GOALS AND PERCEPTIONS IN STRATEGIC PLANNING

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Acknowledgment

I am grateful to members of the management of India Tobacco Company for the patient good humor with which they suffered through my queries. Mr. S.K. Keshava (Chief Scientific Officer), Mr. V. Raman (Chief Production Officer), Mr. J.K. Chatterjee (Head of Public Relations) and Mr. S. Venu (Chief Economist) spent many hours with me exploring the evolution of ITC. I thank them also for making available several corporate documents.
GOALS AND PERCEPTIONS IN STRATEGIC PLANNING

The deteriorating investment environment for multinational corporations has excited much debate in recent years. This study will explore the hypothesis that even in a turbulent, deteriorating environment an MNC can maintain its level of profitability and may even increase its returns. Much depends on the flexibility of corporate response, the sophistication of its strategic planning and the accuracy of its environmental perception.

The effort that follows is in two parts. The first is a detailed examination of the strategic response, over almost 75 years, of a MNC and the second is a conceptual framework that develops the theoretical basis for the firm's response.

A TOBACCO TALE AT BRITISH AMERICAN

"'O Oysters," said the Carpenter, 
'You've had a pleasant run! 
Shall we be trotting home again?' 
But answer came there none-- 
And this was scarcely odd, because 
They'd eaten every one."

--Lewis Carroll

The story began in 1901 when British American Tobacco (BAT), a U.K. corporation, opened a branch in Calcutta. The foreign firm entered India when India, as part of the British Empire, was a captive investing area for British firms. It perceived an abundance of local raw materials, a large captive market and the opportunity for making handsome profits. It also noted that though tobacco had been introduced in India by the Portuguese in the 16th century, leaf tobacco suitable for
cigarette manufacture was not grown locally. The technology of tobacco processing was neither sophisticated nor indeed unique to BAT. The advantage of the British company lay in its knowledge of marketing and its skills in molding consumer tastes.

The branch in Calcutta, called BAT-India Ltd, existed for a very short period, it being scrapped in 1902 (in 1976 company executives could advance no reasons for this change) and replaced by the India Leaf Tobacco Development Company (ILTD). ILTD started growing leaf tobacco in 1906. For reasons now lost in the obscurity of history, BAT decided to establish another wholly-owned firm as well, and on August 24, 1910, the Imperial Tobacco Company (ITC) was incorporated as an Indian company under the laws of the land. Until 1910, BAT had groped for direction in India and debated on the legal form of its investment. The Indian Government did not concern itself with the activities of British corporations, so for nine years the British firm pondered the question of incorporation since no local pressure to take a decision was evident.

It was decided that ITC and ILTD would provide the basic raw material for cigarette manufacture, that is, tobacco; develop the necessary infrastructure and enlist the support of local agricultural interests. Over the years ITC became primarily a domestic marketing and distributing organization with ILTD more concerned with exporting some types of raw tobacco to Britain, developing indigenous suppliers and even establishing its own small Research and Development effort and Agricultural Extension
Service for improving the quality of leaf tobacco and instructing local farmers in the techniques of care and cultivation. ILTD initiated the cultivation of Virginia tobacco on Indian soil in 1920 and introduced the Flue-Curing Process in 1928-29. These innovations changed the character of tobacco production and consumption in India and transformed it into a major tobacco producing nation. (In 1976 there were 10 cigarette manufacturing firms in India, marketing 107 brands with prices ranging from 12 to 75 cents for a pack of twenty.)

The first BAT manufacturing facility was established in Monghyr in 1906 under the ownership of Tobacco Manufactures India (another BAT firm) and was followed by plants at Bangalore (1912), Saharanpur (1928), Calcutta (1934) and Bombay (1942). A printing factory, Printers India, now reputed to be one of the most modern printing establishments in Asia, was started near Madras in 1949.

BAT continued both to manufacture domestically and to import cigarettes until the late thirties. From 1940 onwards the war in Europe put a halt to the importation of cigarettes into India and the domestic market was entirely supplied by locally-made products.

The growing nationalism in India all through the twenties, thirties and forties convinced BAT that its operations there should be self-sufficient. The political climate changed drastically with the advent of independence for India, and foreign ownership of Indian companies came under resentful scrutiny.
by the people in charge of formulating economic plans for the emergent nation. Exclusion of local ownership from firms that depended on the local economy for both supply and demand was not viewed with much favor. BAT correctly perceived this change in its environment and decided to distribute 6% of the equity in its Indian operations to the local public. The dilution in British ownership was accomplished by expanding the capital base, not by disinvestment. At the same time, BAT merged with two other firms, Tobacco Manufactures India Ltd (TMI), now the production organization of ITC, and Printers India which was the printing company that had been responsible for the packaging of cigarettes sold by ITC, just as Tobacco Manufactures India (TMI) had been responsible for producing them.

A valuation of the assets of these companies took place in 1953. It was found that ITC, being a marketing company, had very little value by way of real assets. What it owned consisted of a few automobiles and some office equipment. Even the business premises were rented. TMI, however, had assets worth around Rs 50 million. While the revaluation was being undertaken it was discovered that cigarettes manufactured by TMI and transferred to ITC were attracting intercorporate taxation. A merger on purely financial grounds was necessary. Political considerations such as partisan feelings against foreign firms dictated that BAT attempt to consolidate its Indian interests before offering domestic investors an interest in the equity.
The decision to merge and then dilute ownership was taken in London after consulting local British managers in Calcutta. The strategy was quite consistent with BAT's global policy of territorial self-sufficiency and adaptation to the environment. The parent company had decentralized tactical decision making while maintaining policy control. Its headquarters in London managed sales of £2.5 billion in 1974 and after-tax profits of £180 million with a staff of 400 people.

Through the fifties, India struggled to formulate a national philosophy and enunciate developmental priorities. BAT watched the process closely and concluded that the import of raw materials for the cigarette industry would not be permitted for long. Consequently, it decided to expand the R&D activities of ILTD in an effort to encourage the local cultivation of tobacco leaf that met the quality and characteristics of the inputs needed for cigarette manufacture. Until 1949-50 the local R&D effort had consisted of sending indigenous samples to Liverpool for testing and evaluation at the BAT laboratory there. The feedback usually took six months.

The need to reduce response time as well as energetically develop self-sufficiency in raw material supplies resulted in the establishment of a research laboratory in India in 1952. Its structure and operations duplicated the BAT facility in Liverpool. From 1952 to 1956, the Indian laboratory did little work on the product or process of the tobacco industry. Instead it merely evaluated materials and searched for local substitutes.
During these years, one project, however, was successfully undertaken. Locally grown tobacco had caused problems in burning in cigarettes. ILTD analyzed the tobacco chemically, isolated the cause of nonburning and solved the problem. This success so encouraged local managers that proposals for an extensive leaf-analysis program were presented. It was also suggested that the laboratory conduct soil and fertilizer experiments.

Accordingly, in 1957-58 a new laboratory was established with facilities for analyzing fertilizers, soil, water and leaf tobacco. In addition, an advisory service was established to aid supplying farmers in the techniques of leaf identification, planting, cultivation, and fertilizing.

The years 1954-74 also saw an expansion in the capital base of the enlarged ITC. From a figure of Rs 151.6 million in 1954, the equity base was expanded to Rs 189.5 million in 1974. This expansion led to a further dilution of foreign holdings in that the new capital was raised locally.

It was in 1970 that three significant changes took place at ITC: 1) an Indian was appointed Chairman of the Board, 2) the name of the company was changed to India Tobacco Company from Imperial Tobacco Company, likewise the symbol of the firm, and a slogan ("The best means of growth come from within") adopted in an effort to develop a new corporate personality. (The word "imperial" had certainly become anachronistic by 1970), and 3) Indian equity participation in the firm increased substantially.
The equity position in 1970 was:

Tobacco Manufactures Limited  
(A British firm owned by BAT)  54.5%
Tobacco Investments Limited  
(A British firm controlled by BAT)  17.5%
Rothmans International Limited  
(an independent British firm)  2.8%
Indian shareholders (a few hundred)  25.2%

In 1974, the foreign equity was brought down to about 60%, as shown below:

Tobacco Manufacturers Limited (U.K.)  48%
Tobacco Investments Limited (U.K.)  10%
Rothmans International Limited (U.K.)  3%
Indian shareholders (about 40,000)  39%

The Indian equity participation was therefore both deepened and broadened. The foreign equity was expected to fall to 40% within a few years, as ITC began to comply with the Foreign Regulation Act (FERA) of 1973. (See the section on the Regulatory Environment.)

ITC continued to grow more autonomous in its management decisions as India entered the decade of the sixties. The local management — and through it, BAT — began to sense that import substitution would not be a sufficient response to the changing Indian environment. The industrial community had always followed the fortunes of the Indian National Congress party (whose leadership was assumed by Indira Gandhi in 1967-68 when she became Prime Minister) and began to recognize that around 1967-68 there would be a great agitation in Parliament for a much higher degree of Indian participation in foreign-controlled firms, a
stress on reduced dependence on overseas sources for both philosophical inspiration and technology and, most certainly, a demand for the reduction in the repatriation of profits, dividends, fees and so forth by multinational corporations.

This movement towards greater self-reliance and reduced payments gained focus through a number of government documents. A commission called the Dutt Inquiry Committee was established to investigate the whole issue of industrial licensing and the structure of intercorporate links. The effort of the Committee culminated in the passage of the Monopolies and Restrictive Trade Practices Act (MRTP), which largely defined local anti-trust law. The FERA of 1973 was a logical continuation of this process and for the first time made a distinction between an Indian and a foreign-owned firm actually operating in India, as opposed to entry.

The year 1967 turned out to be a very important political watershed. The hegemony of the Congress Party was sharply disturbed, particularly in the Hindi-speaking belt which had been its stronghold. Soon afterward, the party split and the faction under Mrs. Gandhi moved sharply to the left. The environment for private enterprise began turning hostile. Many businessmen were caught by surprise even though the signs had been clear since 1960. Few people had paid much attention to them for the first five years of the decade.

