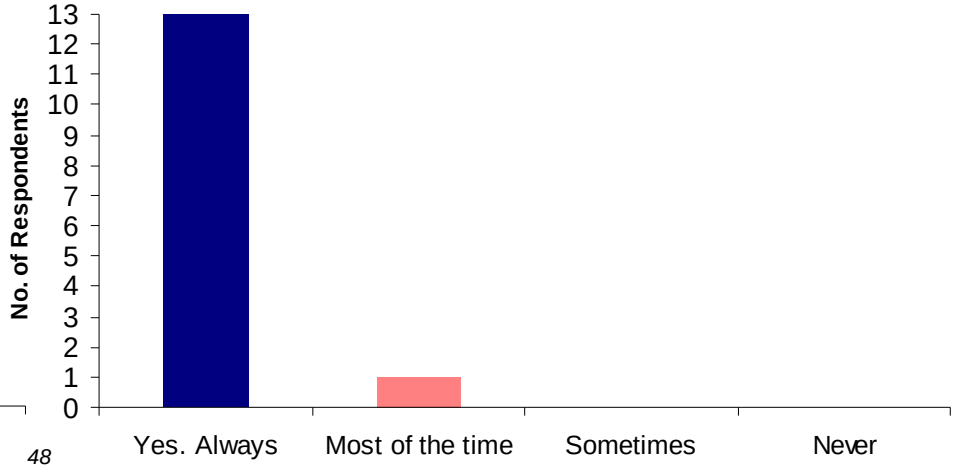
The organization has provided me with sufficient resources/opportunities to develop my managerial skills.(1 being Least Satisfied, 5 being Most Satisfied)



I am pleased with the decision-making power I have.(1 being Least Satisfied, 5 being Most Satisfied)

