

Study Report on Building External Market Linkages for Enerpreneures in the N.E (Oct.2001)

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CONTENTS

I	<u>Building External Market Linkages for the Entrepreneurs in the North East Region</u>	1
II	<u>Economic and Demographic Structure of the North East Region</u>	5
III	<u>Existing Trade Linkages of the North East Region</u>	29
IV	<u>Strategies of Trade Oriented Industrialisation in the North East Region : A Blue Print of Growth</u>	50
V	<u>An Overview and Policy Implications</u>	65
VI	<u>Appendices - I, II, III</u>	67
	Annexure 1	
	Annexure 2	

Foreword

For some time now the North East has been in the focus with the Centre gradually realizing that development of this region is crucial both from the economic and security points of view. For the last decade or so this region has been plagued with the problems of insurgency and economic discontent. In some sense the North East parts of the country are unique. For one, the level of literacy is generally higher than the national average. Second, the workers participation is almost as high among women as in men. Third, there is no major population problem and density of population is low relative to the rest of country. Finally, there is almost no organized industrial sector except for the traditional resource based industries like tea and oil.

In some sense the development of the North East states is subject to the vagaries of the weather. While the widespread rains are good for crops like tea, the resulting floods often inhibit traditional farming and industry. It is however still unfortunate that the states of this region have remained largely unindustrialized with a subsistence based agricultural sector the mainstay of employment for a majority of the population. It is also clear that the mainstay of employment, forestry, can no longer drive the economies of this region. For environmental considerations, the timber industry can no longer be relied upon to generate economic wealth. However, non-timber forest products still offer vast unutilized resources. The only other major source of employment in this region is the government and the armed forces. Such a pattern of development does not lead to establishing the basis for a long-term strategy of development.

The low population level and per capita incomes also indicate that a strategy of development based on domestic demand is bound to fail. In one sense, the North East represents the classic small economy embarking on a growth strategy. Economic theory tells us that such an economy must have a trade based strategy of growth. Another aspect of the North East which must be taken into account is the hilly terrain (barring Assam) which precludes heavy industrialization as in the plain areas. In particular, the terrain makes the problems of communication and transportation a major constraint in development. Finally, such a trade based strategy must rely on private initiative (from within or outside the region) with the role of the government limited to providing the infrastructural facilities. The state must act as a facilitator not the driver of growth.

In this exploratory study, we have tried to find out the areas in which the potential of trade (export and import) lies and see what linkages exist with the rest of the world. In identifying the potential areas, we have taken into account that the North East is crucially located (both for land and air routes) in India's trade with the countries of South and South East Asia. Given India's recent proactive diplomatic linkages with Myanmar, the possibility of opening up the so call "Silk Route" to South East Asia seems much larger. So in identifying trade possibilities of the North East we have looked separately at the internal and external trade.

This is only an exploratory study. It is hoped that this study will identify areas in which further in depth study would be conducted. Here the objective is more to identify the problem areas rather than offer complete solutions.

Chapter I

BUILDING EXTERNAL MARKET LINKAGES FOR THE ENTREPRENEURS IN THE NORTH EAST REGION

The North East India or simply the North East as usually referred to in India is a region as interesting and varied as India itself. It comprises of the eight states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim. It is hilly; it has plains on both sides of the mighty Brahmaputra and then the mighty Himalayan range around it.

The North East is divided into discrete plains regions encompassed within hills, with a number of agro-climatic zones within them. It is characterized by heavy precipitation, extremely rich bio-diversity, fragile hills, high seismicity, and a drainage pattern marked by lateral valleys in the north and transverse valleys in the south, dissected by huge rivers and raging torrents. All of this renders communication difficult and expensive, especially in view of the neglect of the great waterways that were once major arteries of commerce and culture. It has been a victim of retarded development for a variety of reasons. The region has been losing its accumulated wealth through a very adverse credit-deposit ratio.

The governments have miserably failed to deliver the basic necessities of life. States have not been able to deliver the basic goods to their people. There is a growing discontentment on the level of corruption. The regional disparity between the other States of India and the North East has widened as also the disparity between the rich and the poor within the region. Except Mizoram and Manipur, all other States have higher percentage of people under the poverty level than all India average.

The region can't develop in geo-political isolation quite apart from the deleterious impact of this handicap on national integration. Market access is vital for development. Alongside good communications, energy is clearly the most obvious engine for giving a fillip to agriculture, promoting industrialization and employment generation, and enhancing the financial resources of the region both directly and indirectly. River

management is a very high priority for Assam in view of the damaging effect of annual floods on agriculture, infrastructure and the lives of the people.

The North East spreads over a vast expanse of 262,299 sq. km with a relatively small population of under 40 million. However, the cultivable area is limited and the land-man ratio has become increasingly adverse. Barring the Imphal Valley and pockets elsewhere, agricultural yields are low while traditional farming with a shrinking Jhum cycle has become ecologically unsustainable. The community, not the state owns much land in the hills. Though privatization and "enclosures" are evident in some places, urbanization is generally low, except in Assam, Mizoram and Nagaland.

The regional economies are simple, heavily deficit and dependent on the rest of the country for basic needs. All seven units are special category states whose development plans are almost entirely centrally financed on grants and loans. There is no agricultural surplus and limited capital formation and entrepreneurial skills. Assam had seen earlier development around tea, oil and timber, the region is, however, basically pre-industrial despite a number of saw mills and plywood factories, a few cement plants and other miscellaneous enterprises apart from oil.

The North East is a latecomer to development. The trauma of partition, political evolution and reorganization of Assam along the present state boundaries, insurgencies, have interrupted the progress. The inadequate transportation, communication facilities, insurgency problem, lack of investors and absence of manufacturing industries blocks to the growth of trade in the region. For better scope for promoting exports from the region to the neighboring countries, road development work in the border areas would be taken up in earnest to step up trade with the neighboring countries.

The limited market size, transport bottlenecks, lack of infrastructural facilities, poor technology, lack of reliable skilled labor have pushed the region into a vicious circle and crippled its development process.

The region mainly export natural resource intense products like tea, timber in which it has comparative advantage and import manufacturing products from the other states of India and neighboring countries. It can't expect to higher growth because growth comes through export of manufacturing where it can enjoy economies of scale. Hence the

region fails to exploit the economies of scale due to its limited domestic and external market size.

The region is further locked up due to lack of industrialization in this region. Industrialization is further limited by lack of access to market. The poor industrial scenario has further crippled the employment opportunity in the region. The problem is further aggravated by high population growth. Agriculture can't provide job. The profit making entrepreneurs are also not available due to lack of market and insurgency problem.

Hence, there is obvious need for the development in this region. The major question arises how to develop this region. The primary focus of our study is on the harnessing the full potential of the natural resources endowments of the North East Region and it's educated people, equal attention will be given to identify the increased trading opportunities that will emerge out of enhanced investment flows into the region.

In the next chapter we will discuss with the **Economic and demographic structure of the North East region**. Here we will explain the region's geographical position, population, income distribution, production and consumption patterns and economic profile.

In the chapter three, we will discuss with the **Existing Trade Linkages of the North East Region**. Our interest will be to examine the volume and composition of export and imports of India with these countries and the share of the North East region in India's trade. Here, our study will carry out quantitative analysis of export-import statistics of the neighboring countries and the trading patterns. The analysis will result in the identification of the potential areas where external trade based investments in the North East Region likely to be attractive. While carrying out the analysis the cost advantages that are likely to emerge out of the special incentive schemes that are available in the North East Region will also be evaluated.

Finally, In chapter four, our study will examine the existing **Strategies of Trade Oriented Industrialization in the North East Region: A Blue Print of Growth**. An evaluation of the external market linkages and the potential for trade related investment would not only help in better appreciation of the opportunities for investment for external

investors as well as create greater awareness among the people of the North East Region about the growth opportunities.

Chapter II

ECONOMIC AND DEMOGRAPHIC STRUCTURE OF THE NORTHEAST REGION

II.1.A. Demographic profile

The North East India or simply the North East as usually referred is a region as interesting and varied as India itself. It comprises of the eight states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim.

The North East spreads over a vast expanse of 262,299 sq. km with a relatively small population of under 40 million. North East India (Table1) is mostly hilly; it has plains on both sides of the river Bramhaputra and the Himalayan range around it. The flora and fauna of this region is numerous and varied.

The region accounts for 7.8 % of the total land space of the country. Hill ranges forming part of the Himalayas guard the northern side of the region. The area is made up of mountains above the snow line and plains a little higher than sea level.

The **Macmahon line** separates North East India from Tibet, China and Burma. This region is connected with the rest of India only through a narrow corridor. At present, the population of the NE region constitutes about 3.73 percent of the total population of the country (Table 1).

The region is marked by uneven spatial distribution of population (Table1) among the constituent states, the primary reason being that the plains and valleys offer more congenial conditions for absorption of population than the hills and difficult terrains. **Apart from Assam and Tripura, the NE states are mostly inhabited by tribes having unique social and cultural practices.** Overall, tribals account for over 30% of the total population of this region. However, in Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim and Nagaland, scheduled tribes comprise more than 60% of the population. That is what gives these states a predominantly tribal character.

Major plantation in this region is tea. Rice is the major crop and Coal, Petroleum and Natural gas are the major minerals (Table1).

Table1: Demographic profile of eight North Eastern states of India

States	Area (Sq. Km.)	Population (as per 1991 census)	Density Of Population (Per Sq.km.)	Population Growth	Administrative language	Literacy rate	Urbanization rate	Industries	Crops
Assam	78,438	22,414,322	286	0.02%	English, Assamese, Bengali	53%	11.08%	Tea, Exploration, Exploitation and Refining of Petroleum, Handlooms, Sericulture, Cane, Bamboo, Carpentry, Brass and Metal Crafts.	Rice, Jute, Tea, Cotton, Oilseeds
Arunachal Pradesh	83,743	864,558	10	0.03%	English	41.59%	12.21%	Sawmills, Plywood and Venerly Mills, Rice Mills, Fruit Preservation Units, Oil Expellers, Handloom and Handi-Crafts.	Rice, Maize, Millet, Wheat and Mustard
Manipur	22,327	1,837,149	82	0.02%	English	60%	27.69%	Handloom, Sericulture and Wood based industries	Millets, Oil seeds, Pulses, Rice, Sugarcane, Wheat, Rubber, Coffee.
Sikkim	7299	406457	57	---	English, Hindi	56%	9.12	Alcohol, Handicrafts and Wood based industries	Rice, Fruits, Millets and Forestry
Meghalaya	22,429	1,774,778	79	0.03%	English	49%	19.69%	Servicing, Bakeries, Furniture Making, Iron and Steel Fabrication, Knitting etc.	Rice, Maize, Potato, Jute, Mesta, Cotton, Mustard, Ginger, Tea, Mushroom, Tomato and Horticulture Crops
Mizoram	21,067	689756	33	0.03%	English	82.27%	46.2%	Sericulture, Cottage and Wood based industries	Paddy, Coffee, Tea, Fruits, Sugar, Potato and Rice
Nagaland	15,579	1,209,546	73	0.04%	English	62%	17.28%	Sugar, Pulp & Paper, Plywood, Cement, Handicrafts and Handlooms	Rice
Tripura	10,486	2,757,205	263	0.03%	Bengali	60%	15.26%	Tea, Aluminum, Utensils, Sawmills, Steel, Furniture, Flour Mills, Rice Mills, Pharmaceuticals, Plywood, Fruit Canning, Oil Mills etc.	Paddy, Wheat, Jute, Mesta, Potato, Sugarcane and Oil-seeds.

Data Source: Directorate of Economics & Statistics, Govt. of India (NIC)

II.1.B. Resource Endowment Profile

The pace of development in the hilly areas and plains differ considerably. The valleys are economically active areas of the region, the Brahmaputra valley being the most active. Tribal population forms more than one third of the population of the North East, despite the fact that in four states i.e., Mizoram, Meghalaya, Nagaland and Arunachal Pradesh, tribals are in majority and in Mizoram, they constitute as high as 95% of the population. Though the region is diverse and heterogeneous, it is also homogeneous in the sense that the social stratification found in other parts of the country is not present in the North East.

There are differences among the seven states in the North Eastern region with respect to their resource endowments, level of industrialization as well as infrastructural facilities. The industrial sector has mainly grown around tea, timber in Assam and mining, saw mills and plywood factories in other parts of the region. The economy of the region is still primarily agrarian but its full potential is yet to be exploited. Since agriculture and industry have not really taken off in spite of the potential in the form of vast unexploited resource base available in the region, the pressure for employment is on the service sector.

The contribution of agriculture to state domestic income is much higher in this region, except for Meghalaya and Nagaland. Mining in case of Meghalaya and forestry and logging in case of Arunachal Pradesh and Nagaland are important contributors to NSDP. The contribution of construction is also high in this region. Growth in per capita income is almost stagnated in Assam in the 90's, was better than the national average in Meghalaya, an increasing trend in case of Arunachal Pradesh and practically no progress in case of Manipur, Nagaland and Tripura. The past one and half decade has witnessed a tremendous upward swing in various development programme giving a new thrust to the Sikkim economy. This progress has increased wage employment opportunities. Though most of the inhabitants are basically agriculture dependent, they have diversified into tertiary jobs such as Government services.

II.2. State Specific Details

II.2.A. ARUNACHAL PRADESH

(i) Demographic Profile

Located at the farthest point in the northeastern part of India, Arunachal Pradesh occupies a strategic position amongst the northeastern hill states of the country. Known as the Land of the Down-lit Mountains, it shares its borders with Bhutan in the west, China in the north and northeast, and Myanmar (former Burma) in the east and southeast. Assam lies to its south. A sparsely populated state, it does not have railway links with the rest of the country. However, air services connect mainland India to some of the important towns in this state. In terms of area, it is the largest state in the northeast of India.

(ii) Economic Profile

Arunachal Pradesh is the largest state in the North East with a very low land man ratio. It is known for its **forest resources**. The per capita income of Arunachal Pradesh has been the highest among the North Eastern states in the recent years and it has been above all India average. The main constraint faced by the state is the lack of communication. CMIE index for infrastructure development for Arunachal is 44; the reference point is 100, the national average. It is basically a hilly state that interspersed among deep valleys and narrow gorges. Forest products and industries based on them is the lifeline of the state providing income and employment to a large section of the Arunachalis. The state is rural based with nearly 75% of its total workforce is engaged in agriculture (mainly shifting cultivation). The remaining workforce being basically concentrated in the gradually emerging tertiary sectors. The secondary sector employment is mainly in the forest-based industries and also carpets making. Tertiary sector employment is mainly in the government jobs.

The greatest attraction of the state is its dazzling array of flora and fauna, in a habitat that combines glacial terrain, alpine meadows, and sub-tropical rain forests.

Places of tourist interest in the state include **Bomdila**, **Tawang** and the nearby **Buddhist monastery**, which happens to be the largest in India. **Itanagar** is famous for its excavated ruins of the historical **Ita Fort**, and the attractive **Gyaker Sinyi** or the Ganga Lake. **Malinithan** and **Bhismaknagar** are the two important archaeological sites in the state, and **Parashuram Kund** is a prominent pilgrimage site. **Namdapha Wildlife sanctuary** in the **Changlang** district is home to the rare Hoolock gibbon.

