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A case study on decision-making in selected multinational enterprises in India

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Note:
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Chapter 1

Decision-making in multinationals in India

Introduction

Multinational enterprises (MNEs) account for a small share of the total employment in the Indian corporate sector. The total investments by multinationals in India are estimated to be around \$2.5 million.[1] Of this, the American investments are about \$500 million and the largest single share of foreign shareholding is still British. Besides this, there are a significant number of multinational enterprises from the Federal Republic of Germany, Switzerland, Canada, France and Italy. A large number of technical co-operation agreements have been entered into by Japanese enterprises, but their equity participation has remained very modest.

Most of the MNEs in India are engaged in the chemical, pharmaceutical, pesticide, dye-stuffs and intermediates, and fertiliser industries. Other manufacturing industries in which they are found to a lesser extent include vegetables and fractionated oils, soaps and detergents, batteries and torch lights, tobacco (cigarettes), packaged tea and other consumer products like milk products, chocolates, biscuits, pressure cookers, cosmetics, toothpastes, tea plantations and engineering.

There was considerable foreign investment in the earlier years in coal, jute, heavy engineering and tea by the British managing agency houses who dominated the scene until the fifties and the early sixties. However, there has been considerable divestment of their interests in these fields in the last two decades. The Foreign Exchange Regulation Act (FERA) was introduced in 1969-70 stipulating that foreign investments would have to largely concentrate in areas of high technology or in export-oriented sectors. Many of the tea plantations in Assam, West Bengal, Tamil Nadu and Kerala were originally owned by British interests and have either been sold off to Indian parties or there has been considerable dilution in the shareholding of the parent companies. Under FERA the foreign investor can normally retain up to 40 per cent of the shareholding. The Foreign Exchange Regulation Act (FERA) was enacted in 1973. Enterprises with more than 40 per cent foreign ownership fall under its provisions; those with less do not and hence are referred to as non-FERA. FERA indicates the sectors in which foreign investment is permitted and stipulates that it should not exceed 40 per cent. The non-FERA companies are treated as indigenous Indian companies for purposes of industrial licensing, provisions of the Monopolies and Restrictive Practices Commission and can engage in the non-core, non-priority and low-technology sectors with no obligation of export orientation. A company with over 40 per cent foreign shareholding, thus falling under FERA, is usually allowed to operate in the core, priority, high-technology and export-oriented sectors. The objective of FERA was not the regulation of foreign enterprises per se, but rather the conservation of foreign exchange, although a section of the Act does concern itself with companies with foreign equity of more than 40 per cent and with foreign subsidiaries. Equity participation (51 per cent) can be considered for industries which require the importation of highly sophisticated technology or which are largely export-oriented. In actual practice multinationals have managed to retain effective control even though reducing their share to 40 per cent by dilution of equity, its wide dispersal and issuance of bonus shares (thereby remaining the largest shareholder).

The coal industry was nationalised in 1972-73 and the jute industry has been passing through vicissitudes ever since the partition in 1947 when three-quarters of the raw jute growing areas went over to East Pakistan that is now Bangladesh. There was a measure of partial recovery in the late fifties and continued until 1965 with the diversification from sacking and hessian to carpet backing. However, owing to the rapid inroads of substitutes like polyproplene, bulk handling and synthetics, the jute industry has lost much of its export outlets in the past two decades. The plight of the Indian jute mills was further aggravated by the competition from Bangladesh mills which were set up with more modern machinery and with ready access to high quality raw material and lower labour costs. The MNEs had set up three large oil refineries - Shell, Exxon and Caltex at Bombay and Vizag –

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[1] At the current rate of exchange \$1 = 12 rupees (December 1984).

in the early fifties, but these were nationalised in the seventies. Many of the earlier senior top executives of MNEs were expatriates but for the past two or three decades the top management cadres have come to be entirely manned by Indian professionals. Only in a few MNEs do the chief executives remain expatriates.

MNEs employed approximately 4 million people in the eighties or 0.5 per cent of the total labour force of some 840 million (excluding the People's Republic of China) in the developing countries of Africa, Asia and South America. The total employment in the Indian organised sector is 10 million and the multinational share of employment in the private sector is well below 10 per cent, and around 5 per cent if both private and public sector employment is considered to be 3 per cent. MNEs, being mostly in high technology and sophisticated areas, tend to be more capital-intensive and by and large follow more modern managerial systems in the fields of production, marketing target setting, performance appraisal and the systems approach.

In this paper an attempt has been made to study the process of decision-making in 11 MNEs, seven of whom are either subsidiaries or affiliates of parent companies in the United Kingdom, the United States, the Federal Republic of Germany and Canada. They embrace a wide spectrum of manufacturing activities. Hindustan Lever, of the Unilever group, is largely engaged in consumer products - chiefly soaps and detergents, edible oils, packaged tea, processed foods, creams and hair lotions, and lately, diversifying in chemicals/fertilisers; Glaxo - chiefly in drugs, pharmaceuticals and milk foods; India Tobacco - chiefly in cigarette manufacture but has considerably diversified in hotels, paper manufacturing and marine products export; Union Carbide - chiefly in batteries, torch lights, chemicals and pesticides; Siemens - in electrical equipment; Mico-Bosch (Motor Industries Company) - in fuel injection equipment; Indian Aluminium - in the manufacture of aluminium ingots, etc. In this paper two emerging Indian private multinational groups (Birla and Tata) have also been included; they have the largest number of joint ventures abroad in Malaysia, Thailand, Indonesia, Philippines, Singapore, the Gulf countries, East and West Africa, Mauritius and Fiji. Also included are the two largest public-sector enterprises which have emerged as leaders in the field of machine tools and power equipment - Hindustan Machine Tools, Bangalore, which has set up an affiliate in Nigeria, and Bharat Heavy Electricals, which has been involved in very large power-generation projects in Malaysia, Libya, Saudi Arabia, New Zealand and other Middle East countries.

Besides observing FERA, enterprises in India also have to work within the framework of the broad government policy guide-lines enunciated in the industrial policy resolutions of 1948 and 1956, the Industrial Development Regulation Act and the Monopolies and Restrictive Trade Practices (MRTP) Commission which was set up in 1969-70. By and large, the enterprises have had to function within strict government controls and regulations in the area of expansion, diversification and large capital investments. All enterprises which involve a capital investment of Rs.1,000 million or $80 million (new revised ceiling) are subjected to the provisions of the MRTP Commission, or, which command one-third of the market share in the product they manufacture.

The Industrial Disputes Act was enacted in 1947 and there has been considerable labour legislation enacted in the past three decades. As a result, it has become virtually impossible for any large enterprise - multinational or domestic - to retrench or lay off labour, or to close down plants and declare lock-outs without the tacit approval and permission of the local authorities. The process of conciliation, adjudication has become dilatory and long drawn out although the courts have given very liberal interpretations.

In two of the MNEs studied, a scheme of voluntary retirement was introduced as a result of technological changes and of international or domestic marketing developments. This was done in the common parlance of golden handshakes without any union involvement, purely on an individual workmanship basis. The only manner in which the MNEs can cope with new technology and market developments is through expansion and diversification and retraining of the existing labour force.

The multinational enterprises' willingness to invest in India is probably based on:

Profit as a prime consideration both in the short and longer term, and presence in a country with a large growing market potential with ready availability of raw material inputs and political stability. Despite bureaucratic red tape, India's record in honouring its foreign exchange and other regulations has thus far been unimpeachable and the foreign investor has been allowed to repatriate dividends, fees, royalties; and trademarks and patent technology have been duly protected by law. The procedures are sought to be streamlined for expeditious disposal. The role of the Indian directors and managers in significant areas of decision-making has thus become one of combining and optimising the benefits to the economy and ensuring proper returns and adequate profit to the foreign shareholders. The key to this has been chiefly a greater share and autonomy in economic decision-making related to the strategies and policies for growth, diversification and expansion, particularly with reference to investment decisions.

The present study is based on an empirical survey of some 11 individual enterprises and specific cases of MNEs decision-making in the strategic areas of investment and employment. A questionnaire (reproduced in the Appendix) was sent out to these enterprises and was followed up by in-depth interviews with their chairmen/managing directors and their directors for functional areas such as corporate planning, finance, personnel and international operations. The matters pertaining to industrial relations, collective agreements and practices, strategic decisions in regard to investments, corporate planning and the relationship with the parent company were elaborated on in considerable detail. This has been supplemented with a review of other relevant data for the enterprises, including some of their annual reports and five-year plans. A short profile of the MNEs studied has been attempted in the following:

1.1 Motor Industries Company (Mico-Bosch)

Mico-Bosch started manufacturing spark plugs and fuel injection equipment under licence of Robert Bosch GmbH of the Federal Republic of Germany in 1951. The company was originally established in Madras at the initiative of the late Mr. Raghunandan Saran, who had developed a close association with the parent company in Germany earlier, and the company was later shifted to Bangalore in 1953. During the past 30-odd years Mico-Bosch has emerged as the largest producer of fuel injection equipment in India and one of the largest in the World. The range of Mico fuel injection system covers from one to six cylinders and even a 12 cylinder pump for specialised applications. The company manufactures 18 types of spark plugs of different specifications, values and fitment dimensions. More than half of the Mico production is exported and a third of what is exported goes to Europe, the Americas, south-east and west Asian countries. The rest goes to the Far East, eastern Europe, Africa, Australia and the Pacific. Mico products are manufactured in two factories at Bangalore and Nasik, employing over 9,000 workmen. Special emphasis has been placed on the development of the workers' skills. The company has been engaged in upgrading its technology as it has to compete within a framework of fierce international competition.

1.2 Siemens

Siemens started in India in 1954 with the assembly of switchboards at a workshop in Bombay and later manufacturing units were established in Bombay, Calcutta and Nasik where a host of products for power engineering, railway signalling and medical engineering are being produced. Telecommunication equipment made by Siemens is used in the telephone and telex networks. Siemens also provides comprehensive instrumentation and controls for power stations and industry, computerised load dispatching and equipment for medical research, neurology, cardiology, general radiology, therapeutic work and specialised medical investigations. It exports switch gears, switchboards, motors, cables, transformers and entire projects to countries in Asia, Africa, the Federal Republic of Germany and the USSR. Over 7,000 people are employed in the Indian operations. In 1982-83, Siemens sales were Rs.1,438 million and exports were Rs.158 million.

1.3 Hindustan Lever

Hindustan Lever is a subsidiary of Unilever (United Kingdom and Netherlands home-based) and started selling operations in India in the twenties, largely in the area of soaps and detergents and in the forties developed vegetable oil processing. It is the largest company in the private sector among the multinationals operating in India. Its turnover in 1983 was over Rs.5,000 million. The exports during 1983 were over Rs.700 million and it has been actively engaged in promoting exports of products of small-scale and ancillary industries. It has a very large and developed Research and Development (R&D) Centre which is pioneering trials in the efficacy of five growth nutrients to increase yields of oil seeds, paddy, vegetables and potatoes. The centre discovered newer compounds to increase the photo-synthetic efficiency of plants and several new fine chemicals have been developed. Novel efforts in bio-technology - plant tissue culture - are under way. The company has diversified its product lines in recent years to complex fertiliser projects and manufacture of Sodium-Tri-Poly-Phosphate (STPP). A new fine-chemicals unit and drug intermediates project has been commissioned and an export-oriented herbicides project is being set up together with a garment manufacturing unit. The company has also entered the area of animal foods and personal products. The present company still holds 51 per cent of the shares of the Indian company and is diversifying in high technology and export-oriented sectors. It has also taken over Lipton India, a large tea-packaging company, which shall also be examined in Chapter 2. Although Unilever has lately taken over Brooke Bond - a large tea plantation and tea-packaging unit - in the United Kingdom, Brooke Bond's Indian operations have not yet come under Hindustan Lever in view of the MRTP Commission and FERA provisions.

1.4 Glaxo

It started as a subsidiary of the Glaxo group, United Kingdom, and is largely engaged in the pharmaceuticals and milk products sector. With the issue of bonus shares and dilution of equity, foreign shareholding has been reduced to 40 per cent. The shareholding is largely dispersed and even though the parent company share is 40 per cent, as per FERA guide-lines, the parent company remains in effect the largest shareholder. The company sales in 1983 amounted to Rs.1,150 million. For the past several years, the Government has been severely controlling the prices of drugs, pharmaceuticals and formulations. The exports were Rs.47.7 million, particularly to France, Japan and the United Kingdom. The company is diversifying for the manufacture of products derived from maize starch. Over the past ten years the company's sales turnover has trebled and profits quadrupled. It employs a workforce of 5,530 at its various plants near Bombay, Nasik, Ankleshwar and Aligarh, and has established R&D facilities in applied areas while basic research is largely done in the United Kingdom.