The nation began to define its economic priorities quite clearly after 1967. It was evident that industrial regulation
would be based not on questions of profitability or efficiency but on how well an enterprise satisfied national priorities. Agriculture, heavy and light industry were given first priority; consumer goods, second; followed by those defined as "luxury items;" and in fourth place came those activities perceived to make little contribution to national welfare. This last class was to be taxed heavily. ITC quite suddenly realized that its activities fell squarely in the last category. Unless it undertook activities considered valuable by the government policy makers, it would be in serious trouble. This was despite the fact that tobacco was a heavily taxed commodity already, and ITC was the largest private contributor to the national exchequer.

The company became controversial and even within the organization there was much debate about the corporate mission. Some felt that as an efficient and significant tax collector the firm was already contributing to national welfare. Others were of the view that since the taxes were not paid voluntarily, the firm was hardly doing the country a favor by paying its dues. They would be extracted anyway. Even the Rs 114 million of tobacco exported by ILTD was not considered a contribution since raw tobacco, being a 'traditional' export commodity, could have just as well been exported by a locally owned organization. As one of the managers put it, the government's attitude was, "Fine, all right, you jollies have been doing this since the early thirties. If you didn't do it, somebody else would, you know, so it doesn't make you a Jack Horner at all." The social
utility of ITC was perceived to be vastly different from its economic utility.

The management of ITC concluded by 1969 that the firm had little to claim by way of helping the nation meet its goals and social and economic objectives. The survival of the company was thus threatened by its lack of social relevance. A decision to diversify was taken. The sole criterion for the selection of industries within which to diversify was based on the imperative of earning foreign exchange. This would achieve two objectives: a) protect the flow of dividends to foreign shareholders (the return on equity had risen from 7% in 1962 to 15% in 1974. The rising trend was obvious in 1969 and this outflow of foreign exchange had begun to perturb the Indian Government); b) demonstrate to domestic regulation that as a net earner of foreign exchange, ITC performed a valuable service to the nation. The strategy for survival and growth was based on the single consideration of rapidly earning foreign exchange through exports.

At about this time, ITC stopped paying to BAT a buying fee on tobacco and also bought the right to certain brand names from Rothmans Limited, thereby eliminating the flow of royalty payments.

The change of image alluded to earlier took place soon after this decision. Until 1966 ITC had believed that multinational companies should maintain a low profile in host countries and minimize their interference with social and political processes. The experience of United Brands (formerly United Fruit) in Latin
America had long ago convinced BAT that anonymity was a sound strategy. However, the political pressures in India coupled with a sudden change in the domestic competitive environment between 1966-69 persuaded the management of ITC that the philosophy of anonymity would have to be abandoned and an aggressive campaign to develop a favorable corporate image in the minds of both consumers and regulators undertaken.

A wholly Indian-owned manufacturer, Golden Tobacco Company, found itself unable to increase its market share in the face of competition from ITC and Vazir Sultan Company (VSC), another foreign-owned firm which had close business ties with ITC. In 1966, Golden Tobacco decided to seek a political solution to its marketing problem by undertaking a widespread publicity campaign, which included full page advertisements in newspapers and magazines charging ITC and Vazir Sultan Company with exercising monopoly control over the cigarette industry (at that time these two foreign-owned firms held more than 80% of the market) and draining the country of large amounts of foreign exchange annually. Golden Tobacco thereby hoped to discredit the two foreign firms and ultimately have them severely restricted by the Government of India (under the provisions of the MRTP Act) with the intent of securing for itself the market share that ITC and VSC would lose.

ITC responded with a public relations campaign of its own. It created the post of Public Relations Officer, who reported directly to the Board of Directors. It severed all connections
with Vazir Sultan Company and began to reduce gradually its market share in an expanding market so that while absolute sales kept increasing the firm had succeeded in reducing its relative sales to 48% of the market in a few years. The Indianization of ITC began in earnest in 1966.

The transformation of image was not easy for ITC. Not having been a vociferous firm in the past, it found its task of projecting a dynamic, sympathetic image of itself out of character. There was considerable agonizing over what its image should be, and in the years 1966-69 it was not very successful in altering its identity from a quiet, unobtrusive, foreign-owned firm to a confident and active "Indian" company. Its tone was more apologetic rather than assertive. Management, however, persisted, and by 1972 the transition was completed. Golden Tobacco's challenge was met satisfactorily. Indeed, by 1970 ITC had persuaded BAT actually to divest some of its holdings rather than continue expanding the capital base, since this was upsetting the financial structure of the firm. The upshot was that BAT sold some of its shares to Indian investors. The repatriation of this capital was staggered over five years, 1970-74, the final installment being remitted in July 1974. In 1976, IBC was still not an Indian company as legally defined in the FERA, that is, one in which there was a maximum of 40% foreign ownership.

Survival is perhaps the most powerful organizational imperative. The management of ITC was convinced by 1970 that
the firm had to diversify in order to survive. The dominant criterion for selecting a new business was very early defined as an activity that would rapidly earn sizable amounts of foreign exchange. The new business also had to be related to the consumer goods industry since this is where the firm's expertise lay.

Accordingly, the directors established a corporate strategy division to conduit environmental scanning along the following dimensions: i) political, ii) sociological, iii) economic, iv) technological, v) regulatory, and vi) international. The reports that this effort generated were, unfortunately, largely ignored by senior executives when deciding on the diversification strategy and ventures were selected mainly on the basis of instruction from the Chairman and a few key directors. The formal scanning process rapidly fell into disuse and by 1976 had been almost abandoned.

After an initial period of corporate confusion and managerial disarray, ITC was able to consolidate its diversification policy. In 1975-76 it was governed by the following considerations:

1) A clear capacity to earn foreign exchange.
2) Development of ancillary industries in the small scale sectors.
3) Expansion of output in the priority core sectors of the economy.
4) Service and labor intensive activities.
5) Location of facilities in the more backward and rural areas of the country.
All of these considerations were carefully designed both to maximize corporate compliance with Government policies and to secure for the firm the benefits of Government incentives, tax advantages and active social approval. Since all five criteria formed key aspects of the Government's social and economic philosophy, ITC decided to internalize them in its policy-making process and thereby transform itself from a firm at the bottom of national priority to one that could be considered a significant contributor to national interests. The change in corporate purpose, in terms of both image and reality, had, of course, just begun by 1975. But a foundation had been laid for rapid change, for as early as 1968-70 management had begun to question seriously the viability of the firm in what appeared to be an increasingly hostile environment. The effective management of change continued to be a major concern of senior executives at ITC into 1976.

In addition to its traditional businesses of manufacturing and marketing tobacco products and printing and packaging (both for its own purposes and for customers in the basic user industries, such as detergents, pharmaceuticals, toiletries, etc.), ITC had by 1976 managed to diversify into four other activities:

1) **Hotels** - ITC's activity in this sector was conceived mainly as facilities for tourists. Three hotels were planned. The Chola in Madras became operational in August 1975. The Hotel Moghul-Oberoi in Agra was
scheduled to open in the winter of 1976. And the Hotel Maurya in New Delhi was expected to open in 1977 in time for a Winter Trade Fair.

2) Marine Foods - Operations in this area had commenced in 1971 and exports had reached Rs 47 million by 1974-75. There were no domestic sales. The firm had received agreement by the Government to a letter of intent to establish three marine food processing plants; one each in the more backward areas of the States of West Bengal, Orissa and Maharashtra. A traveling fleet composed of several fiberglass motorized boats and some trawlers built in India and two trawlers built in Mexico were being assembled in early 1976.

3) Paper and Board - This is considered a priority industry by the Government. ITC's proposed activity envisaged by 1977 was to form a separate wholly-owned company based in Hyderabad to manage a plant on the banks of River Godavari.

4) General Exports - Exports of products other than tobacco started in 1971, with sales of Rs 22 million. It was expected that these would rise to Rs 30 million by 1975-76. In 1976 a production base was being developed and outlets in U.S.A. were being explored in order to increase future sales well above the 1971-76 target.

None of the four activities mentioned above contained any foreign technological collaboration since indigenous expertise was found suitable.
The greatest area of organizational change had been a complete restructuring of ITC in order to better manage a multi-product business. Each business, by 1975, was being run by a separate division that functioned fairly autonomously.

**Resource Flows Between ITC and BAT**

The management of ITC had been almost completely Indianized by 1974, and the center of policy-making had shifted from London to Calcutta. There were only two foreign directors (despite 60% foreign equity) on the 11-member board. Appointment of directors to the ITC Board continued to be subject to ratification by BAT, and executives of the British firm sometimes visited India to apprise themselves of the local situation first hand. The recommendations of these visitors, however, were advisory, not mandatory. Hence, the influence of BAT was subtle and somewhat limited.

Capital inflows from BAT had stopped in 1960. Subsequently, the chief resource that BAT provided ITC was information, both technical and commercial (free of cost), plus some assistance in developing exports around the world. There was no formal technical collaboration agreement between the firms. Starting from 1974, BAT had a negligible decision making impact on ITC. The last wholly-owned investment BAT had in India in 1976 was ILTD, and this, it was agreed, would be merged with ITC by 1977-78. The management of ILTD was solely responsible to ITC. In fact, ITC operated ILTD very much as a wholly owned subsidiary. Figure 1 delineates the relationship of BAT, ITC and ILTD in 1976.
Figure 1

RESOURCE FLOWS BETWEEN ITC AND BAT
(1976)

\* Formerly Imperial Tobacco Company
\# Very briefly called BAT-India Ltd (1901-2)
Some members of the management of ITC continued to be sent to an annual management development course organized by BAT in England. ITC paid for the cost of transportation and training. The courses were 6-8 weeks long and were of a general management nature with some functional problems included.

It was expected that the flow of technology from BAT would become restricted as the foreign company gradually lost control over ITC. The possibility that closely held corporate information could leak to competitors was the prime reason. Another cause was that ITC made available to its domestic competitors its research findings and technical data as part of its policy of changing its image and profile. BAT feared that this could lead to proprietary information's being transmitted to its global competitors through their Indian links. While BAT had not actually refused to supply specific information when requested to do so by ITC, it had become increasingly reluctant to disclose certain types of data and technology.

Commercial information, however, flowed freely from BAT to ITC. An example of this was the marketing impact of health warnings printed on cigarette packs. Legislation requiring the printing of cautionary clauses was expected to be introduced in 1976. ITC had no experience in dealing with this marketing variable. While the impact of such legislation was well known in developed nations, its influence on markets in developing nations was not documented. BAT surveyed its global environment and found that a market comparable in character to
that in India existed in Fiji, where similar legislation had been enacted in 1972. The London office of BAT summarized the impact of the Fijian legislation on normal market forces and passed the report on to ITC. As a consequence of this resource flow, the marketing department of ITC felt better prepared to deal with the impending Indian legislation.