II.2.B. NAGALAND

(i) Demographic Profile

Nagaland lies in the hills and mountains of the northeastern part of the country. One of the smallest states of India, it has a total area of just 6,401 square miles (16,579 square kilometres). It is bordered by the states of Manipur on the south, Assam on the west and northwest, and Arunachal Pradesh on the northeast. Myanmar (Burma) lies to the east. The capital is Kohima.

Forests cover about one-sixth of Nagaland. Below 4,000 feet are tropical and subtropical evergreen forests, containing palms, rattan, and bamboo, as well as valuable timber species, such as mahogany. Coniferous forests are found at higher elevations. Where clearing for Jhum (shifting cultivation) has taken place, secondary growth of high grass, reeds, and scrub jungle has sprung up. Rhinoceroses, elephants, tigers, leopards, bears, several kinds of monkey, sambar deer, buffalo, and wild oxen live in the lower hills. Porcupines, pangolins (scaly anteaters), wild dogs, foxes, civet cats, and mongooses also are found in the state. The long tail feathers of the great Indian hornbill are treasured for use in traditional ceremonial dress.

(ii) Economic Profile

Nagaland is one of the hill states in the North East, famous for its rich mosaic of numerous tribes with their rich culture. Agriculture and animal husbandry, including poultry, are the main occupations of the Nagas. Bamboo, cane, spears making and

weaving are the traditional occupations of these people. The Naga work force is mainly agricultural with around 73% of the people engaged in different types agricultural practices, Jhum or shifting cultivation being the main one. The secondary sector is small. Traditional village industries based on local forest product form the backbone of this sector. The state also possesses natural oil reserves. Infrastructure bottleneck has been an outstanding problem of the state – the CMIE index being 71 compared to the All India Average of 100 in 1992-93. It shares border with Myanmar and hence has huge potential to develop border trade.

The Nagas are farmers and agriculture is the backbone of the Naga economy and this explains the close link between the economy and environment of Nagaland. The use of land underlies all the aspects of Naga society. Nearly all of Nagaland is mountainous and 1/6th of the land is covered with forests and agriculture at such is not easy. And on the other hand, the fertile land and monsoon climate with average rainfall between 1,800 and 2,500 millimeters favours agriculture. Primarily two kinds of agriculture are practiced which are well adept to the difficult hilly terrain. The slash and burn or Jhum cultivation and the terraced wet rice cultivation. In Jhum cultivation the forest are felled down and the sites are used for two years only. With good rainfall and fertile soil this system can provide an annual surplus of rice, but it depends on having plenty of land and on leaving some trees standing, since the soil quickly becomes infertile, and new sites have to be chosen. The principal tools used are the hoe, digging stick, rake, winnowing fan and the all purpose 'dao' and the main crops are dry rice, Job's tears, millet, taro, maize, ginger, chillis, cotton and other plants. There are interesting stories about carrying the crops back from the fields to the village. The Aos still remembers a Golden Age when all they have to do was call the rice in the fields and it would come flying back to the granaries. But this practice had to be stop as the rice tended to end up in the rich men's granaries. So the poorer villagers began to use baskets to carry the rice, and till now the rich and poor have had to labour up the hill slopes with baskets full of rice.

II.2.C. MEGHALAYA

(i) Demographic Profile

Agriculture is the single largest source of livelihood of the majority of the rural masses and is also the mainstay of the economy of Meghalaya. Besides the major food crops of rice and maize, Meghalaya is renowned for its oranges, pineapple, banana, jackfruits, temperate fruits like plum, pears and peaches. The State has number of small, medium scale industries. Mineral wealth of Meghalaya includes coal, silimanite, lime stone, dolomite, fire clay, felspar, qsuartz and glass sand. The state is well linked with Road network. It is not connected by railway network. The only airport in the State is located at Umroi. Shillong the Capital city has number of beautiful tourist sports. Ward's Lake, Lady Hydari Park, Polo ground, Mini zoo, elephant falls and shillong peak and the golf course are some of the tourist sports of the State.

(ii) Economic Profile

Meghalaya is quite rich in natural resources like coal, uranium and is the only state with surplus power generation. It is also known for the tourism potential. Agriculture is the main stay of the people of Meghalaya and playing a predominant role in the state's economy. Its climate is not only ideal for the development of tourist and health resorts but also for the growth of a large number of horticultural crops like fruits, spices and mushroom. Apart from such potential for agro based industries the state also posses rich deposits of limestone, coal and granite. Most of these natural resources are extracted and sent outside the state only in raw form. There are little value addition activities in the state. CMIE index for infrastructure development for Meghalaya is 65 (in 1992-93); the reference point being 100 which is the national average.

In case of per capita income, Meghalaya continues to leg behind from the national average. In fact, in the recent few years the gap between the per capita income of Meghalaya and India has widen further.

II.2.D. TRIPURA:

(i) Demographic Profile

Tripura is one of the seven states in the northeastern part of India located between 22 degree and 56 minutes and 24 degree and 32 minutes north latitude and between 90 degree and 09 minutes and 92 degree and 20 minutes east latitude. It is bounded on the north, west, south and south-east by Bangladesh whereas in the east it borders Assam and Mizoram.

There is a common belief that the name of the State has originated from "Tripura Sundari" - the presiding deity of the land, which is famous as one of the 51 pethos of Hindu Pilgrims. Apart from this traditional view it is believed that originally the land was known as "Tuipra" meaning a land adjoining the water.

Previously a princely state, and subsequently a Union Territory of Independent India, Tripura was elevated to the status of a state on January 21, 1972. Tripura is mainly a hilly territory with altitudes varying from 50 to 3080 ft above sea level, though the major population of the state lives in the plains. Characterized by moderate temperatures and highly humid atmosphere, Tripura is best visited after the south west monsoons in October.

Today, Tripura is largely a Bengali community, inspite of the 19 Scheduled Tribes that form a major chunk of the population. Hinduism, Islam, Buddhism, and Christianity are the main religions followed in Tripura. The tribals, with a rich and varied culture, belong mainly to the Reang, Chakma, Halam and Usai communities. The majority of tribals live in elevated houses of bamboo called 'Tong'.

The majority of tribals live in elevated houses of bamboo called 'Tong'. Music and Dance are an integral part of Tripura. Their dances reflect the emotions of these people. Garia dance is for the prosperity of people while Cheraw dance is associated with the confinement of Lusai women. Basanta Raas is the dance of Hindu Manipuris in Tripura and Hai Hak dance is of Halam community.

(ii) Economic Profile

The state's economy is primarily based on agriculture. The primary sector (Agricultural) contributes about 64% of total employment in the state and about 48% of the Gross Domestic Product (G.D.P) of the state. A variety of Horticultural Plantation Crops are produced in Tripura like Pineapple, Oranges, Cashewnut, Jackfruit, Coconut, Tea, Rubber, Forest, Plantations etc. There is ample scope for increasing the area under such plantations as well as the productivity. As regards Animal Husbandry and Fisheries, the present level of production is not adequate to meet the demand of the state and there is need and scope for considerable development.

The Industry Sector has also remained to be underdeveloped so far, despite the vast potential. The secondary sector contributes only about 5% of total employment and about 7% of the total income (SDP) of the state at present.

Tourism is growing as an industry in the state. Handicraft is emerging as a potential industry in Tripura. The Handloom Industry also plays an important role in rural Industry of Tripura.

Tripura is a beautiful state lying between the river valleys of Myanmar and Bangladesh. It was annexed to India in 1949. The economy is predominantly agrarian. Agriculture generates about 64% of employment in the state. Tripura's geographical isolation and poor development in infrastructure have gone a long way to hinder the scope of its economic progress. In terms of infrastructure development, the CMIE index for the year 1992-93 is 63 compared to the All India average of 100. The disparity in per capita income between Tripura and the nation has grown with time. The per capita income of the state has remained more or less stagnant during the last few years.

II.2.E. MIZORAM

(i) Demographic Profile

The hilly state of Mizoram is one of the youngest states in the Indian union; having been conferred Statehood in February 1987. It consists of steep hill ranges, separated from one another by narrow valleys. It is predominantly an agrarian state like most of the other states of the North East with more than 70% of its population engaged in agriculture. The present state of the economy is far from satisfactory with very less improvement in the agricultural productivity level. Handloom and handicrafts are the other traditional means of livelihood. The bamboo products of Mizoram are very famous.

(ii) Economic Profile

It is predominantly an agrarian state like most of the other states of the North East with more than 70% of its population engaged in agriculture. The present state of the economy is far from satisfactory with very less improvement in the agricultural productivity level. Handloom and handicrafts are the other traditional means of livelihood. The bamboo products of Mizoram are very famous.

The per capita income of Mizoram is above the national average. However, the state is not self-sufficient and depends heavily on Central Govt. assistance like most of the North Eastern states except Assam. Mizoram has the advantage that it shares borders with Bangladesh and Myanmar. With the opening up of border trade, the state would be able to be a major business hub. In terms of infrastructure, it is still very poor with an index of 63 (according to CMIE in 1992-93) with reference to the national average of 100.

II.2.F. MANIPUR

(i) Demographic Profile

Manipur is situated in the northeastern region of the country. As one might say without hesitation, the land is a paradise come true on earth. Literally meaning “ the jeweled land”, Manipur is richly endowed with natural beauty and splendor. Home to Sangai, a rare species of deer and Siroy Lily, the only terrestrial lily grown on the hill tops of Siroi hill, St. Clair Grimwood described it as " A Pretty Place more beautiful than many show places of the world." Late Pandit Jawaharlal Nehru paid a fitting tribute by describing it as "Jewel of India".

Manipur is bounded by Nagaland in the north, Mizoram in the south, Upper Myanmar in the east and Cachar district of Assam in the west. Manipur is comprised of nine districts: Bishnupur, Chandel, Churachandpur, Imphal East, Imphal West, Senapati, Tamenglong, Thoubal and Ukhrul.

(ii) Economic Profile

Agriculture and allied activities is the single largest source of livelihood, for a majority of the rural masses, and is also the mainstay of the state economy. Industry in Manipur is not very well developed. However, the state is now making rapid strides towards industrialization, with the setting up of many large and small-scale industrial units. The main industries of Manipur are pharmaceuticals, steel re-rolling, plywood, bamboo chipping, cement, vanaspati and electronics.

The state is well connected by airways and roads. Railway tracks are being laid for better transportation facilities. Agriculture and allied activities provide the backbone to the economy in both the hills and the valley of Manipur. While weaving and pisciculture are other important and traditional means of livelihood in the valley, logging, cultivation of a few cash crops, handloom and handicrafts are the traditional sources of

additional income in the hills. In terms of infrastructure Manipur is quite backward with an index of infrastructure of 81 (as per CMIE index in 1992-93). The reference point is 100, the national average. Moreh has become an important business centre because of border trade with Myanmar.

Manipur is lagging much behind the national average in case of per capita income and in the recent few years the gap between the per capita income of the state and the nation has widen further. The state is heavily dependent on imports from outside for almost all items of everyday need.

II.2.G. ASSAM

(i) Demographic Profile

It is located in the northeastern part of the country and has an area of 30,285 square miles (78,438 square kilometers). It is bounded to the north by the kingdom of Bhutan and the state of Arunachal Pradesh; to the east by the states of Nagaland and Manipur; to the south by the states of Mizoram and Tripura; and to the west by the state of Meghalaya, Bangladesh, and the state of West Bengal. The Brahmaputra River valley is the dominant physical feature of Assam. The river enters Assam near Sadiya in the extreme northeast and runs westward across the length of Assam for nearly 450 miles before turning south to enter the plains of Bangladesh. The river valley, rarely more than 50 miles wide, is studded with numerous low, isolated hills and ridges that abruptly rise from the plain. The valley surrounded on all sides, except the west, by mountains and is intersected by many streams and rivulets that flow from the neighboring hills to empty into the Brahmaputra.

(ii) Economic Profile

Assam is a state rich in natural resources like natural oil, natural gas, coal, rubber, tea and some minerals like granite, limestone and kaolin. The present state is much smaller than what it was forty years ago. It is still the largest economy in the North East. It is like the gateway to the other North Eastern states with an infrastructure index (according to CMIE in 1992-93) of 93, quite close to the average of 100. Although it is more industrially developed than the other North Eastern states, it is primarily an agrarian economy with 74% of its population engaged in agriculture and allied activities. The state known for its large industries in the tea and petroleum sectors.

Assam's economy is rural and agricultural. Tea is cultivated in the hilly regions, and the state provides much of the tea grown in India. The valley of the Brahmaputra River is important for rice, the major food product of Assam. Other agricultural products are jute, sugarcane, cotton, oranges, and potatoes. The cultivation of silkworms is common in many areas. Lumber is valuable to the economy of Assam, and the extraction of crude oil is gaining in importance. The primary industries of Assam are textile manufacturing, cement production, and oil refining. There are 848 tea plantations in the state, and growing tea is the principal industry. Production in 1990-91 was 380 million kilograms accounting for over 50% of India's production. Over 72% of the cultivated area is under food crops, of which the most important is rice. Total food grain production in 1994-95 was 3.49 million tons. Main cash crops are jute, tea, cotton, oilseeds, sugarcane, fruits and potatoes. Wheat production in 1994-95 was 0.1 million tons, rice was 3.31 million tons and pulses were 50,400 tons.

II.2.H. SIKKIM

(i) Demographic Profile

Sikkim lies on the southern slopes of the Himalayas. It is bounded on the north and northeast by Tibet Autonomous Region of China, on the southeast by Bhutan, on the south by West Bengal and on the west by Nepal. The area is 7096 sq km. One of the highest regions in India, Sikkim is traversed by the main range of the Himalayas and by several spur ranges. It is entirely mountainous, with one - third of the land covered with dense forests of sal, sambal and bamboo, which are mostly inaccessible and unexploited. Kanchenjunga (8,598-m/28,209 ft) one of the highest peaks in the world lie in Sikkim.

The population is mostly rural, living in scattered hamlets and villages. Gangtok, with fewer than 30,000 people, is Sikkim's largest settlement; other towns, in descending order of population, include Singtam, Rongphu, Jorhang, Nayabazar, Mangan, Gyalshing, and Namchi. Hindi is the official language, with English as the working language of the government; Lepcha, Bhutia, Nepali, and Limbu are also spoken.

Sikkim is a multi-ethnic state. Broadly, the population can be divided into tribal and non-tribal groups. Lepchas, Bhutias, Sherpas are categorized as Scheduled Tribes. The Lepchas are the original inhabitants of the state. Compared to other ethnic groups, the Lepchas still maintain many of their traditional ways. The Bhutias comprise, the sikkimese Bhutia and Bhutia from Bhutan and Tibet. The Sherpas are a marginal ethnic group in the state. Over 70% population consists of Nepalese. They are dominant ethnic group in the state. The people from the plain, mostly involved in trade and services represent a marginal group. As per the 1991 census of India, the total population of the state is 406457, whereas in 1981 it was 3,16,385 only. Dicennial growth has come down, as in 1971-81 it was 50.77% where as for 1981-91 it is 28.47% only. The overall density of population in the state is 57 per sq. Km. East district is the most populated where as North's density only 7, is least populated. Sex ratio (females per thousand male) in 1981 was 835, where as it has improved and now is 878. There are only eight urban towns and urban population is 9.10% of total population. Schedule caste and schedule tribe population is 5.93 % and 22.36% respectively, North district is a tribal district and it has

about 55.38% tribal population. Literacy rate is 56.94% (19th position), higher than the all India average literacy rate of 52.11%.