1.5 Union Carbide

Union Carbide is a subsidiary of Union Carbide, United States, and has been established in India for 50 years. It is engaged purely in the manufacture of torch and flash lights and appliance batteries, brass aluminium and plastic lanterns, carbons, chemicals and pesticides. It has a large agricultural research centre to conduct intensive research on tropical pests. It makes specialised batteries for defence purposes and for other sophisticated equipment. Its sales in 1983 amounted to Rs.2,100 million excluding products used internally, valued at Rs.540 million. Exports were Rs.76 million and profit before tax was Rs.148 million. The company has set up a large battery plant at Srinagar and has been engaged in expanding its pesticides plant at Bhopal.

1.6 Hindustan Machine Tools (HMT)

The company was started in 1953 at Bangalore to manufacture machine tools in collaboration with Swiss manufacturers as a public sector undertaking. During the past three decades it has grown steadily from a single factory set-up to a multi-factory organisation with two subsidiaries and several associated companies. In 1982-83 it had a production and sales turnover of Rs.2,803 million and earned a net profit of Rs.378.3 million. Over the last two decades, the company has diversified into the assembly and manufacture of watches, tractors, printing machines and General Lighting Service (GLS) lamps. It has set up a subsidiary in

Nigeria and has been extending technical co-operation for the setting up of machine tool units in Algeria, Indonesia and Mexico. It has emerged as one of the ten largest machine tool manufacturers in the international market and its subsidiary, HMT International, had a turnover of Rs.191.6 million in terms of exports of products, projects and technical services. It plans to increase its turnover to Rs.5,000 million by 1986-87. Recently it has entered the area of dairy equipment manufacture, miniature papers and stepper motors.

1.7 Birla group of industries

The House of Birla was established as a small broking firm in Sheik Memon Street, Bombay (Zaveri Bazar) in the mid-nineteenth century. It blossomed forth during and after the First World War, in Calcutta. In 1916, G.D. Birla, patriarch of the Birla group, entered the jute and cotton-broking business in Calcutta, and in 1919 acquired the Keshoram Cotton Mills and set up the Birla Jute Mills. Keshoram Cotton Mills were acquired through Andrew Yule - a large British managing agency house. Birla Brothers (Pvt.) Ltd., was incorporated in Calcutta with an authorised capital of Rs.5 million or $1.5 million according to the prevailing rate of exchange in pre-war years. Birla's investments presently are of the order of Rs.20,000 million and it has grown phenomenally during the Second World War and the post-independence years.

The internationalisation of the Birla group activity has been mainly in the past two decades. The group was among the earliest investors to set up a textile plant in Ethopia in the early sixties, and has, in the last 20 years, established a large number of joint ventures mostly in the developing countries of Thailand, Malaysia, Indonesia, Philippines, Sri Lanka, Nepal, Kenya and Nigeria. Birla's joint ventures are mainly in the areas of textiles and man-made fibres, palm oil refraction, cotton yarn, paper, asbestos and shoes. Prior to the 1960s, the group was engaged in the export of jute goods, both to United Kingdom and United States markets, as well as sacking to other countries and had set up an office in Zurich. Birlas are essentially a Marwari house, originating from the village of Pilani in the former Jaipur State where they have established a modern Institute of Technology in collaboration with MIT of the United States. It is currently the second largest enterprise in the corporate sector next only to Tatas and has large diversified interests in cotton, woollen and jute textiles, sugar, cement, tea, paper, rayon, automobiles, textiles, aluminium, textile machinery and electronics.

1.8 Tata group of industries

The House of Tata has played a pioneering role in the fields of Indian trade and industry for well over a century. The House of Tata was founded by the late Jamshedji Tata - a person of very farsighted vision, who had been imbued with a missionary spirit of industrialising India. Jamshedji's forefathers were high priests of the Parsi community. Jamshedji realised at an early age that if India was to attain its rightful place in the comity of nations it had to progress along the lines of industry, research and development, science and modernisation. He was convinced that industrialisation was a prerequisite for growth and development of the economy.

Jamshedji's father, Nowrosjee Tata, had started cotton business and had extensive business interests both in China, London and Ethiopia, dating back from around the 1840s. During the American Civil War, large fortunes were made in Bombay and when the boom collapsed in 1865, Tata's father lost heavily. Young Jamshedji was able to enlist the support of his British trading partners for extension of time to pay off the losses and through dint of hard work and perseverance was able not only to overcome the losses but start on a significant industrial career in the 1870s.

Tata has emerged as the largest house in the corporate sector over the past century. Starting from cotton textiles in the 1870s, Tata set up the integrated steel plant at Jamshedpur, the hydro-electric power chain in Bombay, and branched out into oils, soaps, detergents, chemicals, trucks, locomotives, cosmetics, leather industries and in sophisticated machinery fields. Its industrial investments were of the order of well over Rs.20,000 million.

Only 3 per cent of the total shareholdings of Tata are controlled by Tata interests, and the bulk of the income flowing is earmarked for charity. The House of Tata has been known for enlightened management, research and development, and scrupulously honest and fair dealings.

Internationalisation of activity: It has in recent years developed a consultancy division and has also set up a separate organisation for its exports and joint ventures called Tata Exports. Tata has set up joint ventures in Malaysia, Singapore and the Gulf countries, in the areas of truck assembly manufacture, palm oil refraction, air-conditioning equipment, tools and machinery equipment and set up an instrumentation training centre in Singapore.

1.9 Indian Aluminium Company

It is a subsidiary of the Canadian Alcan Corporation which started its operations in India over 30 years ago and for many years remained the largest single producer of aluminium ingots, alumina, extrusions and other processed aluminium products. The Hindustan Aluminium Company, started by Birla in the late 1950s, has been gradually catching up and outpacing this company in terms of production and the two now remain the largest aluminium producers in the country. A third aluminium complex is coming up in the public sector - Bharat Aluminium and the National Aluminium Company. India has very large reserves of bauxite. The first aluminium plant to come up was in 1941, by the J.K. Organisation, but it has not grown significantly in the past three decades.

The Government instituted a system of pricing policy for aluminium in 1978, and in the last five years the operation of this policy has led to increasing erosion of the profits of the company. There has been no upward revision in the retention price to cover the cost increases in 1982-83 in the rate of power supplied by the state agencies and other imposts over which the company has had no control whatever. Consequently, the company suffered a loss of Rs.620 million in 1983-84 - the first loss incurred by Indal in 30 years of its operations. Aluminium being very largely a power-intensive industry, the company also suffered due to unprecedented power cuts at the smelters and low capacity utilisation. The company has three plants in Orissa, Belgaum (Karnataka) and Kerala. Over the past three years the electricity boards in these states have increased on an average power rate by 280 per cent and power currently constitutes 38 per cent of the company's metal cost in Karnataka as against the international norm of 20 per cent. Lower domestic output of the metal has resulted in larger imports. Over Rs.10,000 million have been invested in the Indian aluminium industry and the demand is likely to exceed supply in 1985-86. There are few export possibilities presently. In 1983, domestic metal shipments of the company were over 51,000 tonnes, with a capacity utilisation of 40 per cent and the sales amounted to Rs.16,000 million. The company sold a comprehensive package of X-Ray Deffraction (XRD) technology to Alcan for analysis of bauxite and has continued to provide technical support to Alcan companies in south-east Asia. The company is planning to modernise and expand its operations in extrusion and refractory projects.

1.10 India Tobacco

The company started in 1910 as a selling organisation and subsidiary of Imperial Tobacco in India. Imperial Tobacco, in turn, is part of British-American Tobacco (BAT). The company's manufacturing operations have grown steadily over the years and it has large cigarette manufacturing plants in Calcutta, Hyderabad and, in terms of sales, it has the largest turnover, but much of the sales revenue is accounted for by excise, as the Government has imposed very heavy taxes on cigarettes and tobacco. The company has reduced the shareholding of its parent company to 40 per cent in terms of the FERA guide-lines, but the United Kingdom company continues to be the largest single shareholder and also has an effective control by widespread dispersal and dilution of equity and issue of bonus shares.

The company realised early that it had to diversify in priority sectors and export-oriented fields if it wanted to continue its operations in the expanding market. In recent years, the company has set up a chain of Wellcome group of hotels in collaboration with the Sheraton chain. It has also diversified into paper manufacture with the setting up of the Badrachalam Paper Plant in Andhra Pradesh. It also entered the marine products and other consumer goods exports, and has been exploring avenues for promoting exports of small industries like carpets to sophisticated markets. In the 1960s, the chairmanship of the company devolved on A.N. Haksar, who had joined the company in the early 1950s, and has been largely instrumental in diversifying its operations and is now its Chairman emeritus.

1.11 Bharat Heavy Electricals Limited

In the late 1950s, a large plant was set up in Bhopal for the manufacture of power-generation equipment and boilers by the Government of India as a public sector unit with United Kingdom collaboration. Similar plants also came up later at Tiruchirapalli in Tamil Nadu, Hyderabad in Andhra Pradesh, Hardwar in Uttar Pradesh, and later at Jhansi and Bangalore. The company was unified in the mid-sixties to take over these plants and in the last 15 years has emerged as one of the best managed public sector enterprises. It was the first public sector complex to start corporate-planning division in 1974. The company has developed, in the last decade, a large export base by commissioning several large power-generation plants in Malaysia, Libya, New Zealand, Saudi Arabia and other Gulf countries. It has extensive collaboration with Siemens and other manufacturers both from east and west Europe and other industrialised countries. Its sales turnover in 1983 was Rs.12,000 million and profits were over Rs.600 million. It has developed a large R&D base and has set up a management development institute for the training and orientation of its executives and technical personnel. It is now set to launch a programme of diversification in 1985-90 which will be largely internally financed by the plough-back of retained earnings and such loans as the company can itself raise in the international capital markets. It is the first public enterprise in the country which has declared its objective not to draw on any government largesse for its expansion, modernisation and diversification.

Chapter 2

Planning and decision-making

2.1 Hindustan Lever

Hindustan Lever, which remains the largest private sector enterprise in terms of turnover (discounted for excise) and profitability, has over the past two decades evolved a highly sophisticated and detailed corporate planning mechanism. It was amongst the early multinationals to Indianise its top management cadre and has built up a very extensive research and development base in the country.

2.1.1 Corporate planning. A company analysis of its socio-economic environment is contained in its five-year plan, which also contains information on economic growth and other relevant indicators for the past five years and projections for the next five years, including the economy's real GNP growth rate per annum, real private consumption growth rate per annum, and inflation averages. The corporate plan also refers to the balance of payments both on current and capital account, the dollar exchange rate and the main raw material price, wage/salary trends, and it assesses the environmental factors and outlines the company's basic strategies for a five-year period during which a continued 51 per cent shareholding by the parent company is assumed.

The mechanics of the corporate plan's detailed exercises are arrived at by dovetailing the plan estimates drawn up by the various units/divisions of the company and interaction and interface by the top management at the Bombay headquarters in consultation with and approval of the parent company. The main objective of this exercise is to protect the profitability and growth of the existing business while securing it by a more rapid and profitable growth in chemicals, agricultural products and exports.

The company has realised that it would be necessary to increase exports on a more enduring and reliable basis and decided to restructure the company by transferring activities like food, personal products and animal feeds which cannot be expected to grow in an enterprise with 51 per cent shareholding of the parent company under FERA regulations. This necessitated the shift to core sector items and exports. The company has found a vehicle to transfer the non-core sector activities with the aim of reducing the current level of dependence on soaps/detergents, by increased investments in chemicals and agriculture and to develop exports on a firmer footing by reducing over-dependence on the USSR market.

The corporate plan objectives include inflation-proofed yield on gross capital employed of 8 per cent per annum, inflation-proofed trading results to grow at 7 per cent per annum linked to inflation rate and dividends to grow in real terms discounted for inflation at 2 1/2 per cent per annum.

The company has, over the years, developed a highly professionalised team of technical graduates. The ability to change the character of the company in conformity with FERA has greatly strengthened its position and the commitment of managers at all decision-making levels. Research and development has now become a source of profitable investment opportunities in areas of national priorities. The company has been able to respond to a high growth rate in technical, marketing, sales and commercial areas, and has developed a greater measure of understanding and communication with the central government ministries/authorities.

The ability to manage a diverse workforce spread over the country has progressively improved in the context of the industrial labour relations laws. The close rapport with financial institutions and banks has improved the negotiating skills and its clout with the parent company in the strategic decision-making areas of investment. The company's efforts towards diversification have reduced over-dependence on detergents and soaps, but its predominance in consumer goods will be sustained. Its fixed assets will continue to be modest as greater investments are envisaged in the priority sectors and at the same time meeting the profitability norms in the face of price restraints and inflation. The turnover of the company in the mid-eighties is expected to touch $1 billion.