Further, some of the exports of raw tobacco that ITC undertook were made possible by its links with BAT, which either used the tobacco in its own manufacturing facilities or found a market for it elsewhere in the world. The nontraditional general exports that ITC attempted to develop (anything from pins to pianos, this division functioning very much as a general export house) have also been helped by BAT's ventures into non-tobacco areas such as retailing, e.g., its acquisition of Gimbels and Saks Fifth Avenue stores. Some of the products that ITC had exported through its general exports division were sports coats, engineering goods, hand tools, garden shears and leather garments. It may be mentioned parenthetically that ITC also attempted to develop links with other multinationals besides BAT. It had, in 1975, used some Japanese trading companies as channels of export and vehicles of market development.

The outflows from ITC to BAT took the form of dividends on equity. There were no royalties on the use of brand names and no allocation of head office expenses. This was a rather unusual arrangement between a parent and its subsidiary in that the equity BAT held in ITC was Rs 50 million in excess of its
investment capitalized at the time of valuation. The Golden Tobacco Company, a competitor, had charged that this was really a devious method of repatriating excess dividends and that the Rs 50 million in fact represented accretion to shareholders' equity. The Government of India rejected the charge and ruled that the valuation had been done fairly. The capitalization of retained earnings had caused the invested amount to increase as the firm used part of its profits to generate expansion from within. This was quite legitimate since instead of paying out all the profits as dividends, a portion had been used to add to the firm's capital.

**BAT and the Host Nation, Costs and Benefits**

The costs and benefits that arise out of an interaction between a multinational corporation and a developing host economy are difficult to assess. Data is scarce and externalities abound. Theoretical models are either too sophisticated for the domestic policy maker or too elaborate in their informational requirements. The direct impact of a foreign corporation on the host economy is easier to measure; and data for three years is presented below in respect to ITC:

1. **Government Revenue**

(Figures in Millions of Rupees)  
<table>
<thead>
<tr>
<th></th>
<th>1971-72</th>
<th>1972-73</th>
<th>1973-74</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ITC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Customs and Excise Duties</td>
<td>Rs1126.8</td>
<td>Rs1190.9</td>
<td>Rs1592.0</td>
</tr>
<tr>
<td>ii. Corporate Tax</td>
<td>35.6</td>
<td>29.2</td>
<td>54.3</td>
</tr>
<tr>
<td>iii. Dividend Tax</td>
<td>6.6</td>
<td>6.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Total (ITC)</td>
<td>Rs1169.0</td>
<td>Rs1226.7</td>
<td>Rs1694.5</td>
</tr>
</tbody>
</table>
b. ILTD

<table>
<thead>
<tr>
<th></th>
<th>7.6</th>
<th>12.9</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Export Duty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. Corporate Tax</td>
<td>10.2</td>
<td>9.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Total (ILTD)</td>
<td>Rs17.8</td>
<td>Rs22.1</td>
<td>Rs18</td>
</tr>
<tr>
<td>Total (ITC/ILTD)</td>
<td>Rs1186.8</td>
<td>Rs1248.8</td>
<td>Rs1667</td>
</tr>
<tr>
<td>ITC Gross Income</td>
<td>Rs2000.7</td>
<td>Rs2171.9</td>
<td>Rs2744</td>
</tr>
<tr>
<td>ITC Profits after Tax</td>
<td>Rs40.3</td>
<td>Rs23.3</td>
<td>Rs39</td>
</tr>
</tbody>
</table>

2. Wages and Industrial Relations

In ITC the nonmanagement unionized work force rose from 8,000 in 1967-68 to 10,600 by 1974-75. ILTD employed, in 1974-75, 1693 full-time and 20,915 seasonal workers. The total peak employment for ITC/ILTD was 32,208 in 1974-75. On the completion of its initial diversification program, the hotel and marine foods divisions alone would employ 1,500 and 1,000 workers, respectively.

The 1973-74 average annual wage of a worker was Rs 8556, with a minimum of Rs 5280 and a maximum of Rs 26,800. It may be noted that, in 1973-74, in most Indian firms, junior-middle management personnel rarely made more than Rs 26,000 in annual salary. The total wage bill in 1973-74 for ITC was Rs 83 million, and for ILTD, Rs 30 million.

In 1971, ITC was presented the Federation of the Indian Chambers of Commerce and Industry (FICCI) Award for outstanding contribution to industrial relations. The firm had established a technical Training Center in December 1970 at Bangalore to instruct trainers (who in turn would teach workers those skills
needed at the various plants) and improve supervisory and technical skills. Likewise, in 1971, each ITC factory established a training cell to provide formal training for workers. By 1976, 30% of the supervisory personnel at ITC had been promoted from the ranks of unionized workers. This was rather unusual among Indian firms.

3. **Foreign Exchange Earnings**

Appendix 1 records the growth of foreign exchange earnings for ITC/ILTD from 1965-66 through 1974-75. In fact, in 1969 ILTD received a Certificate of Merit for outstanding export performance from the Ministry of Foreign Trade and in 1973-74 ITC was recognized as an eligible Export House. (An Export House is an organization authorized by the Government of India to export goods and use part of its foreign exchange earnings to import capital goods from abroad. It is understood that these import goods would be used to produce exportable products) by the Government of India, thereby permitting it to import capital goods.

<table>
<thead>
<tr>
<th>Inflow of Foreign Exchange: (Millions of Rupees)</th>
<th>1971-72</th>
<th>1972-73</th>
<th>1973-74</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ITC</td>
<td>Rs 23.3</td>
<td>Rs 35.1</td>
<td>Rs 58.0</td>
</tr>
<tr>
<td>b. ILTD</td>
<td>105.5</td>
<td>145.1</td>
<td>200.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Rs 128.8</td>
<td>Rs 180.2</td>
<td>Rs 258.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outflow of Foreign Exchange:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. ITC Dividend</td>
<td>15.4</td>
<td>15.2</td>
<td>7.4</td>
</tr>
<tr>
<td>b. ITC Imports</td>
<td>2.1</td>
<td>0.8</td>
<td>2.6</td>
</tr>
<tr>
<td>c. ILTD Profit</td>
<td>3.3</td>
<td>3.0</td>
<td>3.3</td>
</tr>
</tbody>
</table>
d. ILTD Imports

<table>
<thead>
<tr>
<th></th>
<th>0.3</th>
<th>1.0</th>
<th>0.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Rs 21.1</td>
<td>Rs 20.0</td>
<td>Rs 14.1</td>
</tr>
</tbody>
</table>

Net Inflow for ITC and ILTD | Rs 107.7 | Rs 160.2 | Rs 243.9 |

Once the diversification program was completed, management expected that the foreign exchange earnings of ITC/ILTD would amount to between Rs 300 million and Rs 350 million per annum.

4. Tobacco Development

Over the years ILTD continued to increase the area under tobacco cultivation in backward dry lands, thereby providing the local population with a cash crop. From 464 hectares in 1971-72, a company-sponsored agricultural program had helped increase the acreage given over to tobacco cultivation to 16,626 hectares in 1972-73. The acreage was further increased to 24,500 hectares in 1973-74 and to 29,810 hectares in 1974-75.

The price paid to farmers supplying ILTD with tobacco also increased during this period, along with the volume of purchases.

a. Farmer prices
   (Rupees per kg of Tobacco) | 1967-68 | 1971-72 | 1972-73 | 1973-74 |
   i. Flue Cured             | Rs 3.47  | Rs 4.09 | Rs 4.95 | Rs 5.78 |
   ii. Air Cured             | 1.62     | 1.74    | 1.85    | 2.25    |

b. Tobacco purchases
   (Millions of Rupees)
   i. For Domestic Use       | Rs 140.2 | Rs 248.8 | Rs 154.9 | Rs 189.1 |
   ii. For Export            | 127.2     | 117.6    | 137.9    | 200.0    |

Total                      | Rs 267.4 | Rs 366.4 | Rs 292.8 | Rs 389.1 |

ILTD received the FICCI (Federation of Indian Chambers of Commerce and Industry) award for outstanding contribution to agriculture in 1970.
5. **Resource Allocation**

The following table summarizes the distribution of benefits arising from the production activities of ITC/ILTD.

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</thead>
<tbody>
<tr>
<td>i. % of turnover paid to Government (turnover is defined as total sales of the corporation)</td>
<td>58.1</td>
<td>56</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>ii. % of turnover paid to local raw materials</td>
<td>29.8</td>
<td>32</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>iii. % of turnover paid to Indians in salaries, wages and gratuities</td>
<td>4.9</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>iv. Other local expenses as % of turnover</td>
<td>5.2</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>v. Profit available for distribution as % of turnover</td>
<td>1.9</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>vi. Amount distributed as dividend as % of turnover</td>
<td>1.4</td>
<td>1</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>vii. Foreign shareholders' net dividend as % of turnover (60%)</td>
<td>0.8</td>
<td>0.6</td>
<td>0.3</td>
<td></td>
</tr>
</tbody>
</table>

b. ILTD

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<tr>
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</thead>
<tbody>
<tr>
<td>i. % of turnover paid to Government</td>
<td>4.9</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>ii. % of turnover paid for local raw materials</td>
<td>79.6</td>
<td>71</td>
<td>80</td>
</tr>
<tr>
<td>iii. % of turnover paid to Indians in salaries, wages and gratuities</td>
<td>9.0</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>iv. Other local expenses as % of turnover</td>
<td>5.6</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>v. Profit remitted as % of turnover</td>
<td>0.9</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

6. **Development of Ancillaries**

The ancillary industries supplying ITC were located in the following areas: a) machinery, b) materials for printing and packaging and c) advertising and merchandising materials. The
1974 turnover of these industries was Rs 140 million, of which Rs 40 million was attributed to ITC. All in all, 114 industrial units, employing 4500 workers, owed their business, in some measure, to ITC. In addition, ITC partly supported a distribution network of 500 wholesale dealers, 45,000 independent wholesalers and 500,000 self-retailers.