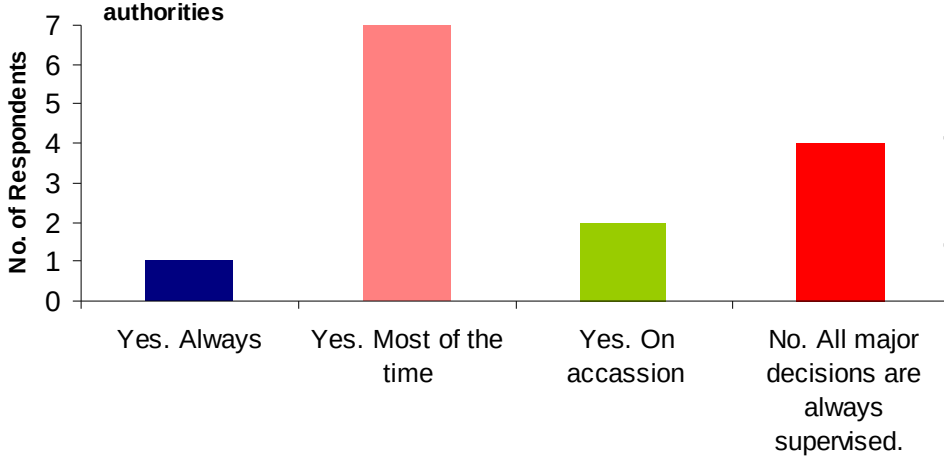


I am able to utilize the resources/opportunities to develop my managerial skills

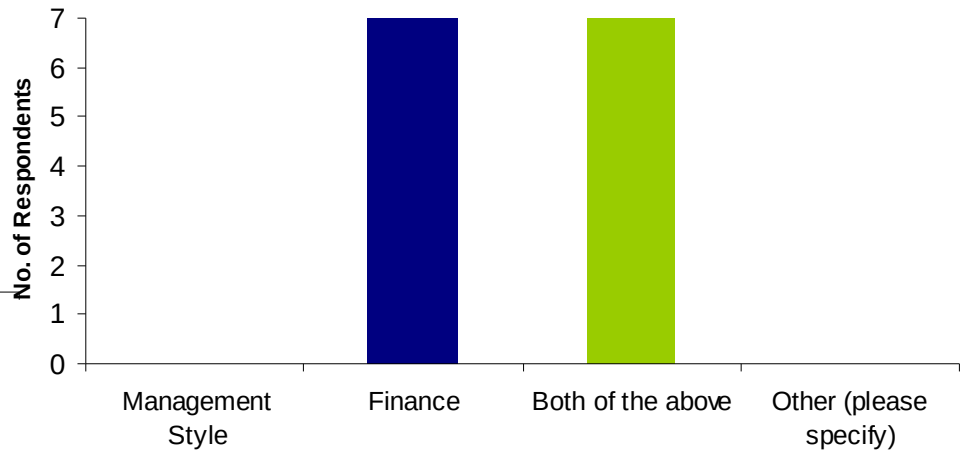


Appendix – Management Survey Results

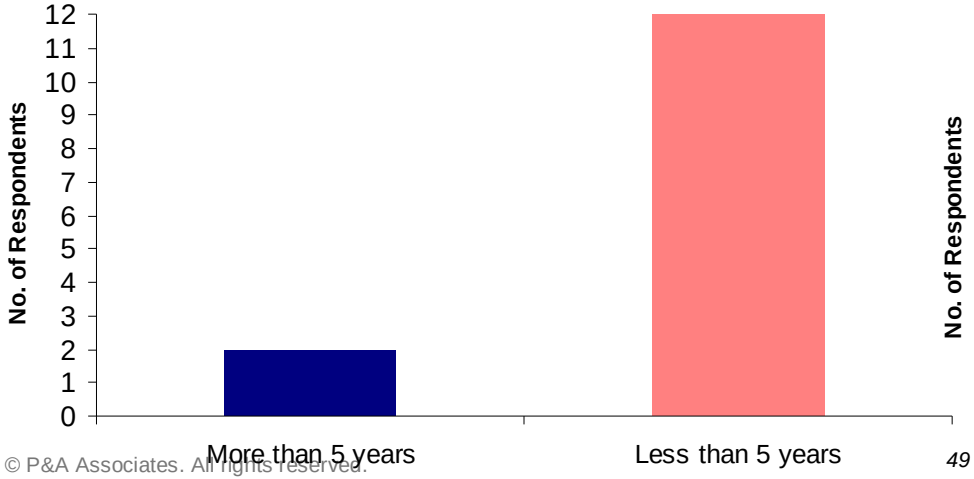
I am able to take independent decision regarding the estate management with minimum supervision/intervention from other authorities



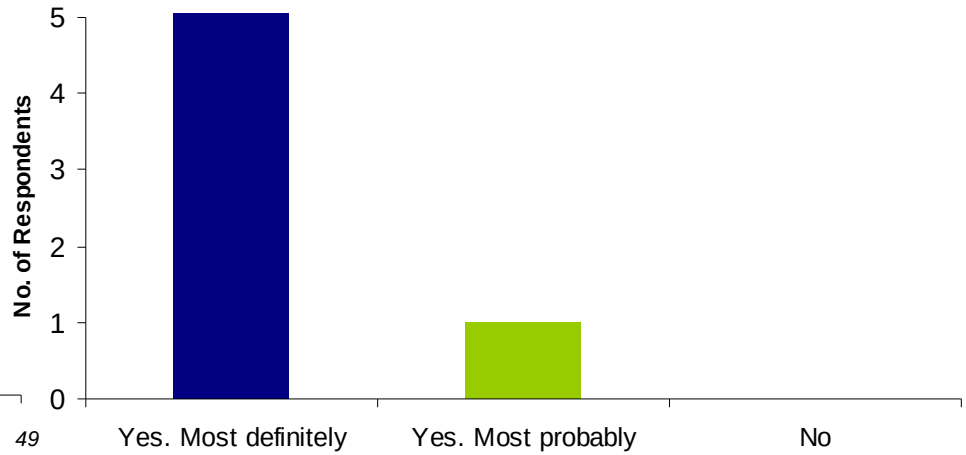
The biggest hurdle for the development of A.T.C Ltd. is:



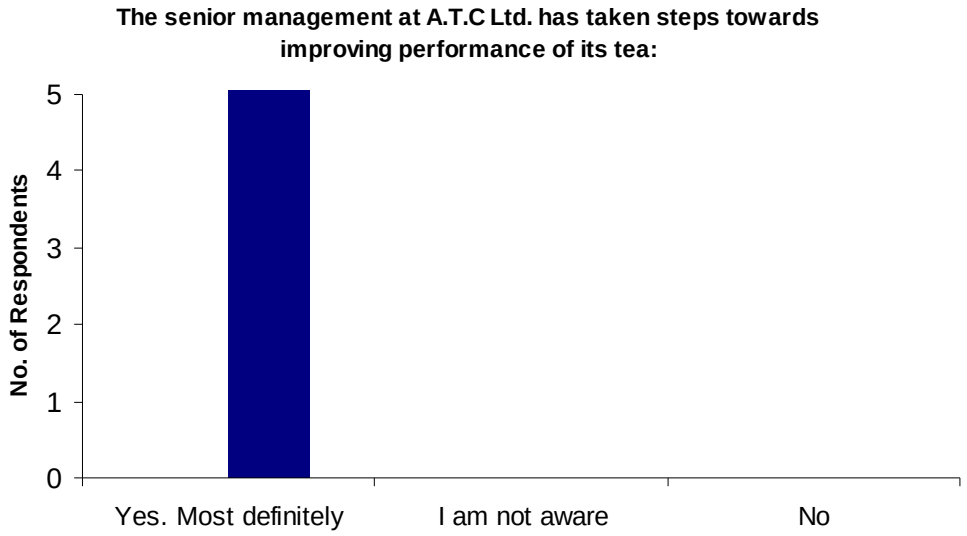
I have stayed as manager in my last estate for:<5 years / >5 years



With the right initiatives A.T.C Ltd. can survive the downturn in the tea industry:



Appendix – Management Survey Results



Appendix – India's Tea Imports and Exports

Table 8.11 : Tea production, consumption and trade

(Qty: million kgs, Value: Rs crore)

Year	Production	Exports		Imports		Domestic consumption $
	Quantity	Quantity	Value	Quantity	Value	Quantity
1997-98	835.6	211.3	2003.2	2.6	17.8	597
1998-99	855.2	205.9	2191.8	8.9	64.7	615
1999-00	836.8	188.9	1796.3	10.4	62.0	633
2000-01	848.4	203.6	1889.8	15.2	95.5	653
2001-02	847.4	190.0	1695.8	16.8	86.7	673
2002-03	846.0	184.4	1665.0	22.5	105.3	693
2003-04	850.5	183.1	1637.0	11.1	67.0	714
2004-05	830.7	205.8	1924.7	32.5	145.0	735
2005-06	930.9	181.1	1631.60	16.40	99.26	757
2006-07(April-Oct.)@	722.5	114.3	1048.50	13.75	70.84	NA

@ Estimated NA Not available $ Relates to calendar year.

Source : Ministry of Commerce and Industry.

Source: Tea Industry of India by V.N. Asopa,IIMA

Appendix – Net Present Value (NPV), Discount Rate and Terminal Value

Net present value (**NPV**) is a standard method for the financial appraisal of long-term projects. Used for capital budgeting, and widely throughout economics, it measures the excess or shortfall of cash flows, in present value (PV) terms, once financing charges are met. By definition,

NPV = Present value of net cash flows. For its expression, see the formula section below.

Formula

Each cash inflow/outflow is discounted back to its PV. Then they are summed. Therefore

$$\mathrm{NPV} = C_0 + \sum_{t=1}^{N} \frac{C_t}{(1+r)^t}$$ or shortened: $$\mathrm{NPV} = \sum_{t=0}^{N} \frac{C_t}{(1+r)^t}$$

Where

t - the time of the cash flow
N - the total time of the project
r - the discount rate (the rate of return that could be earned on an investment in the financial markets with similar risk.)
C_t - the net cash flow (the amount of cash) at time *t* (for educational purposes, C_0 is commonly placed to the left of the sum to emphasize its role as the initial investment.).

The Discount Rate

The rate used to discount future cash flows to their present values is a key variable of this process. A firm's weighted average cost of capital (after tax) is often used, but many people believe that it is appropriate to use higher discount rates to adjust for risk for riskier projects. A variable discount rate with higher rates applied to cash flows occurring further along the time span might be used to reflect the yield curve premium for long-term debt.