(ii) Economic Profile

The economy of Sikkim is mainly based on agricultural and animal husbandry. Approx. 11% of the total geographical area is under agriculture. Agriculture is of the mixed type and still at the subsistence level rather than commercial level. The work force participation rate as per 1991 census is 40.44%. The female participation rate in Sikkim is also much higher than the national average. Cultivators account for the greater majority of the people in the state. Their percentage is 57.84%. Agricultural labourers as a whole constitute only 7.81% of the workers in the state. House holds and other industries are negligible, but other workers (Tertiary Sector) at the state level represent a good percentage of population. Maize, rice, wheat, potato, large cardamom, ginger and orange are the principal crops. Ginger, potato, orange and off-season vegetables are the other cash crops. Sikkim is one of the world's main producers of cardamom. About one-third of Sikkim is forested. It also has a rich and varied animal life, including the black bear, panda, numerous species of deer, and the Tibetan antelope. Copper, lead, zinc, coal, graphite, and limestone are among the minerals found in the state, though not all are commercially exploited. Until the early 1970s, Sikkim had only cottage industries, producing hand-woven textiles, carpet, and blankets—as well as traditional handicrafts. Now there are a number of small-scale industries.

Livestock includes cattle, pigs, sheep, goats, and poultry. Cattle and buffalo are limited mainly to the subtropical humid belt, while yaks and sheep are herded in the higher elevations in the north.

A number of industrial units have also come up in the state in the area of fruit jams and juices, bakery products, beer, plastic goods, wrist watches and leather goods. Traditional handicrafts, tourism, and the development of new industry are also important to Sikkim's economy. The past one and half decade has witnessed a tremendous upward swing in various development programme giving a new thrust to the Sikkim economy. This process has increased wage employment opportunities.

II.1.C. Economic Performance Profile

(i) Share of different sectors in Net State Domestic Product and structural shift:

The **Arunachal Pradesh** state is rural based with nearly 75% of its total workforce is engaged in agriculture (mainly shifting cultivation). The remaining workforce being basically concentrated in the gradually emerging tertiary sectors. The secondary sector employment is mainly in the forest-based industries and also carpets making. Tertiary sector employment is mainly in the government jobs.

The contribution of the tertiary sector in **Nagaland** is the highest in 1996-97 and it is more than half of the state's NDP. The per capita income at constant prices has been lower than the All India average.

So far as the sector wise contribution is concerned, it has been observed that between 1980-81 and 1996-97, **Meghalaya's** agriculture exhibited an annual compound growth rate of 11.41% at current prices and 1.68% at constant prices. Similarly the manufacturing sector showed an annual growth rate of 14.53% at current prices and 6.14% at constant (1980-81) prices over the same period. In 1996-97, the contribution of the tertiary sector to the SDP is highest in **Meghalaya**, comprised of more than half of the states SDP.

The Industry Sector in **Tripura** has remained to be underdeveloped so far, despite the vast potential. The secondary sector contributes only about 5% of total employment and about 7% of the total income (SDP) of the state at present.

Tourism is growing as an industry in the state. Handicraft is emerging as a potential industry in **Tripura**. The Handloom Industry also plays an important role in rural Industry of **Tripura**. In so far as the sectoral growth is concerned, it has been observed that between 1980-81 to 1996-97, agriculture, the major sector in the economy of the state demonstrated a growth rate of 9.92% at current prices and 2.25% at constant prices. The state is famous for its handicrafts. Similarly, the manufacturing sector showed a growth of 5.48% at current prices and 3.24% at constant prices.

In 1995-96 the contribution of the tertiary sector to the NSDP was the highest (37.75%) in **Mizoram**. Over the years, all the sectors (primary, secondary and tertiary) show fluctuating trends. Also there is no obvious shift in sectoral contribution.

In 1996-97, the contribution of the tertiary sector to SDP in **Manipur** was the highest. It comprised almost half of the SDP of **Manipur**. Over the years, there has been a shift in the sectoral contribution from the primary to the tertiary sector and the secondary sector indicates a fluctuating trend.

In 1997-98, the contribution of the tertiary sector to the SDP is the highest in **Assam**. It comprised almost half of the State's SDP. Over the years, there has been a shift in the sectoral contribution from primary to the tertiary sector while the secondary sector indicates a fluctuating contribution to the SDP.

The structural shift is essential to understand the development process of the region. If we make a closer study by looking at the tables 3-

Table2 Growth rate of various sectors in NE

	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98
Agriculture	0.42	0.38	0.39	0.39	0.37	0.38	0.37	0.37	0.36	0.36	0.35	0.35	0.34	0.33	0.33	0.32	0.31	0.31
Infrastructure	0.08	0.08	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.10	0.10
Manufacturing	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04
Primary Services	0.04	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Unregistered	0.38	0.37	0.38	0.38	0.39	0.39	0.40	0.39	0.41	0.41	0.42	0.43	0.43	0.44	0.44	0.45	0.46	0.46
Registered	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

Data source: Processed on the basis of CSO data.

Table 3: Income shares of each North- Eastern States in different sectors

States	Sectors	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
APR	Agriculture	0.369089	0.354661	0.366286	0.391891	0.35323	0.382173	0.365602	0.414889	0.418433	0.39461	0.350915	0.376627	0.356107	0.356086	0.299718	0.283628	0.230587	0.258112
APR	Manufacturing	0.065097	0.060873	0.063612	0.064231	0.063058	0.060634	0.061339	0.062464	0.062638	0.06599	0.060447	0.057372	0.060796	0.064163	0.066225	0.067847	0.07736	0.076558
APR	Primari	0.103685	0.155781	0.101178	0.149257	0.151677	0.147105	0.162699	0.091386	0.12243	0.095092	0.110943	0.099228	0.135463	0.107464	0.135825	0.110343	0.111635	0.102912
APR	Infrastructure	0.160594	0.14094	0.169088	0.10823	0.15219	0.143469	0.118851	0.130975	0.111884	0.155805	0.161611	0.150091	0.136164	0.17743	0.197476	0.262676	0.282306	0.260645
APR	Services	0.301535	0.287745	0.299837	0.286391	0.279845	0.266619	0.29151	0.300285	0.284615	0.288503	0.316083	0.316682	0.311469	0.294857	0.300756	0.275506	0.298112	0.301773
ASSM	Agriculture	0.442098	0.394398	0.404579	0.410955	0.383682	0.388286	0.381695	0.394382	0.386291	0.391113	0.381083	0.375635	0.375327	0.367757	0.363189	0.357828	0.351376	0.345959
ASSM	Manufacturing	0.065253	0.070525	0.067918	0.069412	0.078217	0.071024	0.068694	0.070094	0.068646	0.066376	0.064734	0.062243	0.058047	0.055363	0.055408	0.05285	0.05389	0.049705
ASSM	Primari	0.038564	0.085321	0.085831	0.079289	0.077227	0.077175	0.080766	0.073436	0.075058	0.072523	0.062974	0.060281	0.058789	0.060385	0.06389	0.061188	0.062639	0.062554
ASSM	Infrastructure	0.076379	0.082416	0.073089	0.075033	0.083318	0.077653	0.07442	0.074569	0.076897	0.076666	0.075918	0.076852	0.078036	0.078366	0.094815	0.099148	0.096666	0.096584
ASSM	Services	0.377706	0.36734	0.368582	0.365311	0.377555	0.385863	0.394425	0.387519	0.393108	0.393323	0.415291	0.424989	0.429801	0.438129	0.422698	0.428986	0.435429	0.445198
MAN	Agriculture	0.455502	0.440032	0.418326	0.410224	0.404296	0.39548	0.374622	0.360967	0.338414	0.320138	0.329043	0.314161	0.295807	0.313229	0.314849	0.287532	0.278003	0.278014
MAN	Manufacturing	0.046051	0.047718	0.04817	0.047388	0.049099	0.051099	0.054775	0.053327	0.062758	0.05756	0.059927	0.054484	0.05398	0.028099	0.029103	0.03367	0.035802	0.035792
MAN	primari	0.035578	0.037009	0.040289	0.047689	0.045348	0.042277	0.043866	0.047504	0.049448	0.062471	0.051167	0.064226	0.060992	0.058405	0.055957	0.066726	0.077915	0.07791
MAN	infrastructure	0.045199	0.053973	0.056703	0.057518	0.06427	0.066479	0.069206	0.079742	0.07932	0.084553	0.089305	0.093656	0.120844	0.112967	0.12207	0.118913	0.117426	0.11745
MAN	services	0.417669	0.421267	0.436512	0.437181	0.436987	0.444666	0.457531	0.458461	0.47006	0.475279	0.470558	0.473472	0.468377	0.4873	0.478021	0.49316	0.490854	0.490835
MEGH	Agriculture	0.377519	0.36085	0.37099	0.359151	0.358082	0.35475	0.326871	0.320885	0.259935	0.27831	0.269022	0.258522	0.217083	0.222471	0.217595	0.232024	0.235453	0.234187
MEGH	Manufacturing	0.032235	0.040528	0.032239	0.028113	0.028056	0.033081	0.03441	0.037007	0.033353	0.037771	0.041515	0.044467	0.050188	0.046618	0.045448	0.041972	0.041724	0.039971
MEGH	primari	0.041309	0.054784	0.037709	0.039831	0.042964	0.037421	0.04075	0.043077	0.050008	0.060208	0.082404	0.073756	0.065351	0.05951	0.073465	0.055434	0.055284	0.056564
MEGH	infrastructure	0.136622	0.127243	0.133954	0.145655	0.134855	0.125653	0.12643	0.12177	0.136792	0.113458	0.118458	0.136128	0.151865	0.153587	0.132905	0.1434	0.170667	1.823987
MEGH	services	0.412315	0.416595	0.425108	0.42725	0.436043	0.449095	0.471539	0.47726	0.519912	0.510253	0.488602	0.487127	0.515513	0.517813	0.530587	0.52717	0.496872	0.333309
MEZ	Agriculture	0.243808	0.229546	0.203722	0.193484	0.202333	0.267643	0.345113	0.308552	0.250685	0.28401	0.22076	0.281259	0.261446	0.282871	0.258058	0.255765	0.199272	0.201686
MEZ	Manufacturing	0.025249	0.029591	0.02544	0.023269	0.020019	0.006174	0.017749	0.017965	0.03778	0.028419	0.026718	0.040594	0.045078	0.045225	0.039328	0.030254	0.017034	0.018621
MEZ	primari	0.079608	0.080133	0.077431	0.091137	0.102075	0.078248	0.058222	0.115473	0.056369	0.051584	0.049198	0.049582	0.033396	0.025332	0.009714	0.031853	0.018971	0.017857
MEZ	infrastructure	0.161628	0.127941	0.100121	0.104287	0.097407	0.112233	0.069318	0.074962	0.149355	0.125738	0.140913	0.116867	0.110606	0.072352	0.096337	0.116487	0.085745	0.082119
MEZ	services	0.489707	0.532789	0.593286	0.587824	0.578167	0.535701	0.509598	0.483048	0.505811	0.51025	0.562411	0.511697	0.549474	0.57422	0.596562	0.565641	0.678977	0.679717
NAG	Agriculture	0.286527	0.257236	0.246634	0.253024	0.277686	0.270587	0.217739	0.197653	0.186249	0.191899	0.185258	0.190484	0.18143	0.180547				
NAG	Manufacturing	0.021428	0.018898	0.028541	0.030278	0.02863	0.017313	0.015766	0.015228	0.015182	0.015736	0.080134	0.077525	0.077846	0.078937				
NAG	primari	0.038494	0.089307	0.081837	0.093568	0.091988	0.095124	0.093834	0.094967	0.098395	0.105912	0.106804	0.114734	0.078517	0.082102				

NAG	infrastructure	0.136627	0.125907	0.135344	0.145923	0.121943	0.156594	0.21336	0.284641	0.301518	0.262709	0.235363	0.227128	0.308279	0.302326				
NAG	services	0.516924	0.508652	0.507644	0.477206	0.479753	0.460381	0.459302	0.40751	0.398656	0.423743	0.39244	0.390129	0.353928	0.356087				
TRP	Agriculture	0.458385	0.439237	0.449156	0.437009	0.429319	0.421838	0.42162	0.419146	0.396684	0.386952	0.380746	0.358715	0.330232	0.320729	0.264723	0.258849	0.259386	0.259639
TRP	Manufacturing	0.045907	0.048787	0.049226	0.052167	0.052863	0.045516	0.048266	0.046898	0.031898	0.028373	0.03312	0.042004	0.040612	0.038532	0.038469	0.034684	0.038967	0.044206
TRP	primary	0.100851	0.096384	0.103531	0.07098	0.078422	0.086897	0.065572	0.070304	0.056585	0.056193	0.058027	0.052048	0.05632	0.05057	0.045212	0.040873	0.042118	0.043375
TRP	infrastructure	0.049121	0.047597	0.041155	0.043945	0.02821	0.027737	0.02894	0.042286	0.035593	0.043342	0.057647	0.050893	0.051511	0.047319	0.065617	0.076191	0.075075	0.073821
TRP	services	0.345736	0.367995	0.356932	0.3959	0.411186	0.418013	0.435602	0.421365	0.479239	0.485139	0.470461	0.49634	0.521325	0.54285	0.585979	0.589403	0.584454	0.578959

APR= Arunachal Pradesh
ASSM= Assam
MAN= Manipur
MEGH= Meghalaya
MEZ= Mizoram
NAG= Nagaland
TRP= Tripura

Data source: Processed on the basis of CSO data.