7. Indianization of Management

In 1957 the ITC Board consisted of 9 members, of which 7, including the Chairman, were expatriates. In 1975 the Board consisted of 11 members, of which 9, including the Chairman, were Indians. In 1957 the management cadre consisted of 119 expatriates and 318 Indians at ITC and 24 expatriates and 116 Indians at ILTD. In 1975 there were 5 expatriates and 358 Indians in the management cadre at ITC and only 1 expatriate at ILTD.

The Evolution of Research and Development at ITC/ILTD

It was expected in early 1976 that ITC and ILTD would merge sometime in 1977, the main motivation for which was a tax levied by the Government of India on firms not having an acceptable R&D function. Despite its efforts at building a technical base, ITC discovered that it would not be able to avoid the tax since its level of activity in R&D (1.13% of net income in 1975) did not satisfy the Government. Accordingly, it decided to combine with ILTD and thus acquire the substantial research development and training facilities of the latter. Not only would this move exempt ITC from paying the R&D tax,
it would also provide a valuable tax shield since R&D efforts could be expensed. In fact, the chief cause of ITC's own R&D effort was a desire to reduce its tax liability. Appendix 2 lists the R&D expenditure incurred by ITC from 1965-66 through 1975-76, and Appendix 3 summarizes the details of the tax shield from 1969-70 through 1974-75. While ITC's effort in R&D had been meager, ILTD had a long history of research and training.

ILTD began its efforts in 1920 when it pioneered the cultivation of Virginia tobacco on Indian soil. In 1928, it introduced the flue curing process. This was responsible for a radical transformation in the character of the Indian tobacco industry. In 1975 flue cured Virginia tobacco constituted 80% of India's tobacco exports and for 90% of the foreign exchange earnings derived from tobacco exports. This product provided the basic raw material for the cigarette industry (which contributed over Rs 2,000 million in central excise duties to the national exchequer). It meant a lucrative cash crop for 50,000 farmers and 300,000 farm laborers, and led to the employment of 120,000 workers in the tobacco processing and packaging industry, plus the stimulation of a growing number of ancillary industries.

For over 40 years ILTD had been the only Indian tobacco firm with its own Research Department. It was staffed by competent scientists and agronomists and had a well-equipped
laboratory. The firm spent Rs 2 million on research and extension services in 1975. The Research Department has conducted broad national surveys of soil composition, the distribution of rainfall, prevailing crop patterns, economic conditions and manpower availability in order to formulate a development program that would provide the tobacco industry with viable opportunities for profit and growth. After a number of surveys, experiments and pilot projects, ILTD succeeded in locating large tracts of light soils in the states of Andhra Pradesh and Mysore suitable for the cultivation of the ripe, open grained tobaccos preferred by smokers. It had committed corporate resources to develop these areas, both for meeting local and export needs as well as for offsetting the loss of land entailed by the construction of a large dam in the growing area. Since the techniques of producing flue-cured tobacco from light, rain-fed soils differed from those employed to produce it from black cotton soils (the usual tobacco growing soils), the firm had to develop new production methods as well.

While planning the development of cultivation on light soils, ILTD realized that there was great need for well-trained, technically competent personnel to assist local farmers in growing methods. Accordingly, the firm established a training school at Hunsur in 1965. The school leased an experimental farm where a number of pilot projects were undertaken.

The ILTD Research Department also had become involved in the large scale production of seeds at its multiplication
farms, which seeds were sold at subsidized prices to farmers. It also had experimented with plant breeding and selection in order to evolve disease resistant strains to meet changing requirements of quality; with fertilizers to determine optimum compositions and methods of application to suit varying conditions and varieties; with identification of tobacco pests and diseases for the purpose of evolving disease resistant strains, prophylactic measures and pesticides and fungicides; and with the chemical analysis of water and soils.

ILTD realized that overall improvement in yields and quality would only be secured by a package of improved practices, and from 1955 through 1962 it conducted a "Master Farmer Scheme" to demonstrate and propagate techniques evolved by its Research Department. In so doing, the firm undertook to supply all necessary inputs, including advice and supervision. It also insured any losses that farmers might incur from following the company's recommendations, and participating farmers were offered guaranteed prices for their crops. The program came to be recognized by most observers as a success. It was ILTD policy to provide farmers large interest free loans during times of natural calamities such as floods. All of these programs had been supplemented by the distribution of pamphlets, insertions in newspapers, and radio talks by the manager of its Research and Leaf Development Division. Appendix 4 lists in greater detail the results achieved by the ILTD R&D effort.

The ITC R&D effort had been much more modest. Its R&D division was established in 1952, mainly to develop import
substitutes and local materials. Later, the effort was expanded to evaluate indigenous tobaccos for cigarette manufacture. By 1967 the firm had achieved a high standard of testing and began to sell its services both at home and abroad. In so doing, by the end of 1968 it had entered into technical assistance contracts with companies in Malaya, Singapore, Hong Kong and Indonesia and had begun testing their products. Its 1975 earnings from this activity came to Rs 117,600 in foreign exchange.

Scientists from ITC had taken an active part in communicating research findings to, and cooperating with, official and semi-official bodies such as the Indian Standards Institution, Tobacco Development Council and the Central Tobacco Research Institute. Appendix 5 describes the chief accomplishments of the firm's R&D effort. Appendix 6 shows ITC's R&D imports for 1971-72, 1972-73 and 1973-74.

In 1972 ILTD and ITC decided to establish a joint R&D effort, and in August 1973 construction of the Integrated Research Center at Bangalore (Mysore State) was completed at a cost of Rs 4.3 million. It became fully operational in January 1974. Between 1974 and 1975 the facility undertook two projects:

a. A study of variation in conditioning and processing leaf tobacco;

b. A study of variations on cigarette making machines.

The two firms offered the use of their research facilities to the other 9 firms in the industry and volunteered to share their findings with them. Vazir Sultan Company and Asia Tobacco (a joint enterprise of the Government of Tamilnadu, the Central
Government and Mimec, a private corporation) accepted the offer and after paying a fee began using the facility. Godfrey Phillips (BAT's global competitor) declined, as did likewise Golden Tobacco Company. The other firms did not respond.

The Environment of International Business in India

The Administrative Environment: The system of administration in India continues to be a well-preserved legacy of the British Empire. The functions of the Indian Government under British rule were the collection of taxes and maintenance of order. The structure developed to perform these tasks became inadequate and obsolete after independence. The senior Indian administrator had so thoroughly imbibed colonial British values, norms and manners that he found it impossible to discard them or even conceive of an alternate indigenous model. Cultural schizophrenia ensued as the dialectics of Eastern and Western values failed to synthesize. Consequently, alternative aspects of personality gained dominance and were reflected in the administrative process. The result was that the concept of fair play mingled with manipulation and maneuvering, politeness with arrogance, reserve with outburst.

The elite Indian Civil Service and its less illustrious descendant, the Indian Administrative Service (IAS), formed the core of bureaucratic decision-making within the Government of India. Accustomed to managing by executive order rather than consensus, schooled to govern rather than participate, members of the ICS and IAS were never completely comfortable with or committed to the idea of the gradual evolution that democracy
entails. The rather autocratic and arbitrary nature of the civil service tended to make corporate planning a hazardous activity at best.

BAT had had the advantage of being familiar with this mode of decision-making but nonetheless its flexibility of response was limited by the inherent uncertainties of a system which confined its decision-making to a small and somewhat imperious group of bureaucrats.

The mercantile community in India generally tried to co-opt the administrative community (which was not indifferent to the overtures) by using both excessive obsequiousness and outright bribery, disguised by the euphemism of "ex-gratia payment." This situation only compounded the uncertainties since a business enterprise, especially a foreign owned firm with its relatively more rigid code of ethics, was never sure whether its fate and that of its competitors would be decided by uniform rules or by arbitrary act based on favors.

The transfer of decision-making authority to host country nationals, therefore, became well nigh inevitable for a foreign corporation, since the complexities of the administrative environment were best appreciated by domestic managers. This fact, of course, tended to reduce the degree of real control a parent corporation could exercise over its Indian enterprise.

It is possible that multinationals accustomed to decentralization and at least a limited uncoupling of ownership from management would do rather better than those firms which attempted to
maintain close control from a distance. Consequently, companies that do not resist the environmental pressure to transfer greater authority to local management find themselves better prepared to cope with the organizational demands which subsequent laws requiring the unbundling of management, capital and technology may impose on them.

The Political-Social Environment

The political process that evolved in India was exciting in its promise but unhappy in its realization. The desire for independence from British rule was translated into a coherent strategy with the founding of the Indian National Congress Party in 1885. It quickly attracted articulate, well-educated and wealthy Indians who, having attained or inherited material wealth and social status, sought political satisfaction through the struggle for independence from foreign rule. Imbued with British values, simultaneously attracted and repelled by their foreign masters, the leadership quickly coalesced into an elite, consisting of a dedicated group of lawyers, professionals and aristocrats. Prominent among them was Motilal Nehru, the father of Jawaharlal Nehru, grandfather of Indira Gandhi and great-grandfather of Sanjay Gandhi (no relation to Mahatma Gandhi) who is now one of the most powerful persons in India. The origins of the dynastic tradition in modern Indian politics can be found here.

The Congress Party rapidly acquired support and, with the emergence of Mohandas K. Gandhi (Mahatma Gandhi), developed into a genuine mass movement. For the first time in many hundreds
of years, the average Indian was drawn into the ambit of revolution. It was Gandhi's intention to mobilize the Congress Party for complete independence (under the slogan "Quit India") and once this had been attained, he had hoped the Party would withdraw and let others take over the task of governing a free India. It was, however, unreasonable and excessively idealistic to expect that the people who had led the revolution would not also want to govern.

Shortly after independence, on January 30, 1948, Gandhi was assassinated, and Jawaharlal Nehru became the undisputed leader of the nation. Those who had most passionately believed in Gandhi's principles disengaged themselves from the Party and withdrew into the villages and towns of the country to live with the peasants and common people, instructing and guiding them as Gandhi had hoped they would. Among those who subsequently joined this group was J.P. Narayan, who unsuccessfully tried to lead a mass movement against the Indian Government in 1974-75.