Terminal value

The present value at a future point in time of all future cash flows when we expect stable growth rate forever. It is most often used in multi-stage discounted cash flow analysis, and allows for the limitation of cash flow projections to a several-year period.

Perpetuity Growth Model

The Perpetuity Growth Model accounts for the value of free cash flows that continue into perpetuity in the future, growing at an assumed constant rate. Here, the projected free cash flow in the first year beyond the projection horizon (N+1) is used. This value is divided by the discount rate minus the assumed perpetuity growth rate: $T_0 = FCF_{N+1}/(k - g)$. T_0 is the value of future cash flows at a future point in time which is immediately prior to N+1, or at the end of period N, which is the final year in the projection period, k being the discount rate and g being the growth rate.

Source: Wikipedia

Appendix – Manufacturing/Factory

FACTORY BUILDING:
The factory building in general consists of three separate civil structures viz.

i. The Engine Shade : Area 1,500 Sq.ft.
ii. The Withering Trough Shade. (High Roof) : Area 25,000 Sq. ft.
iii. The Main Building, which covers all the machinery, a stores for spare parts and a large area to store the packed tea. It also provides office rooms. : Area 20,000 Sq. ft.

However, the new designs incorporate the Trough House with the Main Building to a very large extent ,resulting in considerable reduction in the cost of civil construction.

(A) Approximate Cost Of Building The Three Shades :

Taking the cost of civil construction to be a modest Rs. 450 per Sq.ft. the total cost of the shades : Rs.2.00 Corers . …….. (I)

(B) Cost Of Machinery :

i.	Generators 350 KVA – 1 No.	:	Rs. 22.00 Lakhs
ii.	Generator 250 KVA—1 No.	:	Rs. 18.00 Lakhs
iii.	Transformer 500 KVA : 1 No.	:	Rs. 10.00 Lakhs
iv.	Co-Axial W.Trough Fans : 30 No.s	:	Rs. 6.00 Lakhs
v.	Oil Heater & Hot-air Ducts.	:	Rs. 5.00 Lakhs
vi.	46 Inch Double –action Rolling Table : 6 No.s	:	Rs. 12.00 Lakhs
vii.	36 Inch -Do - ; 6 No.s	:	Rs. 10.00 Lakhs
viii.	C.T.C. 14 Inch Diameter with Rotorvane : 3 No.s	:	Rs. 60.00 Lakhs
ix.	Continuous Fermenting Machine (C.F.M.): 3 No.s	:	Rs. 30.00 Lakhs
x.	Coal/ Gas Fired Tea Drier		
(350 kg m.t. out put /hr.) : 3 Nos.		:	Rs.90.00 Lakhs
xi.	Sorting System 500 kg/ hr. : 2 No.s	:	Rs.20.00 Lakhs
xii.	Electrification & other machinery items such as a 6 Ft. Conventional Tea Drier for Orthodox mfg, Weighing scales, Water Supply system, Weigh-bridge etc.	:	Rs. 70.00 Lakhs
	Total	:	Rs. 3.53 Corers
Grand Total of the cost of building the factory :: (I) + (II)		:	Rs. 5.53 Corers

(C) **WORKING CAPITAL** :
Taking the cost of manufacturing to be Rs. 15.00 per K.g. of made tea, since we will be producing 10,000 K.g.s / day our daily requirement of finance will be:
Rs. 15 x 10,000.00 = Rs. 1,50,000.00 (excluding the cost of G.L.)

If the time taken to receive the payment of the tea sold through Guwahati Tea Auction Center & through private sales is taken to be 45 days , then the Working Capital required will be : 45 days x 1,50,000.00 = Rs. 67.5 Lakhs or Rs. 70.00 Lakh (Approx.).

The existing factories owned by A.T.C. have become obsolete. They have also become o very costly to operate. The productivity per worker is much below that of a standard tea factory. As such it is strongly felt that at least three centralized factory is built to cover the estates in Jorhat , Golaghat & Sibsagar Districts.