Table: 4 Production Structure
Net State Domestic Product by Economic Activity at current prices (Rs. In lakhs)

CONTRIBUTION OF MAJOR SECTORS TO NSDP AT CURRENT PRICES

Sectors	Year	Arunachal	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
Agriculture	1990-91	32.98	36.63	36.08	26.46	23.85	26.26	38.37
	1995-96	26.55 R	39.4	33.27	23.19	31.56	27.81	35.90 P
	1996-97	27.34P	38.84P	32.52Q	24.13 Q	NA	29.03 Q	35.91 Q
Forestry & Logging	1990-91	11.91	2.58	1.48	1.55	3.17	4.76	3.87
	1995-96	7.85 R	1.99	2.81	1.40	4.30	3.88	2.73 P
	1996-97	6.73 P	2.03	3.06Q	1.20 Q	NA	3.14 Q	2.73 Q
Fishing	1990-91	0.86	1.46	2.33	0.50	2.88	0.54	3.77
	1995-96	0.72 R	2.06	2.88	0.84	0.89	0.43	3.77 P
	1996-97	0.71 P	1.75	2.63	0.82 Q	NA	0.37 Q	3.77 Q
Mining & quarrying	1990-91	0.69	9.72	0.0013	6.26	2.30	NA	0.86
	1995-96	0.30 R	4.24	0.004	5.36	0.39	NA	0.87 P
	1996-97	0.37 P	3.88	0.0006Q	5.21 Q	NA	NA	0.87 Q
Public Admn.	1990-91	9.39	4.54	13.57	13.86	15.87	15.85	13.77
	1995-96	8.94 R	5.64	13.74	13.35	15.53	17.88	13.86 P
	1996-97	9.63 P	6.79	14.35 Q	12.98 Q	NA	16.58 Q	13.84 Q
Other Services	1990-91	13.52	8.68	11.53	10.53	10.47	14.53	14.57
	1995-96	14.15 R	10.51	13.04	11.54	10.75	15.71	18.8 P
	1996-97	14.15 P	9.93	13.82 Q	10.00 Q	NA	17.27 Q	18.8 Q

Data Source: Directorate of Economics & Statistics, Govt. of India (NIC)

Table 5 PERCENTAGE CONTRIBUTION OF SECONDARY AND TERCINARY SECTORS TO NSDP

Sectors	Year	Arunachal	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
Manufacturing	1990-91	5.11	12.46	2.64	3.11	5.78	2.22	2.62
	1995-96	3.27(R)	7.53	2.98	3.38	4.84	1.41	2.26(P)
	1996-97	3.08(R)	7.70(P)	3.21(Q)	3.30(Q)	N. A.	1.45(Q)	2.26(Q)
Construction	1990-91	16.22	4.77	8.49	12.32	14.93	11.52	6.81
	1995-96	27.8 R	6.88	9.64	11.46	12.16	9.54	8.00 P
	1996-97	26.87 P	7.37 P	10.16 Q	12.85	NA	10.36 Q	8.02 Q
Electricity, Gas and Water supply	1990-91	-3.13	0.24	0.03	-1.37	-2.79	-1.58	-3.01
	1995-96	-0.035	0.33	-2.78	-0.437	-2.32	-0.84	-3.64
	1996-97	0.03	0.34	-3.14 Q	-0.192	NA	-0.75 Q	-3.64
Transport and Communication	1990-91	0.69	2.95	4.03	7.465	5.81	5.48	3.30
	1995-96	0.46 R	3.4	3.11	6.57	3.55	3.48	3.31
	1996-97	0.60 P	3.42 P	2.80 Q	6.73	NA	3.01 Q	3.31
Trade	1990-91	6.19	8.43	4.26	11.49	5.39	7.56	7.11
	1995-96	5.67 R	10.36	5.25	16.06	8.32	8.11	5.72
	1996-97	6.01 P	9.79 P	5.20 Q	15.62	NA	7.62 Q	5.72
Bank and Insurance	1990-91	1.22	2.51	1.45	2.37	1.81	2.25	2.67
	1995-96	1.28 R	3.71	0.96	2.59	1.28	1.18	3.32
	1996-97	1.33 P	3.96	0.86 Q	2.67	NA	0.98 Q	3.32
Other services	1990-91	13.52	8.68	11.53	10.53	10.47	14.53	14.57
	1995-96	14.15 R	10.51	13.04	11.54	10.75	15.71	18.80
	1996-97	14.15 P	9.93	13.82	10.00	NA	17.27 Q	18.80

Data Source: Directorate of Economics & Statistics, Govt. of India (NIC)

(ii) Growth of NSDP:

The annual compounded growth rate of NSDP in **Arunachal Pradesh** from 1980-81 to 1997-98 has been worked out at 15.78% at current prices and 7.82% at constant prices. So far as sectoral growth is concerned, it has been observed that between 1980-81 to 1997-98, agriculture demonstrated a growth rate of 13.95% at current prices and 5.70% at constant prices. Similarly, manufacturing sector showed a growth of 10.70% at current prices and 8.8% at constant prices over the same period.

The annual compounded growth rate of NSDP in **Nagaland** from 1980-81 to 1996-97 has been worked out at 17.58% at current prices. In so far as the sectoral growth is concerned, it has been observed that between 1990-91 to 1996-97, agriculture demonstrated a growth rate of 18.59% at current prices. Similarly, the manufacturing sector showed a growth rate of 9.93% at current prices.

The annual compound growth rate of NSDP in **Meghalaya** during the period from 1980-81 to 1996-97 has been worked out at 14.38% at current prices and 4.45% at constant (1980-81) prices.

The annual compounded growth rate of NSDP in **Mizoram** during the period 1980-81 to 1995-96 has been worked out at 16.97%. It has been observed that during 1990-91 to 1995-96, agriculture exhibited an annual compound growth rate of 22% at current prices. Similarly, manufacturing sector showed an annual growth rate of 13% at current prices for the same period.

The annual compound growth rate of NSDP of **Manipur** during the period 1980-81 to 1996-97 has been worked out at 12.90% at current prices and 4.68% at constant prices. It has been observed that between 1980-81 to 1996-97, agriculture exhibited an annual compound growth rate of 10.69% at current prices and 1.68% at constant prices. Similarly the manufacturing sector showed an annual growth rate of 10.53% at current prices and 3.14% at constant prices over the same period.

The annual compound growth rate of NSDP of **Assam** during the period from 1980-81 to 1997-98 has been worked out at 12.41% at current prices and 3.54% at constant (1980-81) prices. Agriculture demonstrated a growth rate of 11.7% at current prices and 2.14% at constant prices over the same period. Similarly for manufacturing

sector it was 12.05% at current prices and 1.99% at constant prices during the same period.

Table 6
NSDP CURRENT PRICES
(RS. IN LAKHS)

Year	Arunachal	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
1990-91	46045	949847	72301	76735	30560	57882	91710
1991-92	57236	1063230	86769	88422	41733	69148	102865
1992-93	67554	1154279	95711	97854	47810	81141	108165
1993-94	81533	1309525	115633	113338	56178	104530	124395
1994-95	88900	1448860	130579	125804	59702	120882	130694
1995-96	109302R	1638510	141223	158967	76112	144248	155670P
1996-97	119359P	1747984P	157065Q	176262Q	NA	172699Q	170309Q
1997-98	136522Q	1886532Q	NA	NA	NA	NA	NA

New Series (Base: 1993-94)

Data Source: Directorate of Economics & Statistics, Govt. of India (NIC)

(iii) Per capita income:

Per capita income of **Arunachal Pradesh** has been the highest among the North Eastern states in the recent years and it has been above all India average.

In case of per capita income, **Meghalaya** continues to lag behind from the national average. In fact, in the recent few years the gap between the per capita income of Assam and India has widen further.

Manipur is lagging much behind the national average in case of per capita income and in the recent few years the gap between the per capita income of the state and the nation has widen further. The state is heavily dependent on imports from outside for almost all items of everyday need.

Per capita income of **Assam** continues to lag behind the national average. The following table5shows the per capita income comparison of seven states and India over time.

Table 7**PER CAPITA INCOME (Current Price)****(In Rs.)**

Year	Arunachal	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura	All India
1990-91	5398	4281	3976	4375	4479	4990	3370	4,983
1991-92	6526	4683	4660	4891	5941	5590	3681	5,603
1992-93	7514	4973	5023	5272	6599	6273	3783	6,262
1993-94	8853	5520	5929	5934	7517	7730	NA	7,185
1994-95	9417	5979	6542	6402	7743	8550	4366	8,282
1995-96	11303	6624	6914	7862	9570	9758(P)	5083	9,321
1996-97	12032	6928(P)	7510(Q)	8474(Q)	NA	11368(Q)	5432	10,399
1997-98	13424	7335(Q)	NA	NA	NA	NA	NA	13193*(Q)

*New series base 1993-94

Data Source: Directorate of Economics & Statistics, Govt. of India (NIC), Economic Survey of India (1997-98)

Chapter III

EXISTING TRADE LINKAGES OF THE NORTH EAST REGION

Economists and policy makers have been emphasizing on the importance of trade for the development of the North East region. The basic argument for trade is that trade provides the scope for overcoming the limitation of domestic market. In order to understand the extent and scope of trade based industrialization for the North East region, we need to have some idea about the existing pattern of trade and trade linkages of the NE region with the outside world. The existing pattern of trade linkages of the North East region can be seen in two ways: - external and internal. By external linkage, we mean the region's trade with the countries or regions outside India. On the other hand, internal linkage means trade with the rest of the Indian states other than the North East states. Of course, there is another kind of linkage, which is the trade linkage within the eight North East states. But we shall ignore this linkage in this study. Our main focus is on the scope for trade and investment in relation to the external and internal market linkages only.

III.1. External trade Linkages

North East, in terms of its location, can be strategically placed as a link in India's trade with South- East Asia and Australia and New Zealand. Expansion of trade with this region could provide a springboard for the region's development. The region has to concentrate on increasing trade with the neighboring countries mainly to create opportunities for rapid development. This is necessary both as a short and medium term measure since production of industrial and agricultural items with export-bias would need some gestation period. The region has comparative advantages in many local resource based manufacturing activities, which the region is still not able to exploit due to its general industrial backwardness. The increasing importance accorded in recent years to

commercial ties with South East Asia, provide an ideal opportunity to use North-East states to exploit its comparative advantage. Historically, trade between India and Myanmar has been important. Proper planning and implementation can reverse the current situation where India accounts for only about 1% of Myanmar's trade while China accounts for 30% of such trade. Intensification of North- East trade with Myanmar and other countries of S. E. Asia would not only improve living standards in Nagaland but serve India's strategic interests in this area.

The importance of the North East region in India's trade with the neighboring South and South-East Asian countries as a location of production and as a trade route cannot be easily evaluated. The reason for this is that there is no separate trade statistics for this region. We have India's overall trade with these countries. The importance of North East as a production location for the products India is trading with these countries can be examined by looking at the commodity composition of the legal trade of India with these countries. However, these data do not tell us anything about the importance of North East as a trade route. Therefore, we first look at the commodity composition of India's legal trade with the South -South -East Asian countries to find where the NE region stands in the trade as a possible production location. The next section will deal with the border trade (illegal trade) to examine the importance of the North East as a trade route.

III.2. India's Trade with South- East Asia.

To identify the products exported to South East Asia we looked at India's exports to its major trade partners in that region, namely, Thailand, Singapore, Malaysia and Indonesia. Box 1 below shows the products that India exported to all the four countries in 1996-97.

BOX 1

India's Exports to South- East Asia, 1996/97 (Rs. Mill.)

	INDONESIA	MALAYSIA	SINGAPORE	THAILAND
SHRIMP MACROBACTIUM FRZN.	6.5	143.0	131.0	235.0
MEAL OF SOYABEAN	3684.4	745.6	6085.8	1243.1
GRANITE CRUDE OR ROUGH	110.2	25.3	51.3	101.4
PHTHALIC ANHYDRIDE	93.1	40.2	28.1	14.3
INDIAN COTTON	1625.3	128.85	10.62	899.0
ALLUMINIUM INGOTS	538.5	63.2	1427.6	98.0

Source: DGCIS March 97

It is clear that none of these products are produced in the North Eastern region since most of these products are manufactured where NE has no advantage. But some of these products like **chemicals and small electronic components** can be produced in the North East region. Because for such products, **the transport costs are negligible and there are significant possibilities of value addition by local labor.** Considering the region's vast potential of mineral resources such as Granite crude, expansion of India's export from the region is possible.

Further, incentives if are given to the traders to route trade via the North East states, India can increase its exports to the South-South-East Asian (SSA) countries by exploiting the transport advantage of the North East region. For the classic small economy these incentives can be offered in a package through **creation of an Export Processing Zone (EPZ).** In India such EPZ's already exist in Kandla (Gujrat), Noida (Delhi), Santacruz (Maharashtra), Madras and Falta (West Bengal). The EPZs in India have not been major contributors to exports as in some other countries. This is shown in Box 2 below.

BOX 2

Exports From India's EPZs¹

(Rs. Crores)

Year	India's total X	X from India's EPZs	% share of India's Exports
1985-86	10894.6	321.4 *	3.0
1986-87	12452.4	359.8 **	3.0
1987-88	15719.4	333.5 **	2.1
1988-89	20281.0	516.5 **	2.6

*From Kandla & Santacruz

** From All Six Zones

Thus it can be seen that the contribution of EPZs to India's exports has been declining over time.²

However, the existence of EPZs presumes certain institutional and infrastructural prerequisites. The box 3 below lists the salient features of an EPZ.

*****It may be noted that the region's main shortcoming as an EPZ is the availability of infrastructure.** Typically, an EPZ requires an airport with good road/rail linkages to the rest of the state.

BOX 3

Features of Export Processing Zones³

- Access to wide ranges of infrastructural facilities such as airport, good road system, standardized factory buildings etc.
- Entitlement to certain fiscal and financial incentives and customs privileges (e.g. duty free imports of raw materials, semi finished products, machinery etc) .
- Policies attracting foreign capital and technology.

¹ Indian Institute of Foreign Trade, Export Processing Zones in India – A Case Study of Kandla Free Zone, Occasional Paper, Jan., 1990, New Delhi.

² Rajiv Kumar, India's Export Processing Zones in India, O.U.P., Delhi, 1989.

³ Indian Institute of Foreign Trade, Free Trade Zones in Selected Developing Countries, New Delhi, Jan., 1990.

- **No Central Excise Tax on finished products or specified raw materials.**
- **Tax holiday for 5 years.**
- **Facility to sell 25% of the product in the domestic market**
- **Availability of credit at preferential rates from Central and State Financial Agencies up to Rs.3 mn.**

III.3. Border Trade.

Historically, land locked countries have engaged in border trade⁴ with their neighbors. Border Trade has a special significance to the economies of the North -Eastern States due to their peculiar geographic location. The region shares only 2 percent of the border with the Indian mainland, while 98 percent is connected with international border-a border shared with the neighboring countries of Myanmar, Bangladesh, China and Bhutan. Meghalaya, Assam and Tripura share common border with Bangladesh while Mizoram, Manipur and Nagaland share border with Myanmar and Arunachal Pradesh is bordered by Tibetan region of China and the Himalayan range of Mountains. In addition, Assam has border with Bhutan also. Special emphasis is now accorded to enhancing border trade with Myanmar and Bangladesh as India has forged special relationship with both Myanmar and Bangladesh. India has entered into Border Trade Agreement with Myanmar on January 21, 1994. The Agreement came into effect on April 12, 1995 when Indo-Myanmar border was officially declared open for trade at Moreh in Manipur. India has no formal Border Trade Agreement with Bangladesh and three North-Eastern States of Meghalaya, Assam and Tripura either through authorised customs check posts or on an informal basis. Generally, border trade is based on items, which are bulky in nature. Boxes 4 and 5 below look at Indo-Burma trade over the period 1991/92 and 1996/97.

⁴ National Council of Applied Economic Research, Cross Boarder Trade Between India and Bangladesh, NCAER, Working Paper No. 58, Nov., 1995, New Delhi.