The bulk of the members of the Congress Party assumed that they were the logical rulers of the new India. Despite his commitment to democracy, Jawaharlal Nehru became an autocratic, imperious and intolerant prime minister. And the Party became a vehicle for protecting the interests of large landlords and industrialists rather than an instrument of mass social change. The divisiveness of caste, region, language and religion remained pervasive and enervating. The political process was transformed into an exercise in charisma and voter manipulation,
rather than an attempt to introduce and maintain participative democracy. The early excitement of the postindependence years gave way to despair, frustration and anger. Politicians sought personal wealth and power as their rewards for the long years of hardship endured during the preindependence years. And, in the process, they set an unfortunate example for their compatriates to follow. The corruption within the political system spread to all components of the national environment. Underpaid civil servants demanded bribes almost as a matter of right; businessmen sought to evade taxes as a matter of routine; students embarked almost joyfully on widespread cheating in exams; professors distributed grades in return for favors. The continual exploitation of the peasants by big landowners and money lenders was casually ignored. Cosmetic legislation streamed out from a parliament dominated by the Congress Party and changed little.

The concepts of self-abnegation and personal sacrifice, which were central to the culture and to Hindu religion, were twisted into mocking metaphors of public hypocrisy and private greed by both politicians and industrialists. The common people were pacified by exhortations to accept present suffering in the interests of future prosperity. The unrelieved deprivation of the peasant and the laborer contrasted savagely with the conspicuous consumption of the wealthy and powerful. The Communist and Socialist parties (e.g., Communist Party Maoist-Leninists, Peoples Socialist Party, Socialist Party of India,
Peasants and Workers Party) tried to exploit this situation via popular revolt. For a while they had some trivial successes, but when the threat of peasant violence became uncomfortably real in West Bengal (1966-1972), the Government executed thousands of extreme left radicals and halted the uprising. Even in those states where the communists came into power legitimately, West Bengal and Kerela, there was never much mass support for them as subsequent national elections revealed. The concept of communism, particularly its support of violent revolt, was too inimical to either the culture, the religion or the desires of the people. The Congress Party continued to hold power at the center, though weakened by opposition gains. Later, it even formed a tacit electoral alliance with the Communist Party Marxists and thus destroyed the revolutionary credibility of the latter. Corruption further eroded national discipline and paralyzed reform.

Starting in the early 1950's, a "parallel" economy began emerging. Growing, almost repressive, restrictions on private enterprise brought about by the socialism of Nehru and the intellectual dependence of Indian planners on the Fabian Society, forced industry into establishing a vast black market. In this illegal, clandestine market, everything from steel ingots to Cadillacs, perfumes to chemicals, textiles to gold-plated bathroom fixtures was easily available. The size of this market was variously estimated at between Rs 150 billion to Rs 240 billion a year, or 30%-50% of official Indian G.N.P. The in-
istence of the Government in taking control of the "commanding heights" of the economy, coupled with a lack of any real free market mechanism in the private sector, contributed to enormous inefficiencies and waste in the economy. The impracticability of socialism and the incompetence of the public sector led to considerable distortions in resource allocation. The upshot was that the economy achieved growth rates far below its potential. Simultaneous shortages and overcapacity plagued industry.

From 1967 through 1974 the environment for business, both national and international, continued to deteriorate as Mrs. Gandhi consolidated her power. Compounding these problems, there was a fear among Indian intellectuals and policy makers that unless foreign capital was treated with great circumspection, it could become a threat to national flexibility and self-reliance. It was felt that having won freedom from political domination after much toil, the country should not succumb to economic domination. Amidst the obscuring mists of nationalism, ideology and emotion, a rational evaluation of the costs and benefits of foreign investment could not be made.

In 1974, a more confident prime minister began turning the economy increasingly towards the ideological center. In 1975, she assumed extensive and pervasive power and rapidly enacted a series of measures designed to stimulate and reassure the private sector. Taxes were lowered; strikes were banned; many restrictions were lifted; price and dividend controls were eliminated; and foreign enterprises once again welcomed. Corruption in the
civil service was much reduced, and the investing environment stabilized as political uncertainty diminished and inflation was successfully contained.

The Foreign Exchange Regulation Act of 1973 was amended in 1976. Up to that time foreign investors had been permitted to retain control of companies only if they were deemed to in export or high priority industries. Up to a maximum of 74% foreign equity had been permitted. With the 1976 amendment firms containing up to 51% foreign equity were permitted if they used sophisticated technology for at least 60% of the annual turnover and exported a minimum of 10% of their turnover. This meant that subsequently a foreign investor could maintain majority equity in three types of companies:

1. Those that were in the designated priority areas;
2. Those that exported at least 60% of their output;
3. Those that used sophisticated technology for at least 60% of their output and exported a minimum of 10% of their turnover. "Sophisticated technology" remains undefined officially.

The Regulatory Environment

The basic structure of India's industrial policy was contained in the industrial policy Resolution of 1948 and subsequently modified in 1956. This policy envisaged a public sector, a mixed sector and a private sector, with foreign investment and technical collaboration permitted to varying degrees in each. Some areas of the economy were closed to both
foreign and private domestic investment, while others became virtually the exclusive domain of Indian private capital with no foreign collaboration of any kind, financial or technical, permitted. However, joint ventures formed prior to 1948 were not precluded from expansion.

The policy towards foreign investment was clarified in 1949 when Prime Minister Nehru observed that foreign participation would be required to: a) cover the gap between savings and investment, b) supply foreign exchange, and c) provide technical expertise. The chief features of this policy were:

i. Nondiscrimination between Indian and foreign firms;

ii. Provision for the remittance of adequate dividends and repatriation of capital, including capital gains;

iii. Payment of fair compensation in the event of nationalization;

iv. Major equity participations as well as effective management control to be, normally, in domestic hands.

From 1948 through 1973, these considerations continued to delineate official policy. Despite the provision of (iv) above, many firms were allowed to retain foreign equity and managerial control. These firms were either in priority industries, export-oriented, dependent upon advanced technology, or those in which foreign investors historically had maintained control.

The Foreign Exchange Regulation Act of 1973 differentiated for the first time between an Indian and foreign firm and required Indian participation to be raised to 60%, except in
those areas deemed priority industries or where the firm exported 60% of its output. The provisions of the act were somewhat diluted in 1976 when the amendment discussed earlier came into force.

As official regulation of industry grew over the years and government intervention in the economy became larger and more frequent, the bureaucratic machinery for screening foreign investment became increasingly unwieldy, inefficient and slow. The Industries (Development and Regulation) Act of 1951; the Monopolies and Restrictive Trade Practices Act of 1969; and the Patents Act of 1970, among others, caused licensing requirements, rules and procedural steps to proliferate. The Government of India realized that preinvestment procedures were causing unconscionable delays in taking decisions and, hence, overhauled its system of screening applications in November 1973.

A Project Approvals Board (PAB) was created at that time. This was an interministerial committee of Secretaries presided over by the Secretary of Industrial Development. The Licensing Committee, Foreign Investment Board, Capital Goods Committee and the Licensing-cum-MRTP (Monopolies and Restrictive Trade Practices) Committee functioned as a committee of the PAB, which has become the chief policy and decision-making authority as regards foreign investment.

To serve the administrative requirements of the PAB, a Secretariat for Industrial Approvals (SIA) was created as a separate division within the Ministry of Industrial Development. The SIA became responsible for:
i. Receiving and processing applications;

ii. Issuing final government orders, usually within 120 days;

iii. Monitoring the implementation of approved applications from the time of granting a license to the commissioning of capacity; and

iv. Assisting firms with matters of procedure.

On balance, the Indian environment in fact has not been overly harsh for foreign investment. The profits accruing to foreign capital and technology have been, generally, above the national average. While foreign private investment has continued to increase over the post-Independence years, foreign ownership of industry has declined relatively.

Private foreign investment, excluding banking and insurance, was Rs 260 million in 1948. It increased to Rs 6,800 million in 1961, to Rs 10,000 million in 1966 and to Rs 17,000 million in 1972 - an annual average growth rate of 257.5% for 1948-72 and an annual average growth rate of 10% for 1966-72.

Foreign investment has taken the form of branches, subsidiaries and collaborations, i.e., mainly joint ventures which are either technical or financial or a combination of both. The number of branches of foreign firms reached a maximum at 855 in 1951-52, then declined steadily to 541 in 1971-72. These figures are for levels. The number of foreign subsidiaries has also fallen. For example, there were 233 subsidiaries in 1968-69, 217 in 1970-71 and 202 in 1972-73. Foreign collaborations have, however, increased. There were 183 collaborations in

The pattern of investment in India has followed historical pressures. In 1948, India was emerging as a free country after having been a captive market for British goods and investments for almost a century. The U.K. accounted for 80% of all foreign investment in India, while investments originating from the U.S. formed a small percentage of the total. In the following two decades, Britain's role in the international economy diminished while that of the U.S. became more significant. The contraction of British power and influence in Asia was reflected in the fact that by 1970, U.K. investment accounted for only 38% of foreign investment in India while that originating in the U.S. rose from 14% in 1961 to 26% in 1970, which was indicative of the latter's greater involvement in Asia. As India's industrial base widened during the post-Independence period, so did foreign investment in manufacturing (having increased from 27.6% of the total foreign investment in 1948 to 42.8% in 1961 and to 57% in 1970).

Conclusion

BAT has responded, over a period of several years, to various pressures in its environment by:

1. Changing the management of ITC;
2. Giving ITC virtual control over all corporate decisions by transferring decision-making authority to local managers;
3. Severing ITC's links with other foreign-controlled firms.
in India;
4. Diversifying ITC out of traditional into export oriented activities;
5. Building an image of social responsibility and corporate awareness of national aspirations;
6. Consolidating most of its operations under ITC and then moving to merge ITC and ILTD in order to develop a sound technical capability and reduce tax liabilities;
7. Reducing foreign equity to 60% in ITC, with the aim of phasing it down to 40% by 1977-78;
8. Embarking on a strategy of generating additional foreign exchange inflows so as to cover dividend outflows entirely;
9. Maintaining excellent relations with the Indian Government.