The functioning of the majority foreign-owned company in an environment which is constantly questioning the need for foreign investment and growing at a faster rate than the rate of growth of available finances for industry and the insular and regulated nature of the Indian capital market, may possibly create shortages of financial resources. The need to maintain 10 per cent exports could affect profitability and the company will have to grow in chemicals and agro-based industries without the same degree of inputs from the parent company as were available in its traditional lines. The speed of modernisation of operations continues to be retarded by the foreign exchange constraints of the economy which does not permit the free import of capital goods, notwithstanding the recent liberalisation for spares and accessories. All the same, the rate of modernisation will be more rapid than in the past to reduce costs over time.

2.1.2 Strategy. The strategic decision is to maintain the parent company's 51 per cent shareholding retention with a contingency plan to bring it down to 40 per cent, if this should become inescapable, and to provide profitable growth and diversification; seek avenues for restructuring to increase growth opportunities and to expand more rapidly in chemicals, agricultural products and exports through exploitation of research and development and to create new business opportunities. The growth and diversification will continue to be governed by the industries development and regulation act, FERA and MRTP Commission. Diversification in chemicals and agro-industries will be very important to project a reasonable rate of growth in the traditional business of premium soaps, edible oil products, skin and hair preparations. Amongst the strategic investment decisions is the one to explore the restructuring and investment in STPP and fine chemicals. The company had undertaken ossein and Di-Calcium-Phosphate (DCP) business prinicipally to increase exports and to explore the possibilities of the manufacture of Di-Ammonium-Phosphate (DAP) fertiliser and use of research products including alkylate substitutes, sodium sulphate and fine chemicals for a captive use to contain costs of detergent products. The company was able to expend exports by reducing processing costs of ossein, improving the quality of DCP and exploring new markets for castor derivatives and wax-based lubricants and implement projects for the manufacture of drug intermediates - profionic acid, glycerol based and cromix.

Among the multinationals operating in India, Hindustan Lever has one of the most sophisticated and advanced research centres which has been engaged in the discovery of plant growth nutrients and has created an opportunity to enter the agricultural business profitably. The centre has held successful field trials and the strategy is to seek opportunities in areas involving improvement of agricultural productivity as distinct from plant protection and pest control and plans are afoot to manufacture Di-Ammonium-Phosphate (DAP), rhizobial culture for pulses and hybrid seed multiplication. In the longer run the company seeks opportunities through oil bearing plants via the tissue-culture route and plant growth nutrient mixtool. One of the strategic decisions has been to set up a separate agricultural products profit centre, and appropriate marketing and field staff have been recruited. Rhizobial culture has promising prospects for enhancing pulse production in which the country is chronically short and the aim is to commercialise these operations. A survey for the commercialisation of hybrid seeds is currently being undertaken, experience having been gained in seed multiplication in the company's Integrated Rural Development (IRD) programme site at Etah in Uttar Pradesh and research on coconut tissue culture is continuing. The company's exports have doubled in the last five years, and plans are afoot to identify more third-party products like carpets, shoes, etc., as also tea with the earlier acquisition of Liptons and recently of Brooke Bond International in the United Kingdom. The company is, furthermore, exploring the possibility of setting up units under the liberalised scheme for exports and in export-processing zones.

The company is engaged in R&D work on development of process for the manufacture of epam cinnamate, vanillin and Indane musk, and in import substitution areas. In-organic chemicals production, facilities have been set up for the phosphate plant for manufacture of Tri-Sodium-Ortho-Phosphate (TSOP). R&D for upgrading of minor oils is in progress. R&D has initiated work to develop methods for reducing energy requirements in traditional process by application of techniques such as pressure and swing absorption, reverse osmosis, agglomeration technology and basic work in immunology has started.

A 1,000-ton plant is set up to scale up the manufacturing process in detergents' raw materials. Cost advantage at partial replacement will be considerable with the replacement of one-third of active matte with fatty acid, ester and sulphate. R&D is in progress for biological hair darkener and to develop more cost-effective poultry and cattle feed.

The decisions in product planning, marketing and exports are arrived at on a shared basis. The emerging opportunities are identified and initiated by the operating units/ divisions and are then examined in depth at the company's headquarters. There is a continuous interface and interaction and constant communication with the parent company before finalising the strategic decisions in these fields. However, a fair measure of autonomy is vested in the company once the corporate plan has been drawn up and approved. Its implementation is left entirely to the company on a decentralised basis, but there is close monitoring and appraisal of the progress.

2.1.3 Dilution. Dilution of equity is expected to raise fresh resources for growth and expansion should it become necessary for the company to reduce the 51 per cent shareholding of the parent company. However, the sensitivities of growing consumer products fast and profitably will not be enhanced by dilution. The MRTP Commission provisions will continue but there will be no export obligation as it will be treated on par with other Indian companies. The present organisation of the business, as a whole-matrix structure is made up of corporate functions and profit centres. The profit centres are responsible for growth and profitability of individual business; the corporate function serves the entire business in specialist areas.

Corporate functions	Profit centres
Chairman	Detergents
Environment	Chemicals (including corporate developments)
Technical (R&D)	Foods
Personnel	AFS Agricultural products, personal products and exports

There is a separate capital expenditure budget for five years and a projection is contained giving details of modernisation, expansion of new and additional capacity, and upgrading of facilities. Projects are usually completed ahead of schedule to reduce cost over-runs and better knowledge of venture capability has been acquired; consultants are increasingly used for detailed engineering design. The project management division has been reorganised so that plans drawn up for investments and capital expenditure are met on target schedules.

The company enjoys a significant measure of autonomy in the employment and industrial relations field. Decisions pertaining to number of jobs, levels of pay, workers' qualifications and working conditions are taken by the personnel director and by the respective functionaries in the units/branches. The parent company decides on the choice of the chief executive and board appointments but other matters are left to the top management of the company in India.

There is some intra-group trade. The decisions in regard to risk management, quality of management and product differentiation are made on a shared basis by the Indian company in consultation with, and approval of, the parent company. There are no regional headquarters set up by the parent company. In regard to business opportunities specific to the Indian environment, the decisions are initiated by the company's management in India, but parent company's approval is normally obtained. The decision-making process has elements of both bottom up and top down. Being largely in the consumer products area, the emerging opportunities are normally identified by the operating unit/division and are thereafter discussed and examined in depth through interface and are finally worked out at the Bombay Indian headquarters of the company. Matters relating to policy are all decided upon at the Bombay headquarters, in keeping with the broad strategic objectives of the parent company. There is a measure of consensual process of decision-making and operating decisions are not normally superimposed without due involvement and interaction at the unit/branch levels. The company has a fairly healthy relationship with the trade union, and enters into a collective agreement on a medium-term basis (three years).

In the Indian situation, there has been no need for lay-offs and retrenchment. In case of restructuring and redeployment arising from technological changes, the company's strategy has been to retrain the labour force for its expansion and diversification programmes. The technological decisions are no doubt made on a shared basis between the parent company and the Bombay headquarters. However, the R&D centre has been sharing its findings with sister Unilever companies in Africa, Asia and Latin American countries. The decisions in regard to research and development are basically incorporated in the five-year plan which is continuously updated on an annual basis. The decisions concerning the size of the workforce are by and large left to the local personnel director and the personnel managers.

2.1.4 Organisation structures. These have been changed to independent profit centres and a new profit centre in agricultural products has been set up. Finance function is now the charge of the commercial director and in future there will be more profit centres sharing common services in finance, technology, environment (Government/Financial Institution) and personnel.

Each of the profit centres has detailed statements outlining the industrial and competitive environment, trading performance, product group, product performance, capital expenditure, manufacturing, commercial, distribution, sales (marketing) personnel - indirects - Overall Trade Investments (OTIs) with overall summaries.

2.2 Lipton India Limited (a subsidiary of Hindustan Lever)

Growth of the domestic market is largely in loose tea and packeted tea sales have declined with increasing domestic consumption. Heavy excise duty and packaging costs have led to increasing market switch over to loose tea. Lipton's volume increased marginally in the late seventies and early eighties, and its share of total market declined from 10.4 per cent to 7.7 per cent in 1980. Another enterprise, Brooke Bond, dominates the packeted tea sector.

Packet tea exports have been growing but Lipton has not fully exploited, as yet, the market potential in the Middle East and the Gulf countries; there is increasing shift to premium teas and small packs. Attempts are afoot to strengthen the distribution network, reduce the surplus workforce (especially in the sales division) through separation schemes, voluntary retirement and natural attrition; and a thrust in marketing to overcome trading losses. There was also a prolonged strike in 1979-80. Liability to maintain volume growth in the packed tea market and production was highly centralised in Calcutta earlier. The future strategy is to pursue volume of growth and by entry into the loose tea market. About 500 salesmen are to be redeployed and a reduction in the workforce will be arrived at through a near ban on recruitment and voluntary retirement.

2.3 Glaxo

The strategic decisions in respect of investment and employment are made primarily in India except for group-wide drugs and technology, use of brand names and exports franchise. The decisions are shared for major projects and capital expenditures, where concurrence is invariably sought from the group headquarters in the United Kingdom. Shared decisions are few and cover areas which affect the group interests like trademark, export areas and dilution or equity.

Financial decisions in regard to fixed assets, investment projects, expansion and diversification are taken at corporate and divisional levels through the divisional board, and the development committee of the board. Besides the eight divisions, there are functional directors and the managing director.

Five persons from the parent organisation are members of the Indian company board. The total board strength is 12. The president and managing director are full-time executives, the rest are all non-executive directors, comprising five Indians and five from the United Kingdom. The 40 per cent foreign shareholding is termed non-FERA (i.e., not subject to the Foreign Exchange Regulation Act), but the company is subject to MRTP Commission, and the Industrial Development and Regulation Act provisions.

The organisation mostly follows the decentralised approach within the corporate guidelines. Corporate planning and management by objectives (MBO) five-year corporate plan; and strength and weakness analysis of opportunities and threats (SWOT) analysis is the cornerstone of corporate policy. Participative decision-making is practised and quarterly sessions are held and divisional objectives and goals are fixed. There is a three-tier decision-making process. There are departmental targets, result guides and performance appraisal, which is closely monitored. The decisions in respect of product planning, exports and marketing are made through the divisional approach of MBO. The planning process, and related market research take into account government policies as well as consumer needs as seen by each division, headed by senior vice-presidents.

The decisions pertaining to industrial relations and employment, levels of pay, workers' job specifications and working conditions are made in part at the corporate headquarters level and/or the divisional level. Central personnel policies are implemented at divisional levels. Only the managing director and the board members are appointed by the major shareholders.

Decisions in respect of risk management, quality management and product differentiation are based on corporate policy and the MBO process. This is similar in regard to product differentiation.

Major decisions rest with the Indian company's board and its four senior vice-presidents. There is no regional set up.

The Indian company is treated as an affiliate company by the present enterprise and enjoys a large measure of autonomy.

Decisions in regard to an exceptional environment (i.e., unforeseen developments) relating to general strategic objectives and management are made by the managing directors and senior vice-presidents through MBO and the planning process, and the divisional boards and are subject to continuous updating, review and appraisal.

The quantum of exports forms 5 per cent of turnover. Export items and export markets are mutually agreed between the Indian company and the parent group company.

Intra-group is very limited.

There is almost complete autonomy for the Indian affiliate, in regard to employment issues and control measures (except at the managing director/board level appointments). The executive management has been completely Indianised. The policy decisions are made at the corporate and/or divisions as the case may be by the managing director and senior vice-presidents through:

- MBO and planning process;
- divisional boards;
- managing directors and senior vice-presidents in specific areas under their control;
- delegation of powers. The structure's sanctioned strength has to be approved by managing director. Replacements and fresh recruitment requires managing director's clearance.

The company follows a five-year plan - the so called London Plan - which is revised in a broad way around February-March end each year. The annual budget for the next financial year is finalised around May-June. The corporate planner takes the initiative and the board gives the impetus but there is a process of continual interface and exchange/consultation and reporting with the group. The company follows the consensus process and mechanism exists which allows for mobility of ideas and a rapid communication system.

Matters pertaining to employment and any lay-off situations are discussed between the company and the union in bilateral negotiations. The relations with the union have so far been smooth, but lately one militant union has entered the picture. There have been few strikes and no lock-out except at one plant in Aligarh, and no retrenchments. The company was carrying over 500 surplus personnel in the direct distribution at a cost of over Rs.12.6 million annually for several years since the company switched over from direct distribution to distributing through wholesalers.