BOX 4

INDO- BURMA TRADE 1991-92

ITEMS	EXPORTS TO BURMA (Rs. Mill.)	IMPORTS FROM BURMA (Rs. Mill.)	ITEMS
MALTED MILK (1901)	2.39	3	PEAS shld or unshld (0708)
BARYTES POWDER (2511)	13.09	34.25	PEAS dried or shld (0713)
MEDICINE (3004)	0.82	13.8	BEANS (0713)
COSMETICS (3304)	1.74	37.06	KIDNY BEANS include. WHITE PEA (0713)
WOOD (TEAK) (4403)	23.61	4.38	GUAR SEEDS (0713)
BED SHEET etc. (6304)	1.11	410.07	OTHERS (0713)
JUTE SACKING BAGS (6305)	7.08	33.98	MOONG (0713)
BARS AND RODS (7215)	31.03	102.42	TUR (0713)
ELECTRICAL GOODS(8512)	1.81	6.39	URAD (0713)
ELECTRIC INSULATORS OF OTHER MATERIALS (8546)	1.81	74.3	SWAN/CHIPPED TEAK WOOD (4407)
TOTAL	84.49	719.65	

BOX 5

INDIA- BURMA TRADE 1996-97

ITEMS	EXPORTS TO BURMA (Rs. Mn.)	IMPORTS FROM BURMA (Rs. Mn)	ITEMS
CHILLY (0904)	21.8	2.9	BEANS fresh or chilled
WHEAT (1101)	289.8	390.8	PEAS dried or shld
QUARTZ etc (2506)	0.14	501.8	MOONG
MEDICINES (3004)	36.9	1876.6	TUR
COSMETICS (3304)	17.4	304.9	URAD
FUSES etc. (3603)	20.3	100.5	BEETLE NUT whole
TYRES (4011)	73	35.6	CRUDE PALM OIL & its fractions
STEEL etc (7208)	20.8	2.5	SHEEP SKINS
TREATED STEEL (7210)	414.3	9.2	GURGAN (Dipterocarpus Alatus)
BARS &RODS (7213)	38.5	4.7	CATHODES, ANODES,INGOTS
	48.8		
	58.8		
HOT ROLLED (7225)	33.2		
PILING etc (7301)	18.3		
BICYCLES (8714)	23.05		
TOTAL	1115.09	3229.5	

As can be seen from the above there has **been no significant change in the trade pattern during the period 1992-97**. As in the year 1991-92 imports from Burma during 1996-97 largely consist of agricultural items. In the year 1996-97 one set of manufactured

goods i.e. cathodes, anodes, ingots got added to the list. But **exports to Burma mainly consist of manufactured goods**. Two notable items that are new in the list of exports (1996-97) are **wheat and steel**.

From Box 4 & 5, it's clear that India is engaged in trade with its neighbor countries in large amount through Border States. Due to the lack of data, we have to stick to few items. **However, these do not necessarily show any clear picture about the region's comparative advantage as the origin of these products remains unidentified. The items like steel, treated steel, Bars and Rods, Tyres, Wheat, Electronic and Electrical goods are essentially not produced in the North East region due to industrial backwardness and lack of capital.** Now, setting up ancillary industries can develop the region through **relocation of production of these items**. To help the relocation process, **border trade should be legalized and improvement in transport and marketing net work is crucial**. The items like Malted milks, Barytes Powder, Medicine, Cosmetics, Wood (Teak), Jute sacking bags, electrical and electronic goods etc. can be supplied by the region. This way, it would help the region to **identify its pattern of comparative advantage to experience higher growth through trade**.

III.4. Extent of illegal trade: Indo - Burma.

One methodology used to estimate the extent of illegal trade is to compare export and import figures using both a country's own trade data and the partner country data. For the former we used the trade figures published in India's *Monthly Statistics of India's Foreign Trade* (Exports and Imports), Directorate General of Commercial Intelligence and Statistics (DGCI&S). For the latter we used Burma's trade figures as reported by the *UN's Direction of Trade* publication (DOT). We converted the DGCI&S data to million \$ using a conversion rate of Rs. 40 / \$ and compared it with the estimate given by DOT for the same period. . **This study showed that the level of illegal imports from Burma has been significantly high and it has increased during the period 1992-96.** The levels of illegal exports to Burma on the other hand have not been high. This is shown in box 6 below.

Illegal Trade, India-Burma		
<i>BOX 6</i>		
1991-92	Exports to Burma	Imports from Burma
TOTAL (DGCIS in mill. Rs.)	84.49	719.7
TOTAL (DGCIS in mill. \$)	2.414	20.6
DOT DATA (mill. \$)	4	47
1996-97		
TOTAL (DGCIS in mill. Rs.)	1115.09	3229.5
TOTAL (DGCIS in mill. \$)	27.87725	80.7
DOT DATA (mill. \$)	29	167
IIFT REPORT: TOTAL INFORMAL TRADE (1995): Rs. 20 bill. Or \$500 mill.		
VALUES OF ITEMS SEIZED BY INDIAN CUSTOMS(Rs.)		
ITEM	1993-94	Apr-Nov 1994
WOOD	1003544	71090679
SPICES	6351060	509405
SILVER	2458650	
GOLD		1215800
VEHICLE	1638500	6435000
LENS	1364350	1552820
FABRICS	290810	1015691
ELECTRONIC GOODS		1316656
MISC. CONSUMER GOODS	3232206	3702280
NAROTICS SEIZED ON THE INDO MYANMAR BORDER		
YEAR	QUANTITY (Grams)	
1992-93	14.6	
1993-94	329.6	
1994-95	2070.7	

Source: Study on Promotion of Border Trade between India and Myanmar--- Indian Institute of Foreign Trade, New Delhi, 1995

The Indian Institute of Foreign Trade while doing a survey of Export Opportunities in Burma found an estimate for informal trade with the country. It was found that **goods like cycles, motor accessories, drugs, petroleum products, cement, and construction material were informally exported from India. Goods coming into the country were timber, electronics and other third country manufactures.** The

Table above gives the value of selected items seized by the Customs Department on the Indo- Myanmar Border.

It is also seen from Box 6 above, **that the official exports of Burma are more than twice the official imports recorded by India.** This indicates the presence of illegal trade. This is true for both 1991-92 and 1996-97. In 1991-92 Burma's own figures indicate exports to India of \$ 47 million compared to India's official imports of \$ 20 million. The corresponding numbers in 1996-97 are \$ 167 million and \$ 80.7 million. In general, one expects import values to be higher than export values as the former are valued on c.i.f. basis and the latter on f.o.b. basis. On the other hand, as seen in col.2 of Box 9, the difference between India's exports to Burma (row 2) and Burma's imports (row 3 as calculated from the UN's Direction of Trade statistics) are not very high and can be explained by differences in valuations. This is generally true for both the reference years chosen. The lower half of Box 6 indicates that **drug trade can explain a substantial part of this illegal trade.**

However, apart from the drug trade, the incentive for trade must be based on price differences. The incentive for trade (legal or illegal) is clear if one looks at the prices prevailing in Burma for some common items of consumption.

<i>BOX 7</i>				
<i>PRICES OF SELECTED ITEMS FOR LAST QUARTER 1997</i>				
	FEB	MAY	AUG	NOV
2nd QUALITY RICE /pyi	85-90	100	120	120
4th QUALITY RICE/pyi	50-60	65-68	60-75	60-75
CATFISH/ viss	250-280	450-500	450-500	450-500
SHRIMP/ viss	180-250	450-500	400-550	400-550
CHICKEN/viss	500-600	550-700	600-650	600-650
COOKING OIL/viss	300	350	400	440
PETROL/gallon	250-260	270-275	180	180

1 viss= 1.6 Kg, 1 pyi= 2.1 Kg, 1 gallon= 3.8 litres

Source: Economic Intelligence Unit 1997

It is thus clear that for **all the items of mass consumption, prices in Burma are 4 to 6 times those prevailing in India.**

It is important to note that increasing trade with Burma is important from both the security and economic standpoint. From the security point of view, **India accounted for 1.5 percent of Burma's imports from Asia in 1996 compared to 30 percent for China.** However, India's share in Burma's imports has increased by two and half times between 1991 and 1996. **Given its long border with Burma, Nagaland will be a crucial link in this trade expansion.**⁵

From the economic viewpoint, India needs to tap **two important Burmese resources: oil and timber.** While the strategic importance of oil is well known, the role of timber imports is likely to increase given the Supreme Court ban on green felling. Alternatively, North East will have to develop plantations which are outside the purview of the Supreme Court ruling. In the case of oil, the possibility of setting up joint ventures will have to be explored. Here the region has a natural advantage as a base camp for Indian entrepreneurs.

III.5. Indo-Myanmar Border Trade:

The volume of Indo-Myanmar Trade principally on informal basis, through the border areas at Moreh (Manipur)⁶ and Champhai (Mizoram) is, however, considerable. According to an estimate made by a study by the Indian Institute of Foreign Trade in 1995, on "Promotion of Border Trade between India and Myanmar" the extent of border trade between the two countries is placed at around Rs.2000 crores per annum. The informal trade has continued to hover around this figure, as a variety of high value items including precious and semi-precious stones and sophisticated electronic goods feature regularly in such transactions.

The varied assortment of commodities featuring in the informal trade between the two countries is as follows:

⁵ See also, "Transforming the North-East", Planning Commission, op.cit.

⁶ The border trade with Myanmar through Moreh border was operationalized on April 12, 1995. However, the volume of formal trade continues to be negligible.

III.5.a. Through Moreh Border (Manipur)

From Myanmar to India: - Electronic goods, Synthetic blankets, Manmade fabrics, Car batteries, Inverters, Emergency Lamps, Locks and Padlocks, Precious and Semi-precious Stones, Walking Shoes, Soaps, and Toiletries, Silk yarn and Cloves.

From India to Myanmar: - Automobile parts, Drug & Pharmaceuticals, Cycle Parts, Chemicals (bleaching powder, ammonium chloride, etc.), Urea, Cotton Yarn and Handloom Lungies, Stainless Steel Utensils.

III.5.b. Through Champhai Border (Mizoram)

The items traded through Champhai border in Mizoram, particularly, the goods received from Myanmar are more or less similar in nature to those imported through Moreh. Indian exports through this Border, however, show some variations in the product-mix as shown below:

From Myanmar to India: - Drugs and Pharmaceuticals, Synthetic fabrics, synthetic blankets, Torches and batteries, Electronic goods, (TV Sets, Air-conditioners, V.C. Rs), Hardware items, High frequency radio sets, beverages, semi-precious and precious stones and metal scrap.

From India to Myanmar: - Nescafe (instant Coffee), Tea, Maltova, Horlicks, Baby foods, Wheat flour, Medicines, Bicycles, Cotton Yarn (in bales), cotton made-ups, sanitary fittings and stainless steel articles.

III.6. Indo-Bangladesh Trade

Trade between India and Bangladesh is carried out as per the Ind-Bangladesh Trade Agreement which provides for “Most-Favored Nation Treatment” (MFN) accorded to goods and services of both the countries. Both the countries accord mutual preferential trade concessions to each other as well.

Official trade between India and Bangladesh during 1995-96 and 1996-97 averaged over Rs.3400 crore. While India's exports to Bangladesh averaged Rs.3200 crore, imports from Bangladesh averaged only Rs.250 crore. India's major items of export to Bangladesh include textiles, machinery and instruments, transport equipment, rubber products, chemicals and pharmaceuticals and minerals and ores. Major imports from Bangladesh include fertilizers, raw jute and organic chemicals.

India and Bangladesh had a Border Trade Agreement in 1972 but it was never fully operationalised. Nevertheless, there are exports to Bangladesh through the borders of Meghalaya, Assam and Tripura. In 1996-97 exports to Bangladesh from these three states amounted to Rs.113 crore. Meghalaya alone exports to the extent of over 60 percent and Assam around 21 percent and Tripura 16 percent.

Commodities supplied to Bangladesh through the border by the States of Meghalaya, Assam and Tripura include onion, ginger, oranges, dry chillies, garlic, paper, stone boulders, apples, coal and limestone. Coal and limestone are the major items supplied. Stone boulders are sent largely through Meghalaya and there is fair measure of demand in Bangladesh for this item.

III.7. Trade with rest of India

Another way by which the North East region can overcome the limitation of domestic market size for industrialization is through the expansion of trade with other Indian states.

Currently, the main exports of North East to the rest of the country are mainly traditional handicrafts and provision of tourism services. In this chapter we explore prospects for expanding such trade. Exports from the North-East Region can broadly be divided into three categories:

- a) Products of North-Eastern Region exported outside the region are mainly Tea, Jute, Silk Handlooms, Cane & Bamboo crafts. Tea constitutes the bulk of exports. North-Eastern Region's Tea exports both, on direct and indirect basis, is estimated at Rs. 692.66 crore during 1996-97. There is no clear estimate of

the share of Jute of N.E. origin in exports of Jute & Jute products from the country, as it is mostly used for blending in the manufacture of various type of Jute goods in West Bengal.

- b) Items exported through the Customs check posts located at the borders, within the Region. Many of these items are produced locally e.g. ginger, dry-chilly, fruit & vegetables, coal & limestone etc. Such exports are of the order of Rs. 95 crore in 1996-97.
- c) Products that fall in the third category are those which are produced or procured from outside the North-Eastern Region and exported to the neighboring countries like Myanmar, Bangladesh, Bhutan etc. In this category are included not only certain essential commodities like onion, salt, kerosene, spices etc., but also engineering goods, drugs & pharmaceuticals and certain chemicals. However, since there is hardly any value addition in this category and the North-Eastern Region acts merely as a transit route to the neighboring countries, such exports cannot legitimately claim to be North-Eastern origin.

Table below shows exports that took place from the North Eastern Region during 1995/96 & 1996/97. The products have been divided into six board product categories as follows:

- Agro-based Products
- Tea
- Mineral Products
- Forest-based Products
- Handicrafts
- Textiles

Table 1**EXPORT OF SURVEY AND NON-SURVEY PRODUCTS (1995/96 AND 1996/97)**
Val in Rs. crore

Product group	1995-96			1996-97		
	Direct	Indirect	Total	Direct	Indirect	Total
Agro-based Products	90.4	20	110.4	27.98	10	37.98
Forest based Products	---	---	---	---	20	20
Mineral products*	191.71	---	191.71	84.62	---	84.62
Tea	193.23	579.70	772.93	197.90	494.76	692.66
Textiles	---	---	---	---	0.5	0.5
Handicrafts	---	0.9	0.9	---	0.9	0.9
Total	475.34	600.6	1075.94	310.5	526.16	836.66

- Including Stone Boulders
- Source: Field investigations as carried out in the IIFT survey in 1997

As can be seen from the above table, the estimates of authorized exports for the year 1996/97 from the NER is Rs. 836.66 crores. Direct exports are Rs. 310.5 crores and the indirect exports are estimated at Rs. 526.16 crores in 1996/97.

III.8. Electronic Commerce.

Many of the policy recommendations in the above are based on long or, at least, medium term considerations. In particular most of the suggestions for development are based on existence of some infrastructure in the form of road/rail/air links, marketing networks, trading links. We have argued that North East's primary advantage lies in its skilled labour force and a form of trade which is very skilled labour intensive is electronic commerce. For India as whole exports of software have defied all recessionary trends in the economy in the last two years. Box 8 shows the growth in India's software exports in the last two decades.

BOX 8**Software Export From India**

Year	Value (Rs.mill.)
1985	110.0
1993-94	1380.2
By 2000	5000.0

It is important to note that the infrastructure for software development can be set up in a short space of time requiring only a network of computers and servers with satellite links. Globally, the development of the Internet has allowed a lot of commerce to be conducted on the World Wide Web. This has eliminated the need for expensive traditional infrastructure like roads and bridges to ease communications. In the next decade, one is also likely to see most of the traditional marketing taking place on the Internet. **The only major input required for electronic commerce is skilled labour.** Software development, for example, is also highly labour intensive with large backward and forward linkages. But even more important perhaps for North East states would be the provision of services such as accounting using facilities for trans border data flows. In the longer run Internet can be used to offset many locational disadvantages (see in Box 9). North East state's disadvantage of small geographic size can be easily overcome with promotion of information technologies. **The role of the government of India would be primarily in establishing the communication links and setting up of a network of educational institutes for training.** Existing software companies in other parts of India may be invited to set up shop in these states and save the state from funding such education.