In respect to the last point, it should be noted that the Chairman of ITC was highly respected by the civil service and was probably the best known executive in India. He had served as Chairman of the Board of Governors of the Indian Institute of Management at Calcutta, which M.I.T. (Massachusetts Institute of Technology) helped establish; and an eloquent and powerful member of many government and semi-government committees. He had also been Chairman of the Federation of Indian Chambers of Commerce and Industry and active in promoting R&D in the private sector. His personal power and leadership were possibly the most significant factors in the survival and transformation of BAT in India.
GOALS AND PERCEPTIONS

A Multinational Corporation (MNC) might reasonably be expected to maximize utility\(^1\) globally. Conceivably, this may entail submaximization in any one national environment. Most governments, however, are more interested in maximizing national utility\(^2\) even though this may entail global suboptimization for the MNC. Thus, there is the possibility of a conflict of goals between the MNC and the host government that may arise not because of any ideological bias against private foreign investment (though there is undeniable discrimination between public and private capital, whether domestic or foreign in many developing lands) but because of the very nature of international business. The costs of the conflict between national goals and corporate objectives is then, from at least the MNC point of view, the conflict between global maximization and national maximization for each country. It would be unusual if the attempt towards nationally maximized utilities could lead to a globally optimized utility function for the firm. System optimization may demand component suboptimization.

Moreover, nationally maximized after-tax returns may not be equal to realized after-tax returns owing to controls on repatriation of profits and dividends. The firm is interested only in those returns to which it can have access. It means

\(^1\)Utility could refer to sales, market share, managerial power, profits, return on investment or the value of the firm.

\(^2\)It is not obvious what governments try to maximize: social welfare, economic growth, income distribution, government revenue, bureaucratic control?
little to accumulate large profits if they cannot be realized in the firm's currency of measurement. Large rupee or peso profits (or growing market share) are of little avail if they cannot be translated in large dollar profits or in the case of BAT into pound sterling profits. Consequently, corporate policy may argue for national after-tax maximization of returns only in those jurisdictions where the profits are easily accessible. This may well entail submaximization in other national environments.

For purposes of strategic classification, the MNC may thus divide its environments into primary where it maximized after-tax returns and residual where it submaximized. The distribution of returns in the residual environments would be a function of the difference between the globally-maximized, after-tax return and the sum of nationally-maximized, after-tax returns in the primary environments. Or

\[
\sum_{i=1}^{n-m} RRE_i = GMR - \sum_{j=1}^{m} RPE_j \quad n \geq m \quad (1)
\]

\(RRE_i = \text{After-tax Return in Residual Environment } i\)

\(RPE_j = \text{After-tax Return in Primary Environment } j\)

\(GMR = \text{Globally Maximized after-tax Return}\)

\(m = \text{number of primary environments}\)

\(n = \text{total number of environments}\)

The strategy of maximizing in the primary environments, which may be termed the strategy of choice, may not be feasible since national control systems may impose on the MNC a strategy
of necessity. Conceivably, the actual global return determined by the strategy of necessity will be significantly lower than the return hoped for by the strategy of choice. For instance, transfer-pricing suggested by the strategy of choice may be ruled out by the strategy of necessity, or at least seriously constrained.

Some constraints in a national environment are of a general nature and consist of taxes, tariff and nontariff barriers to trade, the exchange rate, inflation rate, domestic cost of capital, labor and raw material costs all impact on any entity that engages in international trade. There are other constraints, however, that specifically relate to foreign direct and portfolio investment and the commercial transfer of technology. These may consist of limits on profit repatriation, license fees, intracorporate pricing, allocation of head office expenses, equity control and other restrictions like training local personnel, conducting research and development, pressure to source locally, etc. It is these latter, more specific, constraints that properly constitute the national entry control system from the perspective of the MNC. The general constraints form the framework for the strategy of choice but the specific together with the general determine the strategy of necessity. Consequently, the cost of national entry control as far as the MNC is concerned may be approximated by the difference between the globally maximized return, GMR, which the strategy of choice would yield and the actual globally realized return, GRR, that the strategy of necessity must face. This cost may
be viewed as a globally forgone return, GFR, where

\[ GFR = GMR - GRR \tag{2} \]

Presumably, part of the GFR would accrue to the host nation in the form of an incremental social return and part would be lost owing to inefficiencies in resource allocation that the various national entry control systems may generate. The assumption here is that national entry control systems distort the internal resource allocation process of the MNC.

There is some intuitive justification, then, for subscribing to the view that entry controls generate costs for the MNC. If these costs are lower than the benefits the host nation derives, then there is some increase in global welfare. In other words, the Marginal National Gain \( \sum \text{MNG} > GFR \). But, as seems more likely, if these costs exceed the national incremental benefit or \( \sum \text{MNG} < GFR \), then global welfare is reduced. The difference between GFR and MNG is a Dead Weight Loss (DWL) or

\[ GFR = DWL + \sum \text{MNG} \tag{3} \]

Indeed, in some cases the entry control system may impose net costs on the nation and the firm, thus unambiguously reducing corporate, national and global welfare so that

\[ \text{DWL} = GFR + \sum_{i=1}^{n} \text{MNG}_i \tag{4} \]

where \( n = \text{number of environments} \)

From the perspective of the MNC, it would be useful to measure the costs imposed by following a strategy of necessity that the national entry control systems dictate. A possible
methodology may be to select a few industries and study the
global strategy of a leading MNC in each of these industries.
For each firm, it should be possible to formulate a hypothetical
strategy of choice and calculate the GMR, Globally Maximized
Return. Then, the actual return being realized by the MNC,
GRR, with the entry restrictions in place could be ascertained.
GMR and GRR could be either the after-tax profits or financial
rates of return or a utility index that was a weighted reflection
of global sales and after-tax profits if the drive to increase market share, total sales and after-tax profits all influence corporate strategy. Thus, for constructing the utility measure,

\[
GMR = \frac{a \times \text{Total Sales without controls}}{\text{Total Investment without controls}} + \frac{b \times \text{Total After-Tax Profits without controls}}{\text{Total Investment without controls}}
\]

where \(a, b\) are weighting factors such that \(0 < a < 0.1, 0 < b < 1\).

or \(GMR = \frac{aS + bP}{I} = \frac{aS + bP}{I}\) \hspace{1cm} (5)

And \(GRR = \frac{a \times \text{Actual Total Sales}}{\text{Actual Total Investment}} + \frac{b \times \text{Total Actual After-Tax Profits}}{\text{Actual Total Investment}}\)

or \(GRR = \frac{aS' + bP'}{I'} = \frac{aS' + bP'}{I'}\) \hspace{1cm} (6)

It is assumed that \(a\) and \(b\) are characteristics of a particular MNC. The weights \(a, b\) will be constants for any one MNC but will vary among corporations in general, reflecting the
different 'personalities' of each firm. Firms that have the same sales to investment and after-tax profit to investment ratios will derive a different utility, depending on how much they are motivated by increasing sales and how much they are driven by increasing after-tax profit.

If sales dominated completely then\( a = 0.1 \) and \( b = 0 \) giving the familiar sales to investment ratio. If profits dominated then \( a = 0 \) and \( b = 1 \), giving the after-tax profit to investment ratio.

Normally, if the behavior of the MNC reflected the joint motivations, one would expect \( b = 1 \) and 'a', a fraction indicating that while both sales and profits are important, the profit motive dominates but does not swamp the desire to increase sales and hence growth. Since the sales to profit ratio is fairly high in most MNCs, it may be necessary to constrain 'a' between 0.01 and 0.1 to prevent the sheer size of the sales figure from completely eliminating the significance of the profit figure.

In addition to the divergence in goals, there may also be a divergence in perceptions between the MNC and the host government. The origins of this divergence may reside in the different vantage positions of the MNC executive and the government official. See Figures 2 and 3. Since perception is a function of both the location as well as the nature of the observer, it may be that the MNC and the host government view the same phenomenon but perceive it differently. This may again arise because of the nature of international business. The MNC scans
Figure 2

Multinational Corporation

Intracorporate - Intergovernmental Resource Transfer

Profits

Dividends

Cost

Personnel

Technology

I01

I02

I03

I04

I05

I06

Most Favorable

International Investing Environments

IRS = International Operations

Least Favorable

Figure 3

NATIONAL GOVERNMENT

Control over inflows

Entry and Jurisdictional Control

Control over outflows

Inflows of capital, technology, culture from external environment

Greater

Contribution to national welfare in host country environment

MNC = Multinational Corporation

Financial Outflows to external environment
a global market and sees any one host nation as a political, economic, technological, cultural, social and legal environment that is one of several it is evaluating. Each environment is important in a relative rather than absolute sense with the home environment probably used as a reference criterion. Environments can then be ranked according to the scale and variation in realizable income, matched with firm's global investing and operating strategy and then arrayed along a spectrum ranging from favorable to unfavorable. Assume that the MNC estimates the mean value of realizable income and the standard deviation of this income for each environment and plots them on an Investment Indifference Curve (IIC) map. IICs may be thought to be trade offs between the mean value of realizable income, \( u(I) \) and the standard deviation, \( \sigma \), of this income stream, parameterized by the discount rate applied to cash flows or equivalently, the Net Present Value (NPV) of these cash flows. See Figure 4.

\[
IIC : \{u(I), \sigma\} \\
C_1 > C_2 > C_3 > C_4
\]
IIC$_1$ has a low discount rate and IIC$_4$ has a high discount rate. Utility increases in a direction opposite to that of the discount rate. IIC$_1$ would give a Net Present Value of C1 with a discount rate $r_1(\sigma)$ while IIC$_4$ would give a NPV of C4 with a discount rate $r_4(\sigma)$ where $r_1(\sigma) < r_2(\sigma) < r_3(\sigma) < r_4(\sigma)$. The set of acceptable projects along IIC$_1$ would clearly be much greater than the set along IIC$_4$, hence IIC$_1$ has a higher utility than IIC$_4$, because NPV on IIC$_1$ is greater than NPV on IIC$_4$. Now suppose the MNC considers 6 operating environments (10) and plots their $u(I)$ and $\sigma$ on the indifference map as shown in Figure 5. The indifference curves have been omitted for clarity.

I01 is the most favorable environment and I06 is the least favorable one in this example.