The Indian company has been facing severe price control existing for the industry. This has kept fresh investments in a low key with restricted margins also in regard to exports. Indigenous machinery for the pharmaceutical industry is not available and there are environmental constraints for modernisation.

Matters pertaining to restructuring and redeployment are discussed with the union as a matter of principle. A voluntary retirement system has been instituted and reliance is placed on natural attrition for the adjustment of the workforce. Only half of the workers thus leaving the company are replaced. Decisions in regard to technology research and development are made by the Indian company, but only relate to the adaptation of group technology.

Decisions on new product lines are taken by the divisions depending upon corporate vis-ã-vis divisional needs. Divisions are headed by senior vice-presidents. There are only two operating divisions, namely drugs and pharmaceuticals, foods and fine chemicals, and two support divisions, namely central services and personnel administration and corporate management services.

The decisions in regard to diversification and allocation of resources are made on a corporate basis by the board on divisional recommendations. The development committee comprises a managing director, four senior vice-presidents, a chief finance manager, legal, quality control and corporate planning chiefs. There is a monthly information systems control. The corporate planner/MBO acts as a catalyst of the de facto committee of management, comprising the chief executive and the four senior vice-presidents.

The decisions in regard to research and development, acquisition and divestment are made by the corporate board, managing director and senior vice-presidents in consultation with the group in the United Kingdom. R&D is part of each operating division. The decisions concerning the size of the workforce and employment are made by division's senior vice-presidents together with managers, managing director, corporate services and personnel division, and senior vice-presidents as embodied in the forward plan. The Indian affiliate enjoys complete autonomy in employment decisions.

The strategic decisions and the analysis of different strategic alternatives, in terms of product choice and market segments, are made in the light of a detailed plan exercise, MBO and on a shared basis with the largest shareholder - the group's parent company in the United Kingdom.

There are no works councils, although works committees existed in the past. A grievance committee exists. The union takes care of these matters.

Strategic decisions in regard to investment projects, creation of new divisions and sale of fixed assets are taken in the light of the plan exercises and MBO. A product committee exists for both the two operating divisions.

2.4 Siemens India Limited

Siemens is planning to provide a substantial part of the telecommunication equipment in the seventh five-year plan (1985-90) in which India is proposing to make a massive modernising investment.

A very detailed and exhaustive annual plan giving production and product targets, investment projects, sales forecast, profitability, cashflows and numbers of employment, is made by each division of the company. There are three expatriate directors and the managing director is an expatriate technocrat. The Federal German parent company holds 51 per cent of the capital of its Indian affiliate company. This is covered under both FERA and MRTP Commission. Being in the core/high technical sector there is no export obligation; nevertheless, about 10 per cent exports are taking place to the USSR and neighbouring countries such as Bangladesh, Nepal, Bhutan and the Maldives, which cannot be competitively serviced directly by the parent company.

There is a monthly performance information report which is sent to the group's headquarters and quarterly performance appraisal is undertaken. As the managing director and other expatriate directors are resident in India, considerable autonomy had been afforded to the chief executive to exercise operational control. One company has a five-year rolling plan which is continuously updated. The product departments of the operating divisions initiate the decision-making process and they are organised on the profit centre basis concept all along the line. The central office lays down the broad operating and policy guide-lines and parameters and closely monitors the performance appraisal and the operating ratios.

There is little turnover in managerial personnel although more at worker levels. Product departments spell out their costs/sales estimates and profitability and are given latitude in deciding margins/discounts, subject to the prevailing market situation and general conditions. The parent company lays down a policy frame for the company's operations, primarily in the electrical field.

Once the annual plan document is prepared and approved there is no further parent interference in the implementation; however, a continuous consultation process is maintained. For important operational decisions there is an executive committee of management which is headed by the chief executive.

The strategic decisions are usually taken by the corporate office in Bombay. The investment plans/projects are initially identified by the departments/divisions and vetted by the corporate planning department which is part of the financial controller's domain and acts as a catalyst to co-ordinate these decisions. The decisions on fixed assets are taken by the Indian headquarters and an elaborate purchase procedure has been outlined. All decisions are well documented and recorded.

The company follows a decentralised approach in matters of sales and product servicing, as profit centres have been set up for the various departments/divisions, but a centralised approach in key and basic areas of decision-making is followed.

Decisions are initiated by product departments/divisions and approved by company headquarters in Bombay. There are virtually no imports from the Federal Republic of Germany, or other foreign sources, and there is no significant intra-group trade. Product planning/ marketing decisions emanate from the field/departments/divisions.

The annual plan spells out the number of jobs; workers' qualifications, and working conditions and industrial relations are centrally controlled by the company's personnel department in Bombay. Agreements with the unions are on a three-year basis. There are two unions - one for white-collar and one for blue-collar workmen. By and large, industrial relations have been satisfactory except for one solitary case when there was a lockout and 1,000 workers had to be temporarily laid off. Most of these workmen were reinstated. There has been no strike. The central office in Bombay lays down the broad parameters of labour policy. There is virtually complete autonomy for the Indian affiliate in the field of employment decisions. Only the chief executive and two directors for major functional areas (all expatriates) are appointed by the parent company. There have been no cases of lay-offs under the existing labour legislation and the court's interpretation, and no retrenchment of workmen is possible. Decisions in regard to risk management, quality of management and product differentiation are made by departments/divisions with the company's headquarters approval in Bombay.

There are no regional headquarters set up and the company is the parent company's direct subsidiary.

The parent/subsidiary relationship exists with considerable autonomy in operations vested with the chief executive and the executive committee comprising functional directors.

In regard to exceptional environment, decisions relating to strategic objectives and management are made by the company's headquarters in Bombay, in consultation and with the approval of the parent company in the Federal Republic of Germany.

Decisions are made on a consensus basis and a participative management style is invariably followed, as profit centres have been set up and very minute and detailed planning exercises are carried out with close monitoring, performance appraisal and performance budgeting.

The iterative process of decision-making is followed and global strategic perspective of the parent company maintained to hold a dominant position in the electrical field, embracing all its segments.

The initiative is normally taken by the departments and divisions, and co-ordinated centrally. Only in matters of high technology and process change are the matters initiated by the parent company, the company's Bombay headquarters and decided in the light of their practicability in India.

Decision-making is both bottom up and in basic key areas top down also. Both the approaches are in evidence.

Technical changes are decided centrally by the Indian company in consultation with the parent company. The unions are taken into confidence and their tacit agreement is obtained. Retraining for new machines and processes is done with the union's consent. There are no works councils. The suggestions of the workmen are invited and incentives are provided.

There is no basic R&D in India. Only applied adaptive research is undertaken as the R&D budget in India is limited. This implies almost complete technical dependence on the parent company.

The decisions in regard to product lines are made by the Indian headquarters of the company in consultation with the product departments/divisions.

There is an executive committee of management set up to decide on matters of policy and of significant importance.

The diversification decisions are usually embodied in the detailed plan and are approved by the executive committee of management and the chief executive in consultation with the parent company. This plan is approved by the parent company.

The basic decisions pertaining to divestment/acquisition are in the competence of the parent company in the Federal Republic of Germany. There has been, thus far, no divestment decisions and acquisition is decided by the executive committee of management and the chief executive.

The decisions relating to planning, budgetary and control procedures are embodied in the elaborate one- and five-year plans, and there is close monitoring against the predetermined targets and variations have to be accounted for.

The strategic decisions, including the socio-economic environment, strengths and weaknesses, different strategic alternatives, in terms of products and market segments and choice of products, are covered fully in the annual and five-year plans and a system of shared decision-making is followed.

The production/marketing decisions are jointly made by the product departments/division headquarters.

The strategic investment decisions, creation of a new division, introduction and composition of product range and product policy, are made as per the plans.

There is no subsidiary, nor any holding company.

2.5 Union Carbide

It has established an R&D centre conducting research on tropical pests and oxygen concentrators and manufacture of midget electrodes for dry cells and electrolytic manganese dioxide. Research on synthesis of new molecules, energy saving and anti-pollution measures is carried on by Union Carbide at its EMCO plant. The company has set up a subsidiary company in Nepal, which went into commercial production in May 1984. The chemicals and plastics business of the company is proposed to be sold to Reliance Textiles owing to the non-availability of gas at economic prices and stagnating diminishing growth prospects in this domain, and the setting up of similar larger capacity plants.

Long-term labour agreements have been entered into by the three factories of Union Carbide of India Limited (UCIL) at Calcutta, Lucknow and Bhopal. Strategic decisions are made jointly at Indian headquarters, regional headquarters and the parent company, and very detailed five-year and annual plans are worked out for investment projects, production and sales forecasts, profitability and turnover ratios, borrowing, cash flow, etc. The company is subject to FERA, MRTP and the Industrial Development and Regulation Act provisions. Its Bhopal plant has suffered, in December 1984, from a very tragic gas leak, resulting in the death of over 2,000 persons and grievous injury to thousands of others.

Decisions in regard to the fixed assets are taken jointly and shared by the Indian headquarters and regional headquarters, and in regard to expansion and diversification - with the approval of the parent company. There is complete autonomy in day-to-day operations with the indian headquarters and management. There is a full-time managing director (chief executive) and a part-time chairman. Board appointments are made with the approval of the parent company. In general terms, decisions are decentralised for day-to-day operations and centralised in key and basic policy areas.

Decision-making is initiated at the level of product managers as profit centres have been established and through the operating headquarters in Calcutta, and are finally cleared by the management committee comprising the financial and personnel directors, vice-president corporate planning, the company secretary and the chief executive in Bombay. The company's registered office continues to be in Calcutta, but both the part-time chairman and managing director are located in Bombay, as also the vice-president for corporate planning and finance, and the finance and personnel directors. In Calcutta are located the chief personnel manager and the deputy financial adviser, who are empowered to take day-to-day operational decisions and keep the Bombay office fully informed. Wherever necessary, they seek clearance of Bombay office by telex/telephone and by continuous interface and interaction.

There are very limited imports undertaken by the company. Decisions regarding marketing and exports are initiated by the marketing divisions and then submitted to the central management committee and managing director. The part-time chairman mainly presides over board meetings and advises with his vast experience as an industrialist with financial management background. He enjoys a high reputation in the Indian industrial and government circles. The managing director has been given the necessary authority and important decisions are made either in consultation with regional headquarters at Hong Kong, or on basic policy issues with the approval of the corporate headquarters of the parent company in the United States. Even when decisions are taken by the management committee, chief executive and the board, they are invariably reported to regional headquarters at Hong Kong and there is constant consultation and interface by frequent and periodic visits.

Decisions pertaining to industrial relations, employment, levels of pay, workers' qualifications and working conditions are usually made at the Bombay office and the broad parameters of personnel policy are laid out for the divisions, branches and the Calcutta/Lucknow/Bhopal units. There is a fair measure of decentralisation in industrial relations. Usually the company enters into three-year agreements with the unions and by and large the industrial relations have been satisfactory. Branch units are given reasonable operational autonomy in day-to-day functioning, but keep the Bombay office fully apprised and wherever necessary consult with it. Other than board appointments, matters are left to the chief executive, personnel director, the committee of management and the Indian board as required.

The decisions in respect of risk management, quality management and product differentiation are made at Bombay, based on the recommendations of branch plants/operating divisions, and the regional headquarters is kept fully informed and consulted on all matters of risk and quality of management.

The chief executive and executive director's remuneration and perquisites are fixed by the company law board of the Government of India. The current ceiling is Rs.7,500 per month plus 1/2 per cent commission on profits, subject to a maximum of 50 per cent of basic pay. There is a 50 per cent house rent ceiling and subsidised car usage and reimbursement of entertainment on actuals. After defraying the heavy rates of income tax, surcharge and compulsory deposit, the net take-home salary of the chief executive amounts to a bare Rs.3,000 per month, which is inadequate in the present inflationary price level and is not likely to attract best talent. The present incumbent has just completed 25 years' service and had received his higher technical education in the United Kingdom and his training in the United States. The marketing and senior personnel decisions, except at chief executive and board level, are taken in Bombay by the committee of management/managing director and are reported to the regional headquarters at Hong Kong.

Decisions in regard to unforeseen developments, general strategic objectives and management emanate from the Bombay office but are usually taken in consultation with regional headquarters at Hong Kong and are invariably shared with it.

The percentage of sales/exports abroad is around 10 per cent which is generally required for FERA companies. For expansion and diversification, the majority-held foreign companies are required by the Government of India to enter the core, high technical sectors and normally foreign-held companies are not encouraged in purely domestic trading areas or conventional industrial fields. There is hardly any intra-group trade.

There is complete autonomy in regard to employment issues and the control measures except at the level of chief executive/board appointments. Full powers are vested in the managing director and the committee of management and the personnel director.