BOX 9

A study of the economy of the state of Vermont in the North East of the US showed the beneficial impact of using the internet. The Vermont Teddy Bear Co., a toy producer, was almost on the verge of collapse three year ago. But by spending \$ 100,000 on marketing through the internet it was able to generate sales of more than \$5 million. Today internet sales account for 20 % of its sales and the Company has completely turned round. The study says that 2300 Vermont business have established a home page and 1300 use their web sites for directly selling their products; 73 % of business have increased their sales and 58 % of companies have discovered new markets for their products.

III.9. Agricultural Development and Trade

North East states being a predominantly agricultural, any increase in productivity in the sector will give a significant boost to the state's economy. Agricultural development affects economic development in a numerous ways - higher agricultural incomes raises demand for manufacturers, higher productivity releases labor from subsistence production for employment in other sectors, provides subsistence products to the non-agricultural population.

In the past, agricultural productivity in the state has stagnated. Improving productivity among small holders is a complex and time-consuming task - development of high productivity technologies, dissemination of the technology, establishment of distribution networks for supply of inputs and disposal of the output. We propose a more limited strategy for agricultural development tied to export markets. Exports of flowers from India have been expanding rapidly and in recent years such exports to Japan, South East Asia and Australia and New Zealand have increased particularly rapidly. To exploit this opportunity studies need to be undertaken to determine the flowers that can be grown, develop appropriate strategy to develop and sell the flowers.

The region also has the potential for selling fruits and vegetables to the rest of the country - at the moment much of the output seems to rot. Exploitation of the export market requires either that the fruits and vegetables be processed. Alternatively, the possibility of supplying them by air to major markets may be explored.

III. 10. Trade in Handicrafts

North East can interact with the rest of the country through **trade in handicrafts** which are a traditional industry of the economy. To investigate the possibilities of such trade being the engine of growth we refer to the **AEDR report**. The report made a survey covered about 150 shops in the major markets. The survey was conducted on the basis of a structured questionnaire, which was filled in by our field staff based on questioning of the shop owners. The results of the survey are shown in the box below.

BOX 10

- **Many shops did not stock any products from North Eastern states**
- **Some stocked only a few products like beads, masks, jewelry such as necklaces and some wood products.**
- **Customers rarely asked for products from North East because they were not aware of any specific products from this region.**
- **Many of the products from North East were more expensive than similar products from other states.**
- **Lack of an appropriate distributor was a constraint to stocking North East products.**

Thus increasing the sale of North East products would require

BOX 11

- **Increasing the visibility of the products in the minds of customers.**
- **Making the products more readily available to sellers by appointing appropriate agents.**
- **Examining causes for the high price of such products in order to reduce costs and make the products more competitive.**

It is thus obvious that increasing such trade would not be cost effective in terms of the high costs of increasing consumer awareness of North East products. In addition, such trade is constrained by supply constraints of the local unorganized industry. **However, the economies of large-scale marketing would accrue if the North-East states as a whole could pool their resources.**

III.11. Tourism.

Given the need to generate employment, tourism offers tremendous potential for North East. The entire North-Eastern Region has tremendous potential in the Services Sector and Tourism in particular, can act as a catalytic agent in transforming the Region into an economic power. Some other studies also indicate this⁶. We undertook a survey of 25 of the large and small domestic and international tour operators in Delhi. The results of the survey are summarized in Box 3 below. Given the stress laid on travel to the North-East as a package, it probably would make sense to develop a North-East Trade Promotion Centre based on cooperation among the states of this area. The hotel facilities in the state will need to be augmented to encourage tourism, since hotels often tend to be loss making in initial stages; their establishment will need to be carefully examined.

⁶ See A Perspective Plan for North-East Region-Phase 1, report prepared for NEC, Shillong by Tata Consultancy Service, 2, Hare Street, Calcutta, 1990.

BOX 12

- In the period 1991-96, number of tourists has more than doubled from 67 million to 140 million.
- Number of domestic tourists to North-East has stagnated at 14000 per year, 1995-97, which is 0.01 percent of total domestic tourists.
- Main factors discouraging tourists are lack of awareness of tourist facilities, transport expenses (for North based tourists) due to lack of air links among states of the North-East, security perceptions.
- Main potential at present lies in adventure tourism. Such group tours seem to reduce security threat perceptions.
- Initial attempts must be to involve travel agents in Eastern states like West Bengal and Orissa.
- Encourage tourists as part of a North- East package.

III.12. Summary

In applying a trade model of growth to North East, we have argued that **the state must concentrate on its most valuable resource—skilled labour, male and female. In the short run, this implies promoting sectors electronic commerce.** Opening of border trade is expected to achieve the industrialization process of the North Eastern states, taking into account export prospects offered not only by Myanmar but also by other South East Asian countries. In addition, **steps must be taken to formalize the already large, but illegal, border trade with Burma.** Lungwa is one identified trade point.

From the long run point of view, North East can envisage setting up of an Export Promotion Zone (EPZ) and **act as a window for India's exports to East and South East Asia.** Given its land-locked nature, **North East would have to concentrate on high value added items where transport costs are not a crucial constraint and which use relatively skilled labour.** While existing exports of **chemicals and electronic components** are feasible, **North East states can exploit their rich forestry resources in exporting non-timber forest products. One such item is floriculture.** However, the

state would need to tie up with canalizing agencies like the MMTC to explore marketing links. It must be noted, however, **that internal road and air links remain the crucial constraint to setting up such and EPZ.**

It must be stressed that we have only identified various potentialities in region's position. Implementation of these suggestions will require further mode to identify the precise possibilities and how to overcome any particular problems that may arise. For this connection it is important to ensure that the strategy chosen with accord with the socio-potential realities and are in consonance with the desires of the people.

In its trade with the rest of the country we have **focussed on sectors with a high skilled labour component.** Here, we identify two areas, **tourism and handicrafts** for focus. The renewed emphasis on border trade can be attributed for the increasing importance of the Government of India for forging closer commercial and economic links with the larger markets of the fast developing South East Asian economies. The North East has already established a large volume of informal trade through different border routes with both Myanmar and Bangladesh. With judicious implementation of policies and programmes, the North-Eastern borders could form important gateways for an expanded trade with the more affluent ASEAN markets. However, given the limited resources of the state we **suggest development of these two areas in co-ordination with the other states of the North-East.**

Chapter IV

STRATEGIES OF TRADE ORIENTED INDUSTRIALIZATION IN THE NORTH- EAST REGION: A BLUE PRINT OF GROWTH

The well known economist D. H. Robertson argued that **"trade leads to growth because trade provides greater scope for the division of labor"**.

III.1. Trade as an engine of growth

The main problem of industrialization of the NE economy is the limited size of the domestic market. The need for market arises for three reasons:

- (1) To reap scale economies in production
- (2) For the development of ancillary manufacturing activities
- (3) Adoption of advanced technology

Economic development is impossible without industrialization. Scope for industrialization can be enhanced if the region can overcome the limitation of the market and one possible way to do this is trade. This is the reason why policy oriented economists often suggest for a trade based industrialization. Average cost falls as the size of production increases.

The growth in the North East region is lacking due to lack of forward and backward linkages, as there is absence of value added manufacturing units. One way to overcome the vicious cycle of backwardness of the region is through opening up of trade and external market linkages. Therefore, growth in this region must be necessarily trade oriented through greater access to external market. The opening up of trade will lead to expansion of market for domestic products that will help for better division of labour and more efficient technology will be used. This will further create more employment through better resource utilization and the region will experience higher growth this way. Among the key drivers of this process is the need for the region and enterprises to find

new markets for their exports. The region can interact with the rest of the country and global market through trade in products, which can be produced by with local natural resources and skilled labor. While labor intensive exports can and should provide the initial platform, the region must evolve a framework for diversification and quality improvement of her export basket. Long term is expected to create a competitive environment which is supposed to raise the level of productivity and efficiency of North East industry.

Table2 in Chapter II gives the comparative growth rates for the main sectors of the economy, which are listed in the calculation of the net state domestic product (NSDP). The growth comparison reveals the fact that the economy of North East is based on agriculture, forest and mining and that the infrastructure required for a manufacturing orientation is practically stagnant. Some activity is noted in the trade and transport sector.

The principal comparative advantage in the North East lies in its skilled labor force. Export processing or special economic zones should be established with all necessary infrastructures at suitable locations in the North East to attract export industries. Joint ventures could be floated with Bangladeshi and other entrepreneurs to exploit the North East and export markets. Expansion of trade with this region could provide a springboard for North East development. The enormous employment and income-generating potential of the handloom and handicraft sector must be creatively tapped by providing the necessary inputs, credit, design and marketing facilities. There has to be a shift to employment generation in industry, and the agro-processing, craft and service sector. **There is a lot of export potential for agro based (fruits, flowers etc.), forest based, engineering, textile, and handicraft products from this region to Bagladesh, Russia, USA, UK, France, Germany, Japan, China and Middle East Countries.** The region can exploit its **skilled labour and natural advantages** by setting up **export units** and enjoy the **economies of scale**.

Simple border trade in head loads or small quantities would benefit local communities on either side and would be important in itself quite apart from substantive inter-country trade. The list of goods being traded and the factor endowment (mainly skilled labour) of the North East suggest the possibility of setting up manufacturing or value-adding units in the North East to produce medicinal products, rubber goods,

bicycles, software, farm sectors and so on which could be exported. This would require the development of industrial area.

Referring to the potential for exporting handicrafts, spices and horticultural products from the region the **government should consider extending the concessions and benefits available to units in the Export Processing Zones (EPZs) to the Export Promotion Industrial Parks (EPIPs) located in the region.** The Govt. would also examine other **incentives for promoting exports from these States.**

The **promotion of border trade** is another area, which has very strong potential for the region. In fact, there is particular scope to increase such trade within the SAARC framework, which the authorities must probe fully if the opportunity this provides for the development of the North-East generally is to be exploited effectively.

The **region should produce and manufacture those goods, in which has natural advantage.** For example, the region is rich in forest resources. Instead of supplying plywood, it should send furniture in those markets so that wood based industries could grow up in the region. Thus lots of fabrication is needed to boost up its export sector and it will also encourage the setting up of industrial units in the region. Like Malaysia and Indonesia, **North East states can apply “screwdriver technology” to reduce its transportation cost. Large-scale marketing is very crucial to pool the region’s vast resources to the exporting nodes.** All over the North East artisans produce Cane and Bamboo products. But, these products still suffer from design limitation and restricted markets. A Cane and Bamboo Technology Research Development should be established to provide the backward linkages (i.e. tissue culture and propagation of bamboo) and forward linkages like design improvement, improvement in product range, marketing assistance for both in India and abroad and networking with artisans. This will also link up its micro credit scheme to this group of artisans, who wants to develop and take advantage under this scheme.

The North Eastern region has been identified as an area having very good scope for the development of food processing industries. The agro-climatic condition of the region is congenial for production of agro-horticultural crops. Besides the food crops, there are fruit crops, vegetable and tuber crops. Among the fruit crops, pineapple, orange, banana, guava, jack fruits and many local varieties of fruits are grown in the

region. They go waste during the production season due to lack of storage and processing facilities and also for inadequate transport facilities. Promotion of food processing industries in the small scale sector will not only check the wastage of these valuable resources and add value to them, but will also encourage the growers to grow more fruits and export them to the international markets. There are also vegetable and other crops, the production of which has gradually been rising in recent years. **Among the vegetable crops, cabbage, tomato, cauliflower etc. are grown and among the tuber crops, potato, sweet potato, and tapioca are grown.** Tapioca grows wild in the border areas of Meghalaya. Based on these resources, industries can come up. Annually more than two lakh tonnes of spices are produced in the region. Principals among the spice are ginger, turmeric, black pepper etc. The region has good prospects for the development of industries based on plantation crops such as rubber, coffee, tea etc. Rubber based units have good prospects, particularly in Tripura. More than half of the tea produced in the country is from the North East region, particularly from Assam. Tea cultivation and processing have occupied an important place in the economy of the region. Tea industry offers scope for the development of ancillary and auxiliary industries in the region. A few industrial units have been set up such as caffeine making unit, tea machinery and equipment manufacturing unit etc. Based on the requirement of the tea industry, cane and bamboo basket making unit, polythene bag making unit, umbrella making unit etc. can be considered. Livestock is another important resource of the region. The entire region is rich in fodder and could support and sustain a large population of livestock. Rearing of livestock will provide scope for development of livestock based industries. Fish is a delicacy of the people of the North East. There is also scope for increasing fish production. Similarly demand for egg is plenty. But the region is deficient in the production. Fish and eggs are being imported from other parts of the country, particularly from Andhra Pradesh. Development scopes in these areas are yet to be exploited.

IV.2. Strategy of trade oriented industrialization

The region suffers from the lack of capital, as large industry can't profitably set up due to small market. The limited market size, transport bottlenecks, lack of infrastructures facilities, poor technology, lack of reliable skilled labor have further aggravated poor industrial scenario in the region. Private investment is not worthwhile due to insecurity in the region. Thus breaking up of industries can play major role for growth in this region. The region offers good scope for small industry development based on its resources, demand, environment and skill. The region is known for its resource endowment.

Keeping in view the resource potential of North East region as a whole and the various obstacles in the way of development of industry, trade and commerce, it is necessary to adopt a new paradigm of export-oriented growth. This is the pragmatic way to achieve the objective of rapid industrialization in the North East region. It is envisaged that export-oriented industrial development would go a long way in reducing the dependence on forest resources and creating employment and income generating activities for ensuring all round development of the economy of the region. The opening up of the economy to external market would attract investments, help set up export-oriented industries, create employment opportunities, offer transfer of technology, help in earning foreign exchange and facilitate development of the region as a whole.

With a view to achieving export-led industrialization, the Government of India may consider declaring North-Eastern region in its entirety as an **Export Processing Zone** by extending all incentives and facilities to attract investments. Export processing or special economic zones should be established with all necessary infrastructures at suitable locations in the North East to attract export industries. Joint ventures could be floated with Bangladeshi and other entrepreneurs to exploit the North East and export markets. Expansion of trade with this region could provide a springboard for North East development. The enormous employment and income-generating potential of the handloom and handicraft sector must be creatively tapped by providing the necessary inputs, credit, design and marketing facilities. There has to be a shift to employment

generation in industry, and the agro-processing, craft and service sector. There is a lot of export potential for agro based (fruits, flowers etc.), forest based, engineering, textile, and handicraft products from this region to Bangladesh, Russia, USA, UK, France, Germany, Japan, China and Middle East Countries. The region can exploit its **skilled labour and natural advantages** by setting up export units and enjoy the economies of scale.