$\text{It should be noted that all discount rates have been normalized for } \sigma = \sigma_1. \text{ As } \sigma \text{ increases, so will the discount rate, i.e., } r = r(\sigma) \text{ implying that increasing risk is incorporated by increasing the discount rate. Accordingly, as one moves up along an indifference curve the discount rate increases, i.e., } r(\sigma_b) > r(\sigma_1) \text{ along IIC}_1 \text{ where } \sigma_b > \sigma_1.$

In practice $u(I)$ would be an equivalent annual income stream. Say a MNC had a time horizon, $T$ years, and in any year $i$ its income stream was $I_i$. Then,

$$u(I) = \sum_{i=1}^{T} \frac{I_i}{(1+r)^i}$$

Also suppose that at any 2 points on a particular indifference curve [$u(I)$, $\sigma$ and $u(I')$, $\sigma'$] the relationship between $r(\sigma) = r$ and $r(\sigma') = r'$ was desired with $r$ known, then the following equation could be used to calculate $r'$

$$\frac{\sum_{i=1}^{T} (1+r)^i}{T} = \frac{\sum_{i=1}^{T} (1+r')^i}{T} = \text{constant}$$
The host nation environment is accordingly perceived in relationship both to other environments and more importantly in relation to the specific needs of the MNC. Therefore, an environment that may appear favorable to one MNC may appear quite unfavorable to another MNC which has a different product and service mix, operating philosophy and investing strategy.

Host nations, on the other hand, view their environment as a given and perceive various MNCs as agents of change, technology transfer and international factor mobility bringing with them national benefits as well as costs, both social and private. The MNCs are implicitly ranked according to their perceived contribution to national welfare which may be a weighted amalgam of, among other factors, effects on national income, balance of payments, growth, government revenues and employment.

BAT, for example, perceived India as an investing environment that started out as being extremely favorable and gradually
became less favorable as political risk escalated from negligible to substantial, even to the point as which survival was in jeopardy. The Indian government, on its part, perceived BAT as being yet another foreign economic agent that was introducing no new capital or technology and yet repatriating profits. Admittedly it was an efficient exporter of a traditional commodity and a collector of domestic taxes but in the view of the Indian government those tasks could have been performed just as well by a domestically owned entity. It required an active strategy of perceptual change on the part of BAT to alter the perceptions and attitude of the Indian government by increasing its (BAT's) economic and social utility and thereby reducing political risk. Once this was achieved, the environment, as perceived by BAT, improved.

Corporate and host nation perceptions are, therefore, important. When the decision to invest is taken, it is clearly the perception of the MNC which is critical. When the decision to establish a control system is taken, it is the perception of the host nation which is important.

The extent and nature of the control system owes its origin to the divergence in both MNC and national perceptions and goals. The greater the divergence, the greater will be the severity of the control system and possibly the costs (from the MNC vantage) of the specific constraints. Even implicit goal convergence may not be enough to liberalize the control system if it is not accompanied by an explicit convergence in perceptions. While
goal congruence is a necessary condition in the elimination of controls, it is not sufficient. It must be accompanied by perceptual congruence.

The discussion on MNC-Host Nation perceptions can be formalized to yield operating rules, if a somewhat stylized approach is adopted. Assume a MNC ranks its operating environments along a number of levels (say, 4) of favorability with N1 representing the most favorable environment (high realized returns - low environment risk) and N4 representing the least favorable environment (low realized return - high environmental risk). Further assume a host nation that also ranks MNCs along some levels (also 4) of contribution to national welfare with C1 representing the greatest contribution and C4 the least. A Nation-Firm Perception Matrix can then be constructed. See Figure 6.

The four corner squares represent polar outcomes in which perceptions are translated into corporate interest and national controls. N1C1 describes a situation leading to high corporate interest and low entry barriers for the firm; N1C4 is a situat-
tion that transforms into high corporate interest and high entry barriers; N4C1 represents a situation that transforms into low corporate interest and low entry barriers and N4C4 translates into low corporate interest and high entry barriers.

N1C1 and N4C4 represent outcomes of perceptual congruence. In the former case, both the firm and the nation view each other with favor and in the latter both look at each other with disfavor. N1C4 and N4C1 represent outcomes of perceptual divergence since the former case is one in which the firm views the nation with favor but the nation is not interested and in the latter case, the nation views the firm with interest but the firm does not consider the nation a favorable environment for business.

The Perception Matrix can be used to match nations and firms for initial investing decisions. N1C1 is the Best Nation-Firm Combination and N4C4 is the Worst Nation-Firm Combination. In addition, the Perception Matrix can also be used to trace changing attitudes over time since perceptions are essentially dynamic. A firm that finds itself in the C4 column should either not invest or begin phasing itself out of the nation or transform its strategy so that it moves to the left. A nation that finds itself in the N4 row with a number of firms might wish to pursue policies that cause it to move upwards.

The BAT case illustrates the process of perceptual interaction. See Figure 7. Soon after 1947, BAT made high returns and India, with its policies still evolving, looked
upon BAT as a good source of revenue and employment. As time went on, BAT continued to earn a good return but the Indian government became increasingly discontented about BAT's contribution to national welfare. The outcome shifted from N1C2 to N1C4. The change in the government's perception was translated into pressure on BAT which began to find the environment increasingly turbulent and by 1968 the outcome had shifted to N3C4. BAT changed its strategy and by 1976 had, through its various programs of R and D, equity divestiture, business diversification and involvement with nontraditional exports, sufficiently changed the government's perception to enable the outcome to move into N2C3. BAT's long-term goal appears to be to attain N2C2.

The dynamics of perceptual change on the part of the host government can lead to an entry control system that is both cyclical and evolutionary. A national control system, which is a set of variables whose outcome the host government wishes to influence significantly, in place at time T is based on the perceptions of the host government at that time. Over the
years as the government monitors the effectiveness of the control system and the performance of foreign capital and technological inflows and financial outflows, its perceptions about the utility and function of MNCs in the domestic economy will change. A different outcome of the variables will appear desirable. Some variables may be further constrained and others made less restrictive and a new control system at time T+5 may be inaugurated. Again, years pass and perceptions alter. Some variables will be further restricted, others further liberalized and the rest may revert to their position (qualitatively, if not quantitatively) at time T. The new control system at time T+10 will then resemble the system at time T in some variables and have moved secularly away from it in others, giving rise to the evolutionary and cyclical characteristics mentioned earlier.
Figure 8 illustrates this behavior over a period of 20 years, assuming a new system is thought to be effectively in place every 5 years. 'a' class variables will undergo increasing constraints over the entire time horizon, 'b' class variables will undergo decreasing restrictions and 'c' class variables will be tightened and loosened periodically.

The strategy of the MNC will depend on whether it correctly perceives the map of the national entry control system. To the extent that it does, its response will be designed around the direction of movement of variable types 'a', 'b' and 'c' and it will be able to optimize within the upper and lower bounds imposed by the system. To the extent that the MNC's perception of the control system is different from the actual map, its strategy will be designed to respond to a movement of variables that is illusory. The firm will not be able to optimize since the real and perceived boundary conditions within which it operates will be different. If the perceptions of the MNC are an important factor in the design of the control system (to an extent host nations must ponder on what MNCs desire if they wish to attract foreign capital and technology) then the map will be forced, at least partially, to track corporate perceptions. To the degree it does, MNC suboptimization will be reduced.

This suggests that in addition to the cost of the entry control system itself, the MNC may face an additional cost that is a function of the divergence between the control system and
the MNC's perception of this system. The former cost, from the MNC point of view, might be termed the external cost of the control system while the latter might be termed the internal cost of the control system. The first step in reducing the costs of the control system would be to identify the external and internal costs by undertaking superior strategic planning, environmental monitoring and by developing a greater sensitivity to the aspirations of host nations.
Appendix 1

**Export Earnings of ITC / ILTD**

1 lakh = 100,000

<table>
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<tr>
<th>Year</th>
<th>ITC (Rs. lakhs)</th>
<th>ILTD (Rs. lakhs)</th>
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<tr>
<td>1965/66</td>
<td>593</td>
<td></td>
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<tr>
<td>1966/67</td>
<td>301</td>
<td></td>
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<tr>
<td>1967/68</td>
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<td></td>
</tr>
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<td>1969/70</td>
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<tr>
<td>1970/71</td>
<td>22</td>
<td>1003</td>
</tr>
<tr>
<td>1971/72</td>
<td>233</td>
<td>1055</td>
</tr>
<tr>
<td>1972/73</td>
<td>392</td>
<td>1380</td>
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<tr>
<td>1973/74</td>
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<td>2000</td>
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<tr>
<td>1974/75</td>
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## Appendix 2

**R & D EXPENDITURE**

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<th>YEAR</th>
<th>CAPITAL</th>
<th>REVENUE</th>
<th>I.T.C. NET INCOME</th>
<th>I.T.C. PROFIT AFTER TAX</th>
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<td>330</td>
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<td>1968/69</td>
<td>47</td>
<td>606</td>
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<td>6510</td>
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<td>1037</td>
<td>653</td>
<td>9028</td>
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<td>1972/73</td>
<td>2774</td>
<td>896</td>
<td>9793</td>
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<td>1222</td>
<td>11302</td>
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<td>1974/75</td>
<td>n</td>
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<tr>
<td>1975/76</td>
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*(Up to Nov. '75)*
## Appendix 3

### Details of Tax Benefits on Capital Expenditure on Scientific Research

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<td>799</td>
<td>3,15,355</td>
<td>1,95,697</td>
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<td>53,061</td>
<td>1,07,982</td>
<td>16,67,122</td>
<td>14,35,535</td>
<td>11,05,111</td>
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<tr>
<td>Allowable deduction</td>
<td>1,93,833</td>
<td>68,169</td>
<td>1,31,689</td>
<td>16,67,921</td>
<td>17,50,890</td>
<td>13,49,434</td>
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<tr>
<td>Tax relief on above</td>
<td>1,96,631</td>
<td>37,493</td>
<td>74,239</td>
<td>9,63,224</td>
<td>10,11,139</td>
<td>7,79,298</td>
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<tr>
<td>Calculated at</td>
<td>55%</td>
<td>55%</td>
<td>56.375%</td>
<td>57.75%</td>
<td>57.75%</td>
<td>57.75%</td>
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</tbody>
</table>
Appendix 4

MAJOR RESULTS OF THE ILTD RESEARCH AND DEVELOPMENT EFFORT

AGRONOMIC INVESTIGATION

1. In black cotton soils of Andhra Pradesh, the effect of deep tillage in improving yield was established (increased yields up to 15%).

2. The feasibility of application of fertiliser by in situ placement of 4 to 6 weeks before planting which could materially improve yield by 25% was established.

3. The response to phosphate in the drought stricken black soils of Kurnool District was a major break-through in that this serious deficiency was a limiting factor for crop production both in tobacco and other crops.