Decisions are as a rule initiated at the branch/operating levels in regard to employment issues and for identifying investment opportunities. The company exercises control measures through monitoring, consultation and interface. The iterative process is followed in this respect, taking account of the global strategic interests of the company which are basically to maintain its leader position in the field of operation.

The initiative is taken by the branch units/plants and thereafter the impetus is given by the Bombay office, the central management committee and the chief executive. The decision-making is both bottom up and top down. The direction is bottom up on day-to-day decisions and top down on key and basic issues.

Decisions are not taken unilaterally but only after due involvement and deliberation of the branch units/plants and are essentially shared excepting the operational day-to-day decisions which vest with the people on the spot.

Unions are duly consulted in labour matters and there is a three-year agreement in regard to employment. There has been no lay-off as no retrenchment is possible under the existing country rules. Expansion and diversification are the only avenues for keeping abreast of global technological changes which result in redeployment of workers.

In cases of major technological, restructuring and redeployment changes, the decisions are made at Bombay in consultation with regional headquarters and the corporate headquarters of the parent company.

Decisions in respect of new product lines and new product functions/services are initiated by branch units/plants operating divisions in the light of the developing marketing situation and competition with the approval of the Bombay office - primarily for new product functions or new services.

The diversification decisions are usually reflected in the detailed annual five-year and annual plan projections and are collectively taken by the committee of management/managing director/board in consultation and with the approval of regional headquarters. The parent company corporate headquarters is kept fully apprised in respect of product lines and strategies. The allocation of resources decisions are taken on a shared basis and are collectively made.

Basic research and development decisions are made at the parent company's corporate headquarters and in matters of applied research at Bombay in consultation with parent company/regional headquarters. The acquisition decisions are made by the central management committee/managing director/board. There have been no divestment decisions excepting to sell off the chemicals and plastics business which is awaiting government clearance. The regional headquarters and parent company's corporate headquarters are kept fully informed of any acquisition decision. The decisions in respect of the size of the workforce and employment are made by the personnel director.

The decisions in regard to planning, budgetary and control procedures are embodied and reflected in the very detailed annual and five-year corporate plan, and there is continuous monitoring and appraisal of the plan in the light of the emerging situations followed by performance budgeting.

The strategic decision-making arrived at on a shared basis, covers the analysis of the socio-economic environment, the strength and weaknesses of the company, and strategic alternatives in terms of products and choice of market segments.

Excepting in Calcutta there are no works councils in the Indian Union Carbide plants, but works committees exist for day-to-day operational matters while the union takes up the broader issues of collective bargaining.

The production/marketing decisions are made on the basis of recommendations of branch units/plants/operating divisions in consultation with personnel and finance directors/advisers.

The strategic decisions pertaining to investment projects, creation of new divisions, sales of fixed assets, new products and product policies are enshrined in the planning process.

2.6 India Tobacco Company (ITC)

All strategic decisions are made at corporate headquarters in India. Strategic decisions are shared with major shareholders namely the parent organisation abroad and All-India Financial Institutions. The financial decisions in regard to fixed assets, investment projects, expansions and diversification are more centralised. ITC follows a mixture of centralised and decentralised decision-taking. The organisation is divided into:

(i) a corporate executive committee (CEC) comprised of the chairman, vice-chairman and two deputy chairmen, each of whom acts as group head for a group of businesses;

(ii) the committee of directors (COD), which comprises full-time directors only;

(iii) the divisional boards or divisional executive committees of operating divisions. Broadly, divisional boards take all operating decisions on a day-to-day basis in accordance with their business plans that are approved once a year by the COD. The CEC takes policy decisions for ITC as a whole, more particularly in the areas of finance, people and new businesses. Major business decisions are agreed between the COD and the divisional boards before implementation. Decisions in respect of product planning, marketing, exports and imports are largely made by divisional boards in keeping with their approved business plans.

In the industrial relations area the strategic policy is drawn up at company's headquarters in India and the company ecourages unionism to make it more responsible. The company believes that workers can be best looked after by one union in one operating unit. No multiplicity of unions is encouraged and the majority group alone is recognised. The pattern is of in-house unions even though the presidents of the union may be from outside, but effective management is from within the union members - who know best.

The benefits of productivity are shared with the shareholders and workers and the company's consumers. In furtherance of this, the company's philosophy is that there is need to work on the basis whereby the elements that become part of pay bracket, but conflict, need to be avoided. There is a productivity improvement plan and unions can voluntarily opt for a productivity linked bonus. Unions are permitted to bring in their own consultants to determine productivity by the company. Decisions in respect of risk management, quality of management and product differentiation are on a decentralised basis. The corporate headquarters participates in making available manpower development facilities and each division expresses its needs and the headquarters arranges and co-ordinates the programmes. General management matters are decided by headquarters and product and technical aspects are dealt by divisions.

Decisions regarding top management are agreed with the parent organisation by the chairman on his annual visit to the parent company headquarters. Regarding major marketing policy decisions, these are taken at the ITC level and contained in the three-year plan which is the vehicle of communication to the parent organisation.

ITC is a trade investment and an associate company of the parent organisation. The relationship is founded on the understanding that the parent company's investment is safe and makes returns to shareholders equally on an agreed basis. Business operations are contained in the company's three-year plan and once these have been examined, there is no interference from the parent organisation in its implementation. Progress against the plan is reported on a monthly basis.

Bhadrachalam Paper is a separate company of ITC, but other entities are divisions. The comapny has been promoted by ITC which has one-third shareholding. The Government of Andhra Pradesh, public institutions and BAT board have also invested, though ITC can have wholly owned/majority-owned subsidiaries and affiliates. Windsor Manor Hotel, Bangalore, is a wholly majority-owned unit, and Bay Hotel is also a majority-owned subsidiary.

Decisions in regard to exceptional environmental features and general strategic objectives are taken at the ITC level and where these impinge on the parent organisation, decisions are taken after mutual consultation. Direct business of ITC with parent organisation or its other subsidiaries abroad is small and limited to leaf tobacco exports.

Almost full autonomy is enjoyed in matters of employment policy. Role of unions is participative and consultative. There is a long history of bipartite and tripartite agreements achieved through negotiations. All decisions are made in India and restructuring and redeployment is done in agreement with unions. Works council regulations are not applicable as recognised unions exist at each unit with whom all matters relating to employment are discussed. The preservation and growth of employment are given lower priority than attaining economic productivity in business decision-making.

ITC organisation does not necessarily follow an iterative decision-making process, unless relevant to the environment in which it operates. This is particularly so for new businesses. Strategic decisions are made at the top, planning being the central core of managing the business and operations. Divisions make plans within the board guide-lines and the parameters laid down and can raise their own resources within approved credit limits. There is a hierarchical-cum-group decision-making process intra-corporate, intra-divisional and inter-divisional/corporate. Discussion is important. Ultimate decisions are taken by the chairman of the group. He has to listen and weigh and make the final decision. The ITC management believes that communication is all important. Direction has to be clear cut and authoritative if necessary.

Decisions in respect of new product lines, new product functions/services are made at divisional board levels. CEC (corporate executive committee) makes the diversification decisions and in respect of allocation of resources. Headquarters role is, in overall strategy formulation, to dilute and diversify the company's operations in the context of national priorities - core/export sections and organisation of operations in a controlled economy. There are procedural bottlenecks over much of planning/controls and total ideology in method is still evolving. R&D decisions are made by divisional boards and acquisition/divestment decisions by CEC divisional boards, and ratified by the committee of directors as part of three-year divisional plan package.

In respect of decisions concerning the size of workforce and employment, the decisions are made at the divisional/personnel levels.

All proposals, strategic or tactical, are embodied in the planning process. Review procedures between the divisions/committee of directors form the basis of monitoring results emerging from such decisions. The management of environment is of primary concern, therefore, comprehensive environmental studies are undertaken by the company taking account of legislation, government economic policy, regulatory measures, resources in terms of men, money and materials, technology, competition, interest impact, ecology and self-examination, and SWOT. Each division plans for its products.

The company enjoys a very high measure of operational autonomy and excepting for the top appointments of chief executive and the board, the parent company does not interfere with the employment and industrial relations matters.

2.7 Mico-Bosch

Motors Industries Company (MICO) Limited was founded in Madras on 12 November 1951 to manufacture spark plugs and fuel injection equipment in collaboration with Robert Bosch, GmbH of the Federal Republic of Germany. With the construction of the first factory building in Bangalore in 1953, the company started assembling spark plugs and moved on to their full-fledged manufacture and single and multi-cylinder fuel injection pumps, and high precision components of the fuel injection system. The head office of the company was shifted to Bangalore in 1954, with financial participation of Robert Bosch. The growth of the vehicular and diesel engine industry in India gave an impetus to the company's rapid development. Mico has worked closely with the manufacture of prime movers to develop a fuel injection system made in India. Over 3 million Mico-equipped diesel driven pump-sets are in use to irrigate 6 million hectares and there are 300,000 Mico-equipped tractors and power tillers; 600,000 Mico-equipped diesel vehicles and 2.8 million petrol-driven vehicles are fitted with Mico spark plugs. The company has been a pioneer in helping establish 300 small-scale ancillary units and has emerged in the past two decades as an exporter of high quality products. Over a third of the company's production is exported to western Europe and the developing countries of Afro-Asia and Latin America. The import substitution of the 1950s and 1960s greatly aided the company's research and development activities. Applied materials research is carried out to find indigenous substitutes and new manufacturing processes have been developed to make maximum use of local resources. Mico had nearly 10,000 employees but owing to technological changes and in order to meet the fierce international competition, the company was forced to trim the labour force to 9,000 largely through a system of voluntary retirement. Mico has two factories at Bangalore and Nasik, and special emphasis has been placed on the development of the workers' skills. It is headed by a chairman and a chief executive who is also in charge of its commercial operations, besides a technical director who is an expatriate from the foreign collaborator. Although the share of the foreign collaborator has been reduced to 40 per cent in terms of the FERA provisions, effective control continues to be vested through dilution of equity, well-dispersed shareholding and issue of bonus shares.

The decision-making process in the company is on a shared basis. The investment decisions relating to expansion, modernisation and diversification are made in consultation with and approval of the largest shareholder in the Federal Republic of Germany. The investment projects are initially identified by the operating divisions/units and are screened and examined by the functional directors and the impetus is provided by the foreign collaborator. As the company has a very large export base, it works in very close rapport with the parent company's international marketing network. Of all the multinationals studied in the report, Mico has the largest segment of the export market. Decisions relating to product planning, choice of products and market segments are arrived at on a consultative basis. The strategic decisions are made at the corporate headquarters in Bangalore on a shared basis with the foreign collaborator. Financial decisions in regard to fixed assets are also arrived at on a shared basis.

Both the centralised and decentralised approach is followed in decision-making. While the decisions in the key and basic areas are made centrally in consonance with the global strategic perspectives of the foreign collaborator, the implementation at the operational levels is on a decentralised basis. The decisions in respect of risk management, quality of management and product decisions are also taken in consultation with the foreign collaborator by the local board. Similarly are decisions made in respect of all exceptional environment and general strategic objectives/management. On account of the very large export base there is considerable extent and quantum of intra-group trade as nearly 1/2 of the production goes to the parent company and its associates and affiliates. The company enjoys a high degree of autonomy in regard to employment issues and control measures. However, as the company is operating in a highly sophisticated technical field it works closely with the parent company in regard to technological choice and its impact on the size of the workforce. In order to remain internationally competitive the company has had to contain the costs and to reduce the workforce by over 10 per cent through generous voluntary retirement measures. The decision-making process is through a consensual and competitive process.

The role of the unions in regard to employment and consultation in lay-off situations is consultative and decisions are usually taken with their tacit involvement. Although the company has developed a substantial R&D base, it remains highly dependent on the parent for basic research. The company has formulated a detailed operating and perspective medium-term plan which covers the analysis of the socio-economic environment, examination of strength and weaknesses, different strategic alternatives and market segments.

2.8 Indian Aluminium Company

The Government instituted a system of pricing policy for aluminium in 1978, and in the last five years the operations of this policy have led to increasing erosion of the profits of the company. There has been no upward revision in the retention price to cover the cost increases in 1982-83 in the rate of power supplied by the state agencies and other imports over which the company has had no control whatever. Consequently, the company suffered a loss of Rs.620 million in 1983-84 - the first loss incurred by Indal in 30 years of its operations. Aluminium being very largely a power-intensive industry, the company also suffered due to unprecedented power cuts at the smelters and low capacity utilisation. The company has three plants in Orissa, Belgaum (Karnataka) and Kerala. Over the past three years, the electricity boards in these states have increased, on an average, power rates by 280 per cent and power currently constitutes 38 per cent of the company's metal cost in Karnataka as against the international norm of 20 per cent. Lower domestic output of the metal has resulted in larger imports. Over Rs.10,000 million have been invested in the Indian Aluminium industry and the demand is likely to exceed supply in 1985-86. There are few export possibilities presently. The company sold a comprehensive package of XRD technology to Alcan for analysis of bauxite and has continued to provide technical support to Alcan companies in south-east Asia. The company is planning to modernise and expand its operations in extrusion and refractory projects.