Declaring the North-East region as **Export Processing Zone**, keeping in view certain ecological parameters, would encourage entrepreneurs to set up industries to cater to the needs of the bordering countries such as Bangladesh, Myanmar, China and Bhutan. Trade and commerce would flourish as the region has 98 per cent of its border with neighbouring countries and shares only 2 per cent of the border with the main land of the country. **The proximity of the North-East region should be viewed as an opportunity to reach out very naturally the neighborhood markets of Bangladesh, Myanmar, China and Bhutan and eventually the markets of Thailand, Malaysia, Indonesia etc.** It is necessary to stimulate industrial growth and promotes legal and direct exports from industries based on plantation, agriculture, horticulture, floriculture, forestry, herbal and medical plants and mineral based industries in the region. This will result in net foreign exchange earnings for the country while opening up opportunities for employment and incomes. **Growth of entrepreneurship would promote human resource development, which would promote human resource development, which would stamp out insurgency.**

Export operations in the North Eastern region, barring tea have been virtually non-existent. The need for a **Nodal Agency** for catalysing the export effort of the North Eastern region has been expressed by the Federation of Industries of North-Eastern region (FINER). The services of the Federation can be effectively utilized in the establishment of a "Trade Development Authority (TDA) for North Eastern region" with a mandate to chart out a programme of action for enhancing Border Trade and Joint product ventures and trade related investment ventures with Bangladesh and Myanmar. **"Export-Development Wing"** may be created under the aegis of the North-Eastern Council (NEC) with considerable background of export-related functions.

Export presupposes the existence of viable supply base, which is also well organized. In the absence of an industrial base, barring Assam to some extent, supplies

for export have to emanate from the other major sectors viz. Agri/Horticulture, Minerals, Forests & Handlooms/Handicrafts. However, the supply base in each of these sectors remains more or less disorganized for a variety of reasons, such as lack of warehouses & cold storage (agri-horticulture), slow pace of exploitation (minerals), lack of commercial production (handlooms and handicrafts). **The State Governments together, have to encourage private enterprise to commit investments for strengthening infrastructure and production by offering attractive incentive and facilities and tax concessions.** There is need for a **unified marketing organization** preferably to be identified in the private sector to take care of the marketing of various products other than the agricultural items.

The geo-climatic condition of the States is congenial for rearing of silk worms such as Eri, Mulberry, Oak Tasar and Muga. The Government should promote all these 4(four) varieties of silk worms in the States. Sericulture Demonstration Farms as well as Spinning units have been set up in the region. However, production of raw silk and reeling facilities can be further expanded with private investment in this sector.

In order to understand the process of industrialization in North East may take, we have to look at the social and demographic profiles of the region to get some idea about its potential comparative advantage. It has been discussed in various sections of chapter II. Further; the following table in Box 1 has been compiled with this purpose in mind. We have looked at the seven North East states in the context of human development because in the determination of comparative advantage in the North-Eastern states these are of paramount importance.

BOX 1

HUMAN DEVELOPMENT

	Year	Nagaland	Assam	Manipur	Meghalaya	Tripura	Mizoram	Arunachal	All India Average
Annual Population Growth Rate	1981-91	56.86	23.58	28.56	31.8	33.69	38.98	35.86	23.56
Crude Birth Rate	1992-93	31.3	30.4	24.4	31.9	23.1	20.8	34.6	28.7
Crude Death Rate	1991-92	1.9	11.3	5.8	6.2	11.8	3.4	8.2	9.7
Total Fertility Rate	1992-93	3.26	3.53	2.76	3.73	2.67	2.3	4.25	3.39
Population (Crore)	1991	0.12	2.24	0.18	0.18	0.28	0.07	0.09	84.63
Rural Pop. as a % of total	1991	87.2	88.9	72.3	81.3	84.7	53.8	87.8	74.3
Female To Male Ratio	1991	993	947	974	986	967	969	982	945
Female Literacy Rate (+7)	1991	55	43	48	45	50	79	30	39
Male Literacy Rate (+7)	1991	68	62	72	53	71	86	51	64
Literacy Rate (+7)		61.5	52.5	60	49	60.5	82.5	40.5	51.5
Under Five Mortality Rate	1992-93	20.7	142.2	61.7	86.9	104.6	29.3	72	109.3
Population per hospital bed	as on 1.1.1993	1235		1223	995	1655	564		1419
Pupil Teacher Ratio (Primary School)	1994-95	20	39	24	40	31	23	40	47
FEMALE WORK PARTICIPATION	1991	37.96	21.61	38.96	34.93	13.76	43.52	37.49	22.25
Per Capita Income (Rs. at constant prices)	1991	5498	4281	3976	4376	3370	4474	5397	6328
People below poverty line (%)	1987-88	22.7	22.6		22.7	22.7			29.2

Source ---- Document of the United Nations Development Programme June 1997, New Delhi.

Several important aspects of the region come out very clearly from the table. First, **population growth rate in Nagaland, Meghalaya, Mizoram, Tripura and Arunachal Pradesh is very high, compare to all India average.** The sex ratio (female to male ratio) in NE is greater than the all India average, along with a very low death rate

yields a very high growth rate of population. Thus, with a fast growing population the region is endowed with a fast growing potential market, which can absorb manufactured products. **Secondly, the literacy rate is much above the Indian average.** The table also shows that the pupil teacher ratio is the high in Assam, Arunachal Pradesh and Meghalaya which shows that further rapid improvement in the literacy rate is far more likely in these states. This gives us one very good basis for finding comparative advantage in skill intensive industries in the North East. **Finally, female participation in the work force is very high in all the North East states and above the national average. Since there is wage differentiation between a male and a female worker with the latter getting the lower wage, it is undoubtedly true that the average wage payment per worker (male and female combined) will be less in North East than in most other states in India. Thus, North East region is likely to have a comparative advantage in skill intensive industries and a competitive edge in female labour intensive occupations.**

The development in transport (road, airports, railheads etc.) is crucial for greater access to the market. It should produce the product that has demand in the world market. The exporting units and industries would efficiently use the local resources. The limitation can be overcome through trade by transforming to manufacturing products. **More fabrication is needed to produce the final products that will effectively reduce the transport cost.** Like the region produces high quality jute and it exports raw jute to other markets where the country has its monopoly power. Now, to add value, it should produce and sell jute bags instead of raw jute to fetch higher revenues. **The list of goods being traded and the factor endowment (mainly skilled labour) of the North East suggest the possibility of setting up manufacturing or value-adding units** in the North East to produce medicinal products, rubber goods, bicycles, software, farm sectors and so on which could be exported. This would require the development of industrial area. There is a huge scope for setting up export-oriented food processing industries in the region that can be utilized to boost up the export of fruits from this region which has a global market. **The North East has monopoly power in wood based products. Instead of raw woods, it should start to establish wood based industries.** It is locked up in a state of unemployment. The setting up of such

manufacturing units to tap the local resources will also generate additional employment opportunities in the region.

The opening up of border trade with the neighboring countries and easy access to south and south-east Asian markets, the States can provide an ideal base for setting up industries in the pharmaceutical, petrochemical, consumer industries sectors. Exemption of Excise duties and Income tax also makes it an attractive destination for industries having a high incidence of such taxes.

It is essential to chalk out a detailed strategy for coordinated development of economically viable industries, which would use appropriate technology, improve productivity and enhance income generation without disturbing ecological balance. Due to higher transportation costs in these areas, industries, which reduce weight and volume, but add value and increase shelf life of the locally available raw materials, will be advantageous. Large and medium industries may not generally be considered suitable except under exceptionally favorable circumstances. **The industries should tap the local English-speaking people and train them to turn them to manufacturing units.**

Tourism can be organized as an industry, with due care taken to avoid exploitative use of scarce local resources, especially water and fuel-wood, so that ecology of the hills is preserved and benefits are reaped by the local population of the area. The states have enormous potential for non-farm sector enterprise, designed around its rich natural & cultural heritage, and traditional knowledge & skills - for instance handicrafts, food processing. Given their attraction as tourism destinations, tourism development is also inevitable and it is imperative that this is used for the benefit of rural host communities, directing it towards sustainable development of underdeveloped regions. Rural tourism in areas like Arunachal Pradesh, Nagaland, Sikkim offers several potential advantages for it permits the commercial utilization of indigenous environmental & cultural resources, and can be combined with sectors like ethnic foods & handicrafts. It is relatively labour intensive, concentrated in small enterprises, does not require extensive infrastructure build up, and can produce higher returns than traditional products. The establishment of such small non-farm enterprise that is rural and community-based will improve the economic and employment status of the indigenous population while preserving its heritage.

The north east regions had failed to attract any private investment. So it is the task of the state governments to draft a new industrial policy. **The policy should envisage identification of thrust areas for attracting investments, keeping in view the comparative advantages of the State and its close proximity to South-east Asia's booming economies. If all barriers were removed and better facilities provided for promoting international trade in the region comprising eight states including Sikkim, India could not only earn plenty of foreign exchange but also improve the economic condition of the people in this part of the country.**

The 40-km limit on either side of the border should be abolished and the entire northeastern region should be declared eligible for international trade with its neighboring countries. To promote international commerce, communication and infrastructural facilities, banking and insurance systems should be improved and trade fairs be organized on regular basis in the region.

Private investment is not worthwhile due to insecurity in the region. Then state would provide the security. The state would provide the law and order situation and infrastructure to facilitate export and growth. So it is not only the limitation of the market, but also the insurgency that make the business unprofitable in the region. Hence, state has important role to play. The state has to take the responsibility to protect and promote the interests of the people. Economic development to a large extent would tackle many socio-economic problems. In an atmosphere of peace, safety and security private enterprise would flourish and come forward to set up industries and provide job opportunities. Growth of industries would create trade avenues including export-marketing opportunities.

IV.3. Identify the pattern of comparative advantage

The major problem is to identify the products in which the region has comparative advantage. We find a way by looking at (1) Region's trade with other states of India and (2) Region's trade with other countries. For this, we see India's border trade with neighbor

countries and the region's trade with the rest of India to pin point the location of the products that are mostly traded through the region. In the previous chapter (section III.1), we identify the products exported to South East Asia by looking at India's exports to its major trade partners in that region, namely, Thailand, Singapore, Malaysia and Indonesia. But none of the products are produced in the NE region. Similarly, we look at India's border trade with the neighbor countries like Bangladesh and Burma etc. It's clear that India is engaged in trade with its neighbor countries in large amount through Border States. Due to the lack of data, we have to stick to few items. **However, these do not necessarily show any clear picture about the region's comparative advantage as the origin of these products remains unidentified. The items like steel, treated steel, Bars and Rods, Tyres, Wheat, Electronic and Electrical goods are essentially not produced in the North East region due to industrial backwardness and lack of capital.** Now, setting up ancillary industries can develop the region through **relocation of production of these items**. To help the relocation process, **border trade should be legalized and improvement in transport and marketing net work is crucial for further development.** The items like Malted milks, Barytes Powder, Medicine, Cosmetics, Wood (Teak), Jute sacking bags, electrical and electronic goods etc. can be supplied by the region. This way, it would help the region to **identify its pattern of comparative advantage to experience higher growth through trade.**

India is engaged in border trade with outside countries like Bangladesh, Burma, China etc. through this region and **exports so many products that are not actually produced in the North Eastern region. Although we know India has comparative advantage in these products, but that never helps to know the region's cost advantage.** Like Bicycle is an important item in the regions export basket. But the production unit is in Ludhiana. Hence the location of the product remains unidentified. **To understand what kind of linkages these states have with the rest of India and abroad, we have to look at the production and consumption level of the eight states and the other states of India.** This is reported in table 1-4 at the end of the chapter.

From the tables, we identify those products in which the region has deficit and surplus. The NE region has surplus production in products like Cereals, Cereal substitutes, Pulses and Products, Edible Oil, Clothing and Electricity. Hence, the region

supplies these products to rest of India and abroad. The deficits in production of items like Milk, Fish, Pan, Tobacco & Intoxication force the region to import these items from outside. Though our study covers only few items, but we can have some idea on the pattern of region's comparative advantage.

The legalized trade will not only boost up exports but also the fetch higher growth for the entire North East region as it would expand the market. The market limitation can be overcome through an effective Inter-modal system of transportation involving road, rail, waterways & air.

Table 1 Dependence on different items in Assam and Manipur (N-E States)

(Rs. Million)

	Items	Assam			Manipur		
		Production	Consumption	Difference	Production	Consumption	Difference
1	Cereals	2352079	26268.02	2325811	237767.6	2668.108	235099.5
2	Gram	896	222.0314	673.9686	0	1.17012	-1.17012
3	Cereal Substitute	4266.5	5.693112	4260.807	2067	0.234024	2066.766
4	Pulses & Products	39900	3031.582	36868.42	0	164.7529	-164.753
5	Edible Oil	111780	4867.611	106912.4	1296	231.9178	1064.082
6	Pan, Tobacco & Intoxication	2160	5357.218	-3197.22	0	293.4661	-293.466
7	Clothing (cotton)	720	5966.381	-5246.38	90	128.2452	-38.2452
8	Milk	3682.88	7366.887	-3684.01	320.96	131.0534	189.9066
9	Fish	174987.6	2081652	-1906664	1.08	1.44	-0.36
10	Electricity 1996-97(Crore kwt.)	192.1	192.1	0	0.3	28.6	-28.3

Table 2 Dependence on different items in Meghalaya and Mizoram (N-E States)**(Rs. Million)**

	Items	Meghalaya			Mizoram		
		Production	Consumption	Difference	Production	Consumption	Difference
1	Cereals	73346	1901.443	71444.56	57246.4	739.1993	56507.2
2	Gram	192	1.3752	190.6248	0	3.228336	-3.22834
3	Cereal Substitute	5962.5	2.7504	5959.75	3763	0.986436	3762.014
4	Pulses & Products	1750	185.8812	1564.119	7560	102.3203	7457.68
5	Edible Oil	3240	454.962	2785.038	1053	150.566	902.434
6	Pan, Tobacco & Intoxication	900	945.9084	-45.9084	1620	248.4922	1371.508
7	Clothing (cotton)	4860	566.124	4293.876	1890	289.8328	1600.167
8	Milk	277.44	651.3864	-373.946	46.24	247.4161	-201.176
9	Fish	0.12	2.28	-2.16	0	3	-3
10	Electricity 1996-97(Crore kwt.)	54.1	29.1	25	1.4	10.7	-9.3

Table 3 Dependence on different items in Nagaland and Tripura (N-E States)**(Rs. Million)**

	Items	Nagaland			Tripura		
		Production	Consumption	Difference	Production	Consumption	Difference
1	Cereals	111426	1713.543	109712.5	297667.5	3284.756	294382.7
2	Gram	1024	2.862	1021.138	256	0	256
3	Cereal Substitute	10070	0	10070	450.5	3.861528	446.6385
4	Pulses & Products	7000	157.41	6842.59	4550	329.283	4220.717
5	Edible Oil	5427	212.265	5214.735	5994	648.3857	5345.614
6	Pan, Tobacco & Intoxication	0	435.501	-435.501	180	698.9366	-518.937
7	Clothing (cotton)	90	181.578	-91.578	1440	858.6634	581.3366
8	Milk	212.16	355.047	-142.887	195.84	978.3708	-782.531
9	Fish	1.8	5.64	-3.84	0	1.32	-1.32
10	Electricity 1996-97(Crore kwt.)	0.3	12.9	-12.6	19.1	27	-7.9

Table 4 Dependence on different items in Arunachal Pradesh (N-E States)**(Rs. Million)**

	Arunachal Pradesh			
	Items	Production	Consumption	Difference
1	Cereals	88452.5	914.774	87537.73
2	Gram	0	19.56204	-19.562
3	Cereal Substitute	18073	0	18073
4	Pulses & Products	3710	164.6748	3545.325
5	Edible Oil	16200	239.8284	15960.17
6	Pan, Tobacco & Intoxication	0	261.9324	-261.932
7	Clothing (cotton)	0	346.1486	-346.149
8	Milk	103.36	408.3714	-305.011
9	Fish	0	1.08	-1.08
10	Electricity 1996- 97(Crore kwt.)	6.1	8.6	-2.5

Chapter V

AN OVERVIEW AND POLICY IMPLICATIONS

In chapters 2 to 4 we have made some preliminary investigations into the scope of trade oriented industrialization possibilities for the NE states. The foundational propositions on the trade-oriented industrialization strategy for development of the NE states are based on the recognition of the fundamental constraint that posed by the limited size of the market in the North East region for rapid growth and industrialization. Experiences from different countries all over the world show a very close relationship between the rate of economic growth and the rate of industrialization. Countries, which are poor, are also industrially very backward. The long and continuing political unrest and insurgencies in various NE states have made policy makers to believe that the root cause of the malice is economic underdevelopment and hence the solution lies in rapid economic development. The idea of trade-oriented strategy of development is the result of this perspective.