4. The time of planting studies have established optimum period of planting for yield in quality in Mysore, Gujrat, Kurnool and in the light soils of Andhra Pradesh.

PLANT PROTECTION

Control of aphids by systemic insecticides and control of mosaic by neem decoction arc significant achievement.

PLANT BREEDING

Research has been responsible for introduction of new varieties - Virginia Gold, F.C.V. 59, Canadel, White mould resistant F.C.V. strains and Banley 21, which in different zones of the country have helped to produce good yield and quality.

The first truly indigenous flue cured strain (F.C.V. special) was evolved by the Research Department by crossing exotic types and this variety has come to be the main stay of Andhra Pradesh flue cured farmers covering nearly 40% of the area as well as in drought area of Mysore State.

Another strain evolved by the Research (16/103) has done remarkably well and covers nearly 50% of the area of light soils development in the West Godavari District.

An improved type of sun cured Natu (K4F) which covers virtually nearly 16000 hectares in Kurnool as well as substantial acreage in other areas has been developed.
CHEMICAL INVESTIGATION

Detailed studies were carried out in regard to identification of saline tobaccos, areas of production, and rapid field test for identification in such tobacco which has helped in elimination of saline tobacco in exports to sophisticated countries which otherwise, could have jeopardized our markets.

In study of other off type tobacco, the phenomena of greying was identified as a nitrogen deficiency system, the correction of which has helped to make tobacco from a large area (15,000 hectares) acceptable to the trade.

The quality investigations in terms of physical and chemical properties of different growths of Indian tobacco, have helped to pinpoint the virtues and deficiencies and establish the suitability of different growths for different customers as well as helping in the process of rationalization of the grading systems.

OTHER TYPES OF TOBACCOS

In addition detailed techniques of production of Burley, Turkish, fire cured and other cigarette types have been worked out.

TRAINING

Realising that the key to successful development is availability of well trained personnel with a high degree of technical competence to assist farmers to produce tobacco on scientific lines, a training school at Hunsur was set up in 1965. The training is imparted by our Research Management and since the inception of the school 41 company, 5 other companies, 2 overseas and 49 government nominees have been trained.
PROVISION OF INPUTS

In order to put across the research findings not only is technical guidance being given to the farmers in the form of field demonstrations, publications of leaflets, farmers' forums, assistance also has been provided for analysing soils and water in areas intended for development.

(a) **SEED:**

Annually 8000 kgs. of seed (each kg. sufficient to plant on 40 hectares) are produced and distributed to the farmers covering all cigarette types of tobaccos.

(b) **FERTILISER:**

About Rs. 70 lakhs are advanced on credit, in order to enable a large number of farmers adopt the recommended practices.

(c) **PESTICIDE:**

Approved pesticides are made available to the farmers so that unapproved pesticides are not used.

The research investigations carried out have helped to improve the yield of the farmers over the years from a level of 500 kgs. in the fifties to a level of 750 to 800 kgs. per hectare today. It has also been possible to sustain high yield in all the developed areas particularly in Mysore and in the light soils of Andhra Pradesh, approaching the levels in the more developed countries.
Appendix 5

MAJOR RESULTS OF THE ITC R&D EFFORT

DEVELOPMENT OF INDIGENOUS MATERIALS AND AECILLARY INDUSTRIES

ITC's R & D have been continuously providing entrepreneurs and indigenous nascent industries with basic information on quality requirements for all processing and packaging materials required by the cigarette industry.

Monitoring, investigating and evaluating all materials and investigating suppliers' manufacturing processes, followed by feedback of information, recommendations and assistance with technical know-how for improvement in quality to meet the demands of the industry is a continuous activity. This is integrated with technical advice to the Company's operating departments as to how indigenous materials can be used to their best advantage which has helped in the development of many small/medium and large scale ancillary industries e.g. Converters in Printing and Packaging, Board and Paper Mills, Inks and Adhesive Manufacturers throughout the country.

IMPORT SUBSTITUTION

To accelerate and achieve import substitution, ITC assisted the promotion and growth of indigenous manufacturers by making available to them basic quality specifications and technical know-how. Such information and know-how continues to be made available to prospective manufacturing entrepreneurs. All packaging materials and adhesives are now indigenous. This has aided in the generation and growth of new products, new processes and sometimes new industries e.g. Cork Tipping, Polykraft, Corrugated Fibreboard Containers, special laminates for pouch/sachet packing in the absence of tins which were traditionally used in the industry.
R & D extend their full laboratory and research services to all small and middle sector industries which do not have their own facilities for evaluating products and processes.

Within the constraints for development of indigenous industry in regard to basic raw materials and equipment, practicable quality specifications and testing procedures for raw materials and products are developed and agreed with suppliers.

The fund of cumulative data built up by ITC's R & D on the quality of indigenous products has provided the very valuable back-ground to the Company's participation with Indian Standards Institution in drafting Indian Standards. Our scientists have taken active part in various sub-committees concerning Paper & Board, Packaging and Tobacco & Tobacco Products and provided prompt laboratory facilities whenever required.

Some of the pioneering efforts and achievements are:

**Adhesives**

Research from 1955-57 to substitute Gum Arabic and other imported adhesives resulted in complete switchover to adhesives made from indigenous raw materials which are prepared at our factories. Imported Filter Tip Adhesive was similarly substituted in 1963.

**Board for Shells & Slides**

In 1939 - Rohtas Board was tried out and during 1939-1945 95% of their total production was adopted for use in reels for our slides. Later in 1952, laboratory and factory tests were carried out by ITC's R & D to develop other sources, and also to bring about improvement in the quality of Rohtas Duplex and Coated Board for use in shell printing and converting. Since 1957 all requirements are being met by local sources.

As the installed capacity of Duplex Board was not enough to meet the total demand of the trade in 1965, Pulp Board was developed in collaboration with West Coast Paper Mills and today six paper mills are manufacturing it.
Corrugated Fibreboard Containers:

Upto 1954-1955 no firm was making CFCs or Solid Board Containers on a large scale. In 1954 consideration was first given to develop a suitable container to replace wooden packing cases due to possible shortage and rising cost of timber and the world packaging trend. Trials carried out on cases made by small scale indigenous manufacturers were not successful. Early in 1955 different kinds of containers were obtained from the U.K. with the object of selecting one type for bulk trials under local transport conditions and then to investigate with indigenous materials how a similar container could be manufactured locally with our technical assistance. After extensive trials development work to produce a reasonable quality was undertaken with two firms - Card Board Box Manufacturing Co., Calcutta and Jayant, Bombay. In January 1961 both these firms commenced regular manufacture of a container to meet our specifications with our technical assistance. Today there are a number of small scale industries who have come up manufacturing these containers for not only the entire cigarette, but also other industries.

Cork/Ivory Tipping:

Imported until 1959 when experiments were undertaken to investigate the possibility of manufacturing it locally. Development work with a Calcutta firm resulted in an acceptable substitute and since 1962 many new small scale units have been developed with our technical assistance, catering to the needs of the entire cigarette industry.

Polycast Kraft:

Due to difficulties in obtaining Bitumen of the right quality and shortage of kraft, investigations were carried out in 1961 to develop polythene laminated kraft in collaboration with a local firm and in 1963 a suitable substitute was evolved. Since then a number of small scale industries have come up and the material is being widely used in the industry.
Aluminium Foil:

Experiments by one manufacturer were started during World War II in close collaboration with our R & D. Success was achieved by late 1952. Later, in 1965, the product of two other manufacturers was developed and taken in use.

Filter Rods:

Need for indigenous manufacture was identified in 1961 in view of the world trend towards filter cigarettes. Discussions with one of the largest manufacturers of filter rods in the world continued during 1961 and finally approval of indigenous manufacture of filter rods was received in October 1972 by a new company Filtrona. This source was given every assistance in conducting trials and in laying down acceptable specifications in the initial stage of their development and by end 1973 indigenous Filter Rods were available.

Since then we have also assisted in testing and rendering technical knowledge available to a second source - Cigfil and in January 1972 their manufacture started. A third source received our full technical assistance in setting up their plant from early 1972 and commenced trial production since February 1973.

The Company's achievements in developing indigenous materials and import substitution have not only been of benefit to the entire cigarette industry but also the small and medium scale sector in the printing and packaging fields. ITC has helped in the development of 40 industries in various states in the small scale/ancillary sector in the wrapping and printing material field by providing free service from the R & D and encouraging frequent visits by our scientists. As a result of this assistance these units have undergone substantial modernisation and expansion within the period of their association with ITC.
ENGINEERING KNOW-HOW AND IMPORT SUBSTITUTION:

In this area service of our experienced engineers and research establishment were freely given to assist small/medium scale manufacturers in design of products, operation data, technical working drawings and inspection facilities.

This was followed up by help in overcoming teething troubles and commissioning. The result has been considerable saving in foreign exchange by import substitution and some of the significant achievements are as under:

(a) Production Machinery
2. Compressed Tobacco Conditioning Machines.
3. Tobacco Cleaning & Classifying Plant.
5. Conditioning Cylinders.
7. Tobacco Dryers.
10. Course Filleting.
11. Wrapping/Packing Machines.

(b) Printing/Packaging Machinery
1. Modification of Baron Tubing Machines with 100% increase in output.
2. Design of a shell unit counting and parcelling machines.
3. Pile Airing Device.
4. Printing Roller Making (Patented as Batco process).

(c) Laboratory Instruments/Equipment
1. Humidity Conditioning Cabinets.

(d) Spares
150 imported spares substituted by indigenous supply source.
80 lakhs of spares procured within India from small/medium Engineering industries.
Multiple sources of supply established for critical spares.
<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
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<tr>
<td></td>
<td>One Rauni Baby Cigarette Maker</td>
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<td></td>
<td>One Elrepho Photoelectric Reflection Photometer</td>
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<td></td>
<td>Total</td>
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### Appendix 7

**TEN YEARS OF ITC AT A GLANCE**

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**USE OF FUNDS**

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<th>4611</th>
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**PROFITS AND APPROPRIATIONS**

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**Notes:**
1. In 1973 Rs. 143 lakhs (Net of Tax) has been charged to Profit & Loss Account in respect of Leaving/Retiring Gratuities.
2. In 1974 Rs. 152 lakhs proposed final dividend which could not be paid as a consequence of the Companies (Temporary Restrictions on Dividends) Act, 1974 has been adjusted against retained profits.
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