Strategic decisions are made at the corporate headquarters and shared with the parent organisation in Canada. The major investment decisions and pertaining to share issues, top management changes/appointments and technological changes are arrived at on a shared basis with the parent company. Financial decisions in regard to fixed assets, expansion and diversification are more centralised in the organisation and it follows a both centralised and decentralised approach in decision-making. Functional and operational decisions are largely decentralised. Decisions made in regard to product planning, exports, marketing and imports are arrived at by the concerned operational heads/business managers, heads of functional divisions and the chief executive.

Decisions pertaining to industrial relations, employment, number of jobs, levels of pay, workers' qualifications and working conditions are on a shared basis, while the basic and key decisions are made centrally.

Decisions in regard to risk management, quality of management and product differentiation are taken by the central management committee comprising the functional directors and the chief executive. The parent organisation has set up a regional headquarters to co-ordinate their Asian operations but their role is advisory in regard to marketing and senior personnel decisions.

The Indian company is a subsidiary and the parent company is represented on the board by the chief executive chosen and appointed by the parent company and major policy/strategic decisions are made in consultation with the parent company. The Canadian company also renders technical assistance and their advice is often solicited. There is a constant communication flow through interface and frequent visits. The Indian company also provides technical and advisory services to other sister Alcan units in south-east Asia. Decisions in regard to exceptional environment/general strategic objectives and management are made on a shared basis. Quantum and percentage of sales/exports abroad vary from 5 to 7 per cent in recent years and there is a close linkage with the parent company and their affiliates in south-east Asia. However, there is not much quantum of intra-group trade.

The company's headquarters in Calcutta enjoys full autonomy in employment issues and controls all measures except for the appointment of the chief executive and board members. The management committee has been set up by the chief executive for strategic issues. In the areas of production, marketing and sales, the general managers and the business centre managers are empowered to make decisions. The organisation follows the iterative process and the global strategic perspective of the parent company is that aluminium is a key material and will remain so. New capacity must be based on cheap power under the company's own 'control'. The initiative in strategic matters is taken at both corporate and business levels while the impetus is provided by the business planning and technology manager. Forecast/actual synthesis is done at the corporate planning level. The company follows both bottom up and top down decision-making patterns. The process of decision-making is on a competitive and consensual basis.

The role of the units in regard to employment and consultation in lay-off situations is consultative up to certain levels but the ultimate decision rests with the management. Similarly, in matters of industrial relations, the unions are consulted but management has the final say in regard to reconstructing and redeployment and in cases of technological changes.

Decisions in regard to technological changes are initiated by the Indian company and the impetus is provided by the parent company through continuous consultation. Decisions in regard to new product lines, new product functions/services are made locally, but the parent company is kept fully apprised and is duly consulted. The diversification decisions are taken on a collective basis by the chief executive in consultation with and approval of the parent company. Decisions in regard to research and development, acquisition/divestment are made by the head of research and development divisions - chief technical officer, the central management committee/chief executive and the parent company.

Decisions concerning the size of the workforce and employment are made by the various departmental heads in the company's units/divisions and by the personnel managers/personnel director.

In regard to planning, budgetary and control procedures, the finance division collects all the information and data, analyses the same, which are placed before the central management committee/chief executive and these are largely embodied in the annual and medium-term plans of the company. These plans cover an analysis of the socio-economic environment, examination of the company's strength/weaknesses, and an analysis of the different strategic alternatives in terms of product choices and market segments.

The role of the works council in the organisation is consultative - mostly positive. The works council deliberates on matters of safety, work conditions, productivity, etc.

Production and marketing decisions are based on commercial norms. However, employment potential is kept in view. The strategic decisions in regard to choice of investment projects, creation of a new division, sale of fixed assets, choice of a new product, composition of product range and product policy are based on the broad guide-lines set out and reflected in the annual and medium-term plans. The decision-making represents a combination of number of shareholders, board, corporate management and business.

The subsidiary enjoys autonomy in matters relating to employment.

2.9 Tata group

The House of Tata has played a pioneering and notable role in the fields of trade and industry for over a century. Tata has emerged as the largest house in the corporate sector with the largest steel plant in the private sector and have branched out into manufacture of trucks, locomotives, chemicals, oils, textiles, soaps, detergents, cosmetics, leather industry and in sophisticated machinery fields. Its industrial investments have been of the order of well over Rs.20,000 million. In the domestic corporate sector it has been a leader in the areas of research and development and enlightened human and industrial relations. For almost 50 years Tata has not experienced any labour strife in their industrial complex and was the first in the country to institute many welfare measures for the safety and well being of their large workforce - running into a quarter million. It has in recent years set up a consultancy division and a separate organisation for its exports, called Tata Exports. The house has set up joint ventures in Malaysia for the assembly of its trucks and for palm oil refraction and an instrument manufacturing and training centre in Singapore, and air-conditioning units in the Gulf countries.

Tata started a joint venture in Malaysia along with the Danish group - United Plantations - with the share of Tata oil mills at 50 per cent and 50 per cent Danish for ungradation of crude palm oil into palm oil refraction in the early seventies. The original plant was built with Danish technology and Tata's investment was Rs.5.4 million. Royalties for Tata, for its expertise, were to be spread over six to seven years, but the entire royalty was paid back in the very first year - amounting to Rs.5.3 million. Tata's profit share was ploughed back and the present capital of the joint venture is around 38 million Malaysian dollars, having successfully risen from original 5 million Malaysian dollars through retained earnings. The project is 98 per cent export oriented and the palm oil refineries have multiplied the refining capacity to two times of the crude input. Lately, the Danish group have disinvested to a large extent, particularly in 1982, and have sold off their holdings at six times the original cost. In 1983, Malaysian palm oil prices more than doubled and high liquidity was maintained despite the losses sustained. Because of high efficiency, the unit has been able to achieve 50 to 70 per cent capacity utilisation at a time when several refineries have had to close down.

There are periodic board meetings and partners' meetings in Malaysia with the Bhumiputras and Danish representatives. Strategic decisions are made on a shared basis. There has been an equal representation on the board of five Tata nominees, four Danish and one Bhumiputra. The unit has essentially been run on a partnership basis. General policy and investment guide-lines are given by the board and employment conditions are laid down by the local bosses, i.e. Bhumipurtras of Malay and Chinese descent.

Voltas, in which Tata acquired a dominant share from the Swiss house of Volkarts in the early fifties, has set up joint ventures in the area of air-conditioning equipment and refrigeration in Saudi Arabia, Muscat (Oman), the United Arab Emirates (UAE) and Sri Lanka. Excepting the UAE, where there is a subsidiary of Voltas, the other joint ventures are affiliates with local partners. The local partners have generally 51 per cent of shareholding and provide local support and local finances which are invariably twice the level of the capital. They also furnish guarantee to the banks for capital and working fund loans, while Voltas provide the technical know-how and management, and exercises financial control through the systems approach and trained personnel for manning the operations.

General decision-making, relating to industrial relations and personnel, rests with the Voltas nominees, particularly in the areas of technical management and training of the local workforce. The chairman is usually local, while the managing director/chief executive is provided by the Voltas. There is a parity of board members excepting in the case of the subsidiary in the United Arab Emirates. As per United Arab Emirates laws, domestic trading activities are generally not allowed and the subsidiary is required to have a local partner. Import-export trade is, however, permitted. The strategic and investment decisions are on a shared basis.

So far, only 10 per cent cash participation in the equity capital has been permitted by the Indian authorities and the balance has been provided through export of equipment, machinery and technical know-how. The inability to plough back profits owing to very heavy rates of tax on dividends from overseas companies at 70 per cent and also on technical know-how, since April 1984, has been a constraint on the expansion and diversification.

In the Malaysian joint venture for the assembly and progressive manufacture of trucks, the unit has been, of late, experiencing very severe competition from the Japanese. However, it has been able to weather the storm. Tata had, earlier, a collaboration with Mercedes Benz of the Federal Republic of Germany for over two decades but now manufacture trucks under their own name, maintaining high quality and precision of the product, which has helped them to withstand international competition.

Tata was called upon by the Government of Singapore to set up a manufacturing-cum-training centre in the field of instrumentation and the project is progressing well. The House of Tata is subject to the MRTP and FERA regulations and also the Industrial Development and Regulation Act provisions.

2.10 Birla group

Starting from a modest beginning towards the close of the First World War, the Birla group emerged in the post-Second World War period as the fastest growing industrial combine in India. It is perhaps the most diversified group and excepting steel it has made an entry into most other industrial sectors. The internationalisation of its operations started over two decades ago with the setting up of a textile plant in Ethiopia. The stress on joint ventures increased greatly after the enactment of the MRTP, whereby the growth of large houses came to be severely regulated and controlled. The group has set up the largest number of joint ventures in Thailand, Malaysia, Indonesia, the Philippines, Sri Lanka, Nepal, Kenya and Nigeria. The group was held together by the late G.D. Birla, but in the past two years, since his demise, the group is becoming subdivided. The largest number of joint ventures have passed under the control of G.D. Birla's grandson, Aditya Birla, who was the first family member in the group to be educated at MIT.

Among the joint ventures, the Thailand Carbon Black Company Limited showed a profit of bhat 29,386,117 for the period ended 31 December 1983. The company exported 2,249 tons, comprising 12.5 per cent of total sales.

Indo-Bharat Rayan had sales of 27,313,349,983 Indonesian rupiah in 1984, and showed a net income of 4,656,286,467 rupiah.

Even though the equity participation of the Birla group is around 30 per cent, in keeping with the guide-lines issued by the Government of India in respect of joint ventures stipulating that the Indian shareholding should be of a minority percentage, Birla has managed majority control through the help of their friends and associates. Furthermore, the Indian Government permits this participation only through export of machinery and equipment from India. Very modest capital outflow has thus far been permitted through equity participation. Birla has been able to manage these enterprises abroad by entering into long-term management contracts. Strategic decisions pertaining to investments, expansion and diversification, product planning and exports are shared with the local partners although ultimate control continues to be exercised by a central cell set up in the Birla headquarters at Bombay. The managing director is appointed by Birla from its Bombay headquarters.

Investment projects are identified and initiated locally depending upon the emerging opportunities, the international marketing situation and framework; there is a continuous interface, dialogue and consultation with the joint ventures and Birla headquarters through frequent visits and meetings. A system of close monitoring, in terms of predetermined targets, ratios, goals and objectives, has been instituted. Birla headquarters extends help by providing expertise, consultants and know-how. Technology is often arranged globally to meet international competition.

The financial decisions on investment projects, expansion and diversification are initiated by the joint ventures but screened, examined and finalised centrally. Complete autonomy has been vested in operational, day-to-day management to the joint ventures. A decentralised approach is followed in operational matters but in all policy matters there is centralised control. The decisions in respect of product planning, marketing and exports/imports are initiated by joint ventures but require approval by Bombay headquarters.

The group has a regional set-up in Thailand which superintends, oversees and controls operations in Indonesia, Malaysia and the Philippines under the direct charge of Bombay headquarters. In regard to exceptional environment viz. important changes in political and economic matters and global strategic objectives, the initiation is from joint ventures, while the impetus is given centrally. The Malaysian palm oil refraction venture is engaged in substantial exports of refined palm oil to India and other consuming markets, and there is intra-group trade in palm oil imports into India.

In import matters there is a very significant measure of autonomy in consonance with local import regulations in host countries. Decision-making is both bottom up and top down and a consensual approach and process is followed. The headquarters role is normally dominant in the power relationships.

The labour unions in the south-east Asian countries, where the majority of joint ventures are in operation, are not marked by an agitational approach as is generally experienced in India. A good relationship is maintained with minimal industrial strife. There is stress on productivity and the labour force is normally well disciplined. There have been no lay-off situations thus far and a close rapport is maintained with the workers. The industrial relations decisions are made at the joint venture's level itself, but issues pertaining to redeployment/restructuring are usually decided centrally in due consultation with joint-venture partners.

There is no basic thrust in areas of research and development as the technology is usually purchased under service contracts and with know-how from both foreign and Indian manufacturers/suppliers. Only applied research is attempted and normally a long-term agreement extending over five to ten years is entered into with the foreign manufacturers/suppliers to keep the process updated in the light of global R&D developments and to keep up with international competition. Decisions in regard to new product lines, choice of products and market segments are initiated by the joint ventures but impetus and approval is provided centrally. The diversification/allocation of resources decisions are centrally made on receiving detailed project proposals from joint ventures and consultation with other associates/shareholders, as the group does not have a majority shareholding. The acquisition and divestment decisions are also centrally made with due consultation of associates/shareholders.

Decisions concerning the size of the workforce and employment are entirely made at the joint venture level. The system of annual and perspective five-year plan has been instituted and there is a continuous budgetary and monitoring control exercised by the Bombay headquarters in terms of production, sales/profitability ratios, cost and inventories, borrowings and cashflow.

The strategic decision-making embodied in the plans embraces an analysis of the socio-economic environment and examination of the strength/weaknesses. Analysis of the different strategic alternatives in terms of choice of product and market segment are arrived at on a shared basis by the joint ventures and Bombay headquarters. There are no works councils in any of the joint ventures and decisions are finalised centrally. Though the detailed plan exercise is done on a shared and consultative basis, the basic and key decisions are made centrally. The joint ventures can at best be termed as an affiliate company without majority shareholding and there is no holding company either.

2.11 Hindustan Machine Tools (HMT)

Hindustan Machine Tools - a public sector undertaking - was set up at Bangalore in 1953, and set up an affiliate at Lagos (Nigeria) called Nigeria Machine Tools Limited, on 18 February 1980. The affiliate has an equity participation by the Federal Government of Nigeria to the tune of 85 per cent, while the remaining 15 per cent is held by HMT. The entire shareholding of HMT/equity participation has been by way of export of plant and equipment. The authorised equity capital is of 20 million naira and the board of directors comprises two directors from HMT, including the chief executive (managing director) and the finance director of HMT. Four directors are nominated by the Federal Government of Nigeria including the chairman.

Decisions concerning investments, expansion and diversification and all major policy matters like product planning and exports are taken on a shared basis in Nigeria and the laws of Nigeria apply in regard to the functioning of the joint venture. As HMT has only a minority shareholding the relationship is of an affiliate and not of a subsidiary. In basic policy matters the Government of Nigeria has a preponderant say but for all operational purposes the chief executive, deputed from HMT, exercises the necessary powers. However, HMT has undertaken to train a Nigerian incumbent after the plant has become operational. The role of HMT's financial director is to safeguard HMT's interest and the overall viability of the Nigeria Machine Tools Limited, Lagos.

As the plant is still in a formative stage and the construction of building, installation of plant and equipment is in progress, the stage of industrial relations has yet to be reached. The training of Nigerian nationals in HMT and deputation of HMT experts to Nigeria for imparting training to their personnel is in progress. HMT has assisted the Nigerian Machine Tools to set up a technical training centre for the skilled manpower requirements as precision is a very necessary prerequisite in the machine-tool field.

A large measure of autonomy is exercised by the chief executive in all day-to-day operational matters. The project is expected to go on stream by 1987, and the take-off and gestation period in the case of machine-tool units is fairly long. The role of labour unions is therefore premature.

The Nigerian Machine Tools is the only joint venture of HMT although technical assistance co-operation has been extended in Algeria and Indonesia by HMT. The necessary clearances are obtained for the joint venture from the Ministries of Industries and Commerce. The decisions regarding allocation of resources, divestment and acquisition will normally be made in Nigeria, and the planning, budgetary and control measures are local in nature.

There have been significant changes in the Nigerian political environment after the military takeover resulting in financial constraints in regard to allocation of resources. Nigerian Machine Tools, which has planned to manufacture and produce turning, milling, drilling, grinding and cutting machines, has been reportedly cleared as a core project by the Federal Nigerian Government. All the technical know-how and services are being provided under an agreement with HMT on payment basis.

2.12 Bharat Heavy Electricals Limited

Although various units, which presently comprise the Bharat Heavy Electricals complex, had come up individually in the late fifties and early sixties, they were unified under a centrally controlled management two decades ago. Bharat Heavy Electricals Limited has made rapid strides in the last 15 years and presently comprises 11 manufacturing plants employing over 70,000 people including 14,000 graduate engineers and trained technicians and 31,000 trained artisans. It represents an investment of Rs.7,000 million and its present annual turnover is Rs.12,000 million. It is the largest engineering and manufacturing organisation in India and ranks amongst the top 12 manufacturers of power plant equipment in the world. Its two main sectors are power and industry, with power accounting for nearly 64 per cent of the company's turnover. In the thermal, nuclear and hydro areas, the company has supplied 30,000 MW power-generating equipment domestically and abroad, and 12,000 MW equipments are under manufacture. The company manufactures boilers and turbo sets up to 500 MW and possesses the technology to produce equipment of up to 1,000 MW rating and manufactures transformers and switch gears for voltages up to 4,000 KV. In the industry sector it had a turnover of over Rs.3,000 million and its range of equipment include compressors, industrial and turbo sets, large electrical motors and control gear, oil rigs and heat exchangers. It manufactures electrical traction equipment for diesel locomotives and has been exporting to over 40 countries ranging from individual equipment to complete power stations, consultancy services for setting up manufacturing units and providing technical manpower. The company has set up power plants in Libya, Malaysia, Saudi Arabia, New Zealand, Tanzania, Thailand, Nepal, the Philippines, Ghana and Turkey. It had a turnover of Rs.12,386 million in 1982-83 and the profit before tax was Rs.604 million.

It started its corporate planning division in 1974. The company has collaboration with the United Kingdom, the United States, the Federal Republic of Germany, the USSR, Japan and Czechoslovakia and has developed a large research and development base and management development institute for the training and orientation of its executives and technical personnel. It is now set to launch a programme of diversification in 1985-90 which will be largely internally financed by the plough-back of retained earnings and such loans as the company can itself raise in the international markets. It is the first public enterprise in the country to declare its objective not to draw on any government largesse for its expansion, modernisation and diversification.

It has a three-tier decision-making process. The first tier comprises the general managers and heads of operating divisions of the various units; the second tier comprises the functional directors of the company including the finance, personnel and technical directors and the third tier represents the board, including the non-executive directors nominated by the Government. Investment decisions are initiated by the operating divisions/units and thereafter screened and examined by the functional directors and the board who provide the impetus. The board has been empowered to take decisions involving investments up to Rs.20 million and decisions requiring larger outlays need to be approved and cleared by the administrative Ministry of Industry in consultation with the Ministry of Finance. In case of major projects, consultation is also required with the planning commission and approval of the public investment board.

In day-to-day operational matters the heads of units/divisions have been given a fairly large measure of autonomy. However, in matters involving basic and key areas the central office takes the decisions and lays down the broad guide-lines and parameters. With regard to industrial relations, the company's record has been fairly satisfactory and the company has entered into a four-year agreement with the unions and is considered to be one of the most progressive in the corporate sector.

The decisions regarding the product composition, choice of products, market segments and exports are taken centrally in consultation with the various units/divisions. The company has drawn up a very detailed annual and five-year plan which takes into account an analysis of the socio-economic environment and the emerging opportunities, and is continuously updated. The company follows a systems approach of budgetary control, performance budgeting and appraisal. Although the company has not yet formed a subsidiary or full-fledged affiliate, it has, none the less, achieved a large measure of internationalised operations and has therefore been included in the study as an emerging multinational.

Chapter 3

Summary and conclusions

The study pertains to decision-making structures in the subsidiaries/affiliates of multinationals operating in India, in particular as regards the areas of employment, investments and major industrial relations aspects.

MNEs account for a small share of the total employment in the Indian corporate sector. The total investment by multinationals is estimated at around 2.5 billion dollars or roughly 10 per cent of the private corporate sector investment, or 5 per cent if the public sector is also taken into account. The largest single part of foreign shareholding is still British. In addition to this, there are a significant number of subsidiaries of Canadian, French, Swiss, and USA enterprises which are primarily engaged in the chemical, pharmaceuticals, pesticides, drugs, dye stuffs, fertilisers, explosives and high technology industries (engineering, electronics and computers). In the consumer goods sector, products of multinationals include - vegetable and fractionated oils, soaps and detergents, batteries, torch lights, cigarettes, packaged tea, tyres, milk foods, chocolates, biscuits, tea, pressure cookers, cosmetics, toothpaste, etc. A large number of technical co-operation agreements have been entered into with Japanese enterprises, particularly in the automotive, shipbuilding, watch manufacture, power tillers and fertiliser sectors; but their equity participation has thus far remained very modest.

MNEs are subject to the Foreign Exchange Regulation Act (FERA), introduced in 1969-70, and in most cases also to the Monopolies and Restrictive Trade Practices (MRTP) Commission set up in 1969-70, and to the Industrial Development and Regulation Act, 1951, as well as extensive labour legislation. Under the FERA the foreign investor can normally retain up to 40 per cent of shareholding, excepting in cases where the enterprise is engaged in either core or high technology areas or in predominantly export-oriented sectors where majority foreign shareholding is permitted. However, MNE affiliates with 40 per cent shareholding have usually continued to retain control through dilution of equity, wide dispersal of shareholding and by issue of bonus shares. Under the MRTP Commission, implantation of enterprises involving an investment of over Rs.200 million, or units who control one-third of the total market share of their product, is encouraged. MRTP is also applicable to the large Indian industrial houses. With the inflation of recent years, the ceiling indicated is very easily reached. These provisions are applicable in cases of expansion, modernisation and diversification. Under the Industrial Development and Regulation Act, 1951, the enterprises are required to obtain an industrial licence for putting up plants. In terms of the Industrial Disputes Act, 1947, and subsequent labour legislation as well as court pronouncements, it is virtually not possible to effect retrenchment or even lay-offs and plant closures without prior approval of the local/state authorities. Enterprises usually have to resort to retraining/redeployment when expanding, modernising or diversifying their operations. In a few cases MNEs have been able to reduce the workforce through voluntary retirement and generous separation schemes involving substantial compensation or through near ban on recruitment and non-filling of posts resulting from retirement, death or resignations.

Despite these constraints and the bureaucratic red tape and procedures, MNEs' willingness to investment in India is probably primarily connected with shorter and longer term investment yields, which have tended to be high. Furthermore, presence in a country that represents a large and growing market, availability of raw material inputs, political stability and security are certainly among the investment motives. MNEs also have assurances in respect of their concerns in the most fundamental areas that the investment and their share in the company as equity holders is secure and can be repatriated and their dividends, and other charges that may be applicable and approved can be remitted without undue delay. Likewise, MNEs are not forced to make available their patented technologies and trademarks to parties other than the company in which they have invested and are assured of legal and practical protection in extending their usage on acceptable commercial terms. MNEs have been permitted to grow, expand and diversify within the framework of the national economic policies and to use available technical/specialist staff. The record of India in honouring these commitments and meeting its international financial obligations has been unimpeachable.

MNEs being mostly in high technology and sophisticated consumer goods areas, they tend to be more capital-intensive than the average enterprises, and generally follow a modern managerial systems approach. The study embraces the structure of decision-making process structures and procedures in investments/employment and industrial relations areas in 11 enterprises, seven of whom are either subsidiaries or affiliates of parent companies in the United Kingdom, the United States, the Federal Republic of Germany and Canada. Hindustan Lever, Indian Tobacco and Glaxo are subsidiaries/affiliates of companies in the United Kingdom; Siemens and Mico-Bosch have their parent enterprises in the Federal Republic of Germany; Union Carbide is the subsidiary of an American company and Indian Aluminium a Canadian subsidiary of Alcan. Two emerging Third World multinationals in the private corporate sector - Tata and Birla - who have the largest number of joint ventures in Malaysia, Indonesia, Thailand, Singapore, the Philippines, the Gulf countries, East and West Africa, Mauritius and Fiji, have also been studied and two leading public sector organisations - Hindustan Machine Tools, which has set up an affiliate in Nigeria, and Bharat Heavy Electricals (whose internationalised operations extend to 40 countries and has set up a number of power generation plants/boilers in Malaysia, Libya, Saudi Arabia, Thailand, the Philippines, Tanzania and Turkey) have also been included. The sample enterprises embrace also a wide spectrum of manufacturing activity.

The basic information for this study has been obtained through a mail questionnaire (Appendix) and in-depth personal interviews with the chief executives, functional directors and divisional chiefs in the areas of corporate planning, finance, personnel and international operations, and some union representatives.

The study brings out that the investment decisions in respect of expansion, modernisation, diversification, acquisition, divestment and allocation of resources are arrived at on a shared basis. The subsidiary/affiliate initiates the investment project proposals which are identified initially by the operating divisions/units of the enterprises and thereafter are screened and examined by the corporate headquarters in India and the impetus is provided by the parent company/major shareholder abroad. There is a continuous process of interface, exchanges, consultation, interaction and rapid communication with the parent company/regional headquarters. Participative and consensual form of decision-making, involving these various units, has become the vogue. The MNEs studied usually draw up very detailed annual and five-year plans which embrace the analysis of the socio-economic environment, strengths and weaknesses of the enterprises, and alternative strategies for product choice and market segments. Much of the investment projects are reflected in the plan exercises and these plans are discussed and approved by the parent company and are, at least, in consonance with its global strategy. There is a system of close monitoring of predetermined targets, ratios of sales/profitability, costs and inventories, performance budgeting and appraisal. Implementation is left to the enterprise operations and usually full autonomy is accorded in operational matters and the day-to-day functioning. The parent company exercises its prerogative in the choice and appointment of the chief executive (managing director) and the functional directors and board members. There is both a decentralised and centralised approach in decision-making. Strategic decisions in key and basic policy matters are made centrally at the level of the executive management committee, usually comprising the functional directors and the chief executive, while the delegation extends in the operational sphere where the decentralised approach is followed. It is both top down and bottom up. Emerging investment opportunities are at first identified by the operating managers and their viability is closely examined centrally. In matters of technological choice and strategy, the decisions are top down. In most of the MNEs studied in this paper only the applied and adaptive research is being undertaken in India, while the subsidiary/affiliate is very largely dependent on the parent company for basic research. Only in the case of Hindustan Lever is there a significant departure from this usual funding, and a highly advanced and sophisticated research and development centre has been set up. Its research results are being passed on and shared with Unilever subsidiaries in Afro-Asia and South America. Region Indian Aluminium, to a smaller extent, is also sharing its researches with Alcan subsidiaries in south-east Asia.

The quantum of intra-group trade is usually insignificant in the sample enterprises, except in the case of Birla, who has a palm oil refraction plant in Malaysia which exports very substantially to India. The ratio of exports in the MNEs surveyed ranges from 5 to approximately 20 per cent. Export operations are apparently not very profitable. Decisions in respect of fixed assets, product planning, exports, marketing and imports are taken by operational heads, divisional chiefs/functional directors and the chief executive, and in respect of risk and quality of management and product differentiation by the central management committee. Decisions in regard to exceptional environment and general strategic objectives and management are made on a shared basis by the central office and the parent company.

The decisions in regard to the global strategic perspectives are taken by the parent company which lays down the broad policy parameters. The planning, budgetary and control procedures are set out in the plan process exercises and MBO, and are centrally administered. Decisions in regard to production/marketing, choice of investment projects, creation of a new division, introduction of a new product, composition of a product range and product policy are based on the criteria embodied in the plan and are made on a shared basis with the principal shareholder/parent company, the board and corporate management.

In regard to employment and industrial relations, the MNEs usually enjoy a great measure of autonomy in the Indian context, which seems influenced also by the existing labour legislation of the country and case law. Retrenchment is not feasible and restructuring/redeployment decisions are normally made in consultation with unions. Most MNEs have entered into medium-term three or four-year collective agreements with the unions and by and large the industrial relations fo the enterprises surveyed have been satisfactory, barring isolated cases. Mico-Bosch and Lipton India - subsidiaries of Hindustan Lever and Glaxo - were able to bring about a reduction in their labour force through a voluntary retirement and generous separation payment scheme and by near ban on recruitment, partial replacement on death, retirement or resignation. MNEs have had to retrain surplus workers in their expansion and diversification programmes.

Decisions pertaining to the number of jobs, levels of pay, workers' qualifications and working conditions are made at the MNEs' Indian headquarters and the divisions/units; this means that as a rule, the central office/personnel director lays down the broad framework and the implementation is at divisional/branch/unit level. Excepting the top appointments of the chief executive, the parent company has no role in employment decisions. Full autonomy of the Indian matters is the rule. The decisions concerning the size of the workforce and employment are usually taken by the departmental head/personnel within the Indian corporate policy frame.

The role of the unions in regard to employment and consultation in lay-off situations is largely consultative and issues pertaining to restructuring and redeployment in case of technological changes are decided by the management in consultation with the unions.

Excepting in Union Carbide's Calcutta plant, there are no works councils. Works and grievance committees exist dealing with operational matters and workers' complaints. In the Indian context, the MNEs have been largely operating under a plethora of controls and in a much protected home market. However, there has been an effort at liberalisation and streamlining bureaucratic procedures, and therein lies the hope for a greater involvement of MNEs in high technology and sophisticated product areas and for trade expansion by MNEs.

Types of decisions in Indian MNEs

Enterprise		Strategic decisions	Non-strategic decisions	Decisions on a shared basis	Legal framework
Hindustan Lever	Parent	Corporate plan discussed R&D decision		Product planning Marketing Exports Risk management Product differentiation	
	Subsidiary		Employment Industrial relations Implementation		FERA (51% foreign shareholders)
Glaxo	Parent	Corporate plan & MBO Investment (drugs & technologies*)		New product lines & diversification Trademark Capital expenditures Exports Dilution or equity	
	Subsidiary	Investment - (except of *) Sale of fixed assets R&D centre	Employment Industrial relations		Non-FERA (only 40% foreign shareholders)
Siemens India Ltd.	Parent	Detailed annual plan Divestment/acquisition Initiate high tech & process change R&D dec. & centre		Product differentiation Marketing Technical changes Risk management	
	Subsidiary	Investment Decision on fixed assets	Employment Implementation		FERA (51%) & MRTP
Union Carbide	Parent	Five-year & annual plan R&D decision		New product lines & diversification Marketing Exports Expansion/acquisitions Risk management Restructuring Decision on fixed assets	
	Subsidiary	R&D centre	Employment Industrial relations		FERA, MRTP & IDRA
Indian Tobacco Company	Parent	Three-year plan General management matters Expansion, investment, divers. Fixed assets		Prod. planning & technical aspects Exports Management Acquisition/divestment	
	Subsidiary	New product lines/services R&D dec.	Marketing Employment Ind. relations Control measures		Non-FERA (40%)

Types of decisions in Indian MNEs (cont.)

Enterprise		Strategic decisions	Non-strategic decisions	Decisions on a shared basis	Legal framework
Mico-Bosch	Parent	R&D basic decision		Product planning & diversification Marketing ↔ exports Risk management Investment,expansion Employment	
	Subsidi-ary	R&D centre		Control measures Implementation Modernisation Dec. on fixed assets (Intra-group trade → 1/2)	Non-FERA (40%)
Indian Aluminium Company	Parent	Annual and medium-term plans, R&D dec. Expansion Fixed assets Set up a regional HQ to advise - (→ marketing)		Product planning & new product lines Marketing Exports Technology changes & diversification Investment	
	Subsidi-ary		Employment Ind. relations Control measures Implementation		
Tata group	Parent	Management		Strategies dec. made on a shared basis with major local shareholders	FERA, MRTP & IDRA
	Joint ventures (Malaysia)	Investment General policy	Employment Ind. relations Training Implementation		50% Tata 50% Danish
	Voltas joint ventures (S.Arabia, Muscat-Oman, Sri Lanka)				Dominant share by Tata group (generally 51%)
	Subsidi-ary (UAE)			Investment and strat. decisions	
Birla group	Parent	Corporate plan Ultimate control Annual & five-year plan No basic thrust in areas of R&D		Product planning & new product lines Diversification Marketing Exports Investment	
	Joint ventures/ (affiliate company without majority shareholding)	Day-to-day management	Employment Ind. relations Implementation Operational	Redeployment & restructuring Acquisition/ divestment	Non-FERA (30% by Birla)

Types of decisions in Indian MNEs (cont.)

Enterprise		Strategic decisions	Non-strategic decisions	Decisions on a shared basis	Legal framework
Hindustan Machine Tools	Parent	HMT's financial director safeguards HMT's interests of one affiliate	Training	Product planning & diversification Exports Investment/expansion Allocation of resources Divestment Acquisition	
	One affiliate		Day-to-day operational matters Implementation		Non-FERA (15% by HMT)
Bharat Heavy Electricals Ltd.	Parent	Corporate planning Annual & five-year plan R&D base		Product planning Marketing Exports Investment	
	No subsidiary or affiliate only internationalised operations ↓ Emerging multi.		Day-to-day operational matters Ind. relations Implementation Training		

Appendix

Questionnaire for the ILO study on decision-making in multinationals in India

1. Are strategic decisions made at the corporate headquarters in India or are such decisions shared with your parent organisation abroad?

2. Kindly elucidate an analysis of shared decisions between the parent company and yourselves.

3. Are financial decisions in regard to fixed assets, investment projects, expansion and diversification more centralised than other functional decisions?

4. Does your organisation follow a centralised or decentralised approach in decision-making?

5. How are decisions made in respect of product planning, exports, marketing and imports?

6. Are decisions pertaining to industrial relations, employment, number of jobs, levels of pay, workers' qualifications and working conditions made at your headquarters or branch units?

7. How are decisions made in respect of risk management, quality of management and product differentiation?

8. In case your parent organisation has no regional headquarters what is the role of the regional set-up in regard to marketing and senior personnel decisions?

9. Please amplify the characteristics of the parent/subsidiary affiliate relationship and the characteristics of the affiliate/subsidiary.

10. In regard to exceptional environment how are decisions relating to general strategic objectives and management made?

11. Please indicate the percentage of sales/exports abroad and the number of subsidiaries and matrix structures indicating the specific nature of links between parent company and yourselves.

12. Kindly indicate the extent and quantum of intra-group trade.

13. Please indicate the degree of autonomy enjoyed in regard to employment issues and the control measures.

14. Who really makes decisions and how are they made? Please elucidate the process approach.

15. Does your organisation follow the iterative process and what are the global strategic perspectives of the parent company?

16. Who takes the initiative? Who imparts the impetus? Please elucidate the trial process and the typology of the iterative process.

17. Is it bottom up, top down or both? Is decision-making flow upward or downward? Please indicate the direction.

18. Is there a hierarchical, reverse hierarchical, competitive and consensual process of decision-making? Please indicate the power relationships and if they are mobile.

19. What is the role of unions in regard to employment and consultation in lay-off situations?

20. Are industrial relations decisions made at your end and how are issues pertaining to restructuring and redeployment decided in cases of technological changes?

21. How are technological decisions made? Please indicate the role of the parent company and your research and development work.

22. How are decisions made in respect of new product lines, new product functions or new services?

23. Who makes the diversification decisions in your organisation and who makes decisions concerning allocation of resources?

24. How are decisions made in regard to research and development, acquisition/divestment?

25. Who makes decisions concerning the size of the workforce and employment?

26. How do planning, budgetary and control procedures embody these decisions?

27. (a) The strategic-making decisions would cover an analysis of the socio-economic environment.

    (b) Examination of the strength/weaknesses.

    (c) Analysis of different strategic alternatives in terms of product-market segments.

    (d) Choice of the product-market segments according to the objectives.

28. The role of works council.

29. How are production/marketing decisions made with a potential influence on the employment situation?

30. How are strategic decisions in regard to choice of investment projects, creation of a new division, sale of fixed assets, introduction of a new product, composition of a product range and product policy made? Who makes them and how?

31. Is your subsidiary or affiliate consulted or given autonomy in matters relating to employment?

32. What is the role of the holding company vis-à-vis the subsidiary? What is the control relationship?

List of abbreviations

Alcan:	Aluminium Corporation of Canada
BAT:	British American Tobacco Company
CEC:	Corporate Executive Committee
COD:	Committee of directors
DAP:	Di-Ammonia-Phosphate
DCP:	Di-Calcium-Phosphate
EMCO:	Name of a plant of Union Carbide
FERA:	Foreign Exchange Regulation Act
GLS:	General Lighting Service
HMT:	Hindustan Machine Tools
IDRA:	Refers to the provisions of the Industrial Development and Regulation Act
IRD:	Integrated rural development
ITC:	India Tobacco Company
MBO:	Management by Objectives
MD:	Managing director
Mico:	Motor Industries Company
MNEs:	Multinational enterprises
MRTP:	Monopolies and Restrictive Trade Practices
Non-FERA:	Refers to enterprises which are not subject to the Foreign Exchange Regulation Act
OTI:	Overall trade investments
R&D:	Research and development
Rs.:	Rupees
STPP:	Sodium-Tri-Poly-Phosphate
SWOT:	Strength and weakness analysis of opportunities and threats
TSOP:	Tri-Sodium-Ortho-Phosphate
UAE:	United Arab Emirates
UCIL:	Union Carbide Limited
XRD:	X-Ray deffraction