The policy perspective hinges on the assumption that the NE states could overcome the limitations of market size through trade where trade is seen as both internal and external. Internal trade means trade possibilities with the other states of the Indian economy while external trade implies trade possibilities with the neighboring countries. The examination of this requires an understanding of the existing trade linkages of the region with the other Indian states and also with the neighboring countries. We have through various indirect methods tried to find the existing patterns of trade of the NE region with the outside world. We looked at the North East as a viable location of product sourcing as well as a viable trade route. In order to make the North East region a viable location for production of goods that India can export we need to know about the products in the production of which the N E region has comparative advantages. We

know from the text book theories that the comparative advantage of a region is determined by its resource endowments. The second chapter deals with that.

The third chapter deals with the existing trade linkages taking the North East as a source of production for trade and also as a trade route. It establishes certain commodities in which the North East can develop its comparative advantage. The scope for the exploitation of such potentialities depends on a number of factors such as (i) investment inducement, (ii) infrastructure development, (iii) transport net working and (iv) government initiative. The fourth chapter examines these in great detail.

Thus we conclude that if the right initiative are taken by the government for inducing private investment in to the region, the North East can flourish as an important location of production as well as an important trade route for India particularly in the context of India's trade with the South and the South East countries. Once such an industrialization process begins it will gather momentum in no time.

APPENDIX I

Table 1.1: Population of North Eastern States

	80-81	81-82	82-83	8384	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	622000	643000	663000	684000	705000	727000	750000	774000	799000	826000	853000	877000	899000	921000	944000	967000	992000	1017000
ASSM	17892800	18253100	18623600	19005200	19400000	19810300	20238600	20687400	21159600	21658300	22186900	22705400	23210600	23721300	24231500	24735300	25231700	25721200
MAN	1405900	1443300	1482300	1522200	1562200	1603200	1644800	1687200	1730200	1773900	1818400	1862000	1905600	1950200	1995900	2042600	2091400	2142000
MEGH	1320000	1358000	1397000	1437000	1477000	1518000	1558000	1598000	1646000	1720000	1754000	1808000	1856000	1910000	1965000	2022000	2080000	2140000
MEZ	482500	506400	528100	549300	570400	591700	613300	635000	645900	679000	683000	702400	724500	747300	771000	795300	843900	914500
NAG	774900	794900	829200	863300	897600	932800	968800	1005500	1043000	1081300	1205000	1235000	1265000	1325000	1395000	1415000	1495000	1575000
TRP	2024100	2086900	2146600	2208500	2272900	2339700	2409400	2482100	2558200	2637900	2721400	2794300	2859100	2925400	2993200	3062600	3135100	3210500
total	24522200	25085600	25669800	26269500	26885100	27522700	28182900	28869200	29581900	30376400	31221700	31984100	32719800	33500200	34295600	35039800	35869100	36720200

Table 1.2: Population Shares of Different north-Eastern Sates

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	0.025365	0.025632	0.025828	0.026038	0.026223	0.026415	0.026612	0.026811	0.02701	0.027192	0.027321	0.02742	0.027476	0.027492	0.027525	0.027597	0.027656	0.027696
ASSM	0.729657	0.727633	0.725506	0.72347	0.721589	0.71978	0.718116	0.716591	0.715289	0.712998	0.710624	0.709896	0.709375	0.708094	0.706548	0.70592	0.703438	0.700465
MAN	0.057332	0.057535	0.057745	0.057946	0.058107	0.05825	0.058362	0.058443	0.058488	0.058397	0.058242	0.058216	0.05824	0.058215	0.058197	0.058294	0.058306	0.058333
MEGH	0.053829	0.054135	0.054422	0.054702	0.054937	0.055154	0.055282	0.055353	0.055642	0.056623	0.056179	0.056528	0.056724	0.057015	0.057296	0.057706	0.057989	0.058279
MEZ	0.019676	0.020187	0.020573	0.02091	0.021216	0.021499	0.021761	0.021996	0.021834	0.022353	0.021876	0.021961	0.022143	0.022307	0.022481	0.022697	0.023527	0.024905
NAG	0.0316	0.031688	0.032303	0.032863	0.033387	0.033892	0.034375	0.03483	0.035258	0.035597	0.038595	0.038613	0.038662	0.039552	0.040676	0.040383	0.041679	0.042892
TRP	0.082542	0.083191	0.083624	0.084071	0.084541	0.08501	0.085492	0.085977	0.086479	0.08684	0.087164	0.087365	0.087381	0.087325	0.087277	0.087403	0.087404	0.087431

Table 1.3 : Income from Agriculture Sector in Different North-Eastern States(Rs. Lakhs)

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	3606	3991	4261	4881	4823	5887	6020	7273	7936	7702	8110	9952	9653	11044	9237	10058	7878	9784
ASSM	101606	100896	108278	114793	107716	116167	110974	119760	118202	128508	130542	134350	135609	138053	139499	141791	147227	148838
MAN	9090	9286	8971	9557	9807	10131	9787	10167	9992	9583	10405	10771	10631	11493	12463	11708	12067	12832
MEGH	6781	6758	7054	6988	7326	7603	7115	7613	6227	7641	8178	8244	6514	7144	7153	8480	8995	
MEZ	1516	1454.30	1372.30	1421.46	1661.34	2723.34	3753.37	4092.33	3288.03	3734.56	2735.47	4335.88	4218.02	4940.94	4560.74	5276.11	5965.83	6867
NAG	3022	3226	3517	3702	4190	4173	3729	3790	3852	4122	4411	4720	5139	5192				
TRP	12122	11443	12911	12172	12312	12243	12937	14541	15458	16079	17014	16465	15726	16972	15153	16732	17866	19077
Total	137743	137054	146364	153514	147835	158927	154315	167236	164955	177369	181395	188837	187490	194838	1880657	194045	199998	197398

Table 1.4 : Income from Infrastructure in Different North-Eastern States (Rs. Lakhs)

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98
APR	1569	1586	1967	1348	2078	2210	1957	2296	2122	3041	3735	3966	3691	5503	6086	9315	9645	9880
ASSM	17554	21084	19561	20959	23391	23232	21637	22644	23530	25190	26006	27487	28195	29418	36418	39288	40503	41552
MAN	902	1139	1216	1340	1559	1703	1808	2246	2342	2531	2824	3211	4343	4145	4832	4842	5097	5421
MEGH	2454	2383	2547	2834	2759	2693	2752	2889	3277	3115	3601	4341	4557	4932	4369	5241	6520	
MEZ	1005	810	674	766	799	1142	753	994	1958	1653	1746	1801	1784	1263	1702	2402	2567	2796
NAG	1441	1579	1930	2135	1840	2415	3654	5458	6236	5643	5604	5628	8732	8694				
TRP	1299	1240	1183	1224	809	805	888	1467	1387	1801	2576	2336	2453	2504	3756	4925	5171	5424
Total	26224	29821	29078	30606	33235	34200	33449	37994	40852	42974	46092	48770	53755	56459	57163	66013	69503	65073

Table 1.5 : Income from Manufacturing Sector in Different North-Eastern States (Rs. Lakhs)

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	636	685	740	800	861	934	1010	1095	1188	1288	1397	1516	1648	1990	2041	2406	2643	2902
ASSM	1499 7	18042	18177	19389	21959	21249	19972	21285	21005	21809	22175	22262	20973	20783	21282	20942	22580	21384
MAN	919	1007	1033	1104	1191	1309	1431	1502	1853	1723	1895	1868	1940	1031	1152	1371	1554	1652
MEGH	579	759	613	547	574	709	749	878	799	1037	1262	1418	1506	1497	1494	1534	1594	
MEZ	157	187	171	170	164	62	193	238	495	373.	331	625	727	789	695	624	509	634
NAG	226	237	407	443	432	267	270	292	314	338	1908	1921	2205	2270				
TRP	1214	1271	1415	1453	1516	1321	1481	1627	1243	1179	1480	1928	1934	2039	2202	2242	2684	3248
Total	18728	22188.47	22556.37	23906.95	26697.38	25851.83	25106.03	26917.28	26897.53	27747.69	30448.07	31538.8	30933.26	30399.95	28866.06	29119.1	31564.97	29820

Table 1.6 : Income from Primary Sector in Different North-Eastern States (Rs. Lakhs)

	80-81	81-82	82-83	8384	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	1013	1753	1177	1859	2071	2266	2679	1602	2322	1856	2564	2622	3672	3333	4186	3913	3814	3901
ASSM	8863	21827	22971	22148	21681	23089	23482	22300	22967	23829	21572	21560	21241	22668	24540	24246	26246	26912
MAN	710	781	864	1111	1100	1083	1146	1338	1460	1870	1618	2202	2192	2143	2215	2717	3382	3596
MEGH	742	1026	717	775	879	802	887	1022	1198	1653	2505	2352	1961	1911	2415	2026	2112	
MEZ	495	507.6906	521.5872	669.556	838.1316	796.1988	633.2115	1531.517	739.346	678.3035	609.6228	764.3608	538.8005	442.4826	171.6864	657.0973	567.9467	608
NAG	406	1120	1167	1369	1388	1467	1607	1821	2035	2275	2543	2843	2224	2361				
TRP	2667	2511	2976	1977	2249	2522	2012	2439	2205	2335	2593	2389	2682	2676	2588	2642	2901	3187
Total	14896	29525.69	30393.59	29908.56	30206.13	32025.2	32446.21	32053.52	32926.35	34496.3	34004.62	34732.36	34510.8	35534.48	36115.69	36201.1	39022.95	38204

Table 1.7 : Income from Services Sector in Different North-Eastern States(Rs. Lakhs)

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	2946	3238	3488	3567	3821	4107	4800	5264	5398	5631	7305	8368	8443	9145	9269	9770	10185	11439
ASSM	86807	93974	98644	102043	105996	115442	114675	117676	120288	129234	142260	152002	155291	164470	162356	169988	182445	19153 2
MAN	8335	8890	9361	10185	10600	11391	11953	12913	13879	14227	14880	16233	16833	17880	18922	20081	21306	22655
MEGH	7406	7802	8083	8313	8921	9625	10264	11323	12455	14009	14853	15534	15469	16628	17442	19267	18982	
MEZ	3045	3375.525	3996.487	4318.56	4747.303	5450.901	5542.278	6406.671	6634.319	6709.496	6968.919	7888.324	8864.915	10029.98	10543.22	11668.46	20327.29	23143
NAG	5452	6379	7239	6982	7239	7100	7866	7814	8245	9102	9344	9667	10025	10240				
TRP	9143	9587	10260	11027	11792	12132	13366	14618	18675	20159	21023	22782	24826	28726	33542	38099	40256	42539
Total	123134	133245.5	141071.5	146435.6	153116.3	165247.9	168466.3	176014.7	185574.3	199071.5	216633.9	232474.3	239751.9	257119	252074.2	268873.5	293501.3	291308

Table 1.8 : Income from SDP in Different North-Eastern States (Rs. Lakhs)

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	9770	11253	11633	12455	13654	15404	16466	17530	18966	19518	23111	26424	27107	31015	30819	35462	34165	37906
ASSM	22982 7	255823	267631	279332	280743	299179	290740	303665	305992	328570	342555	357661	361309	375392	384095	396255	419001	430218
MAN	19956	21103	21445	23297	24257	25617	26125	28166	29526	29934	31622	34285	35939	36692	39584	40719	43406	46156
MEG H	17962	18728	19014	19457	20459	21432	21767	23725	23956	27455	30399	31889	30007	32112	32873	36548	38203	
MEZ	6218	6335.579	6736.186	7346.693	8210.958	10175.27	10875.78	13263.02	13116.19	13149.44	12391.16	15416	16133.45	17467.14	17673.3	20628.75	29938.1	34048
NAG	10547	12541	14260	14631	15089	15422	17126	19175	20682	21480	23810	24779	28325	28757				
TRP	26445	26052	28745	27853	28678	29023	30684	34692	38968	41553	44686	45900	47621	52917	57241	64640	68878	73475
Total	320725	351835.6	369464.2	384371.7	391091	416252.3	413783.8	440216	451206.2	481659.4	508574.2	536354	546441.5	574352.1	562285.3	594252.8	633591.1	621803

Table 1.9 : Income from Unregisterd in Different North-Eastern States (Rs. Lakhs)

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97-98
APR	636	685	740	800	861	934	1010	1095	1188	1288	1397	1516	1648	1990	2041	2406	2643	2902
ASSM	544 3	5886	5608	5565	7223	6135	5092	5698	5235	5601	5658	5145	5189	5380	5818	5630	6662	6072
MAN	859	941	966	1031	1112	1222	1336	1436	1564	1699	1842	1825	1837	963	1088	1257	1421	1511
MEGH	421	550	394	395	417	480	479	557	508	624	791	928	884	1062	1044	1078	1126	
MEZ	125	161.041	133.8615	158.0019	164.773	23.35432	259.4541	166.9562	453.1729	448.3448	440.8388	680.3306	786.6803	868.7718	853.5159	771.5448	674.1456	695
NAG	226	237	407	443	432	267	270	292	314	338	363	390	462	481	489	512	534	567
TRP	118 7	1272	1291	1402	1178	1416	1476	1602	1384	1646	2134	2400	2239	2099	3420	4378	4651	4941
Total	8897	9732.041	9539.862	9794.002	11387.77	10477.35	9922.454	10846.96	10646.17	11644.34	12625.84	12884.33	13045.68	12843.77	14753.52	16032.54	17711.15	16688

Table 1.10 : Income from Registered Sector in Different North-Eastern States (Rs. Lakhs)

	80-81	81-82	82-83	83-84	84-85	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94	94-95	95- 96	96- 97	97- 98
APR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASSM	9554	12156	12569	13824	14736	15114	14880	15587	15770	16208	16517	17117	15784	15403	15464	15312	15918	15312
MAN	60	66	67	73	79	87	95	66	289	24	53	43	103	68	64	114	133	141
MEGH	158	209	219	152	157	229	270	321	291	413	471	490	622	435	450	456	468	
MEZ	32	31.34144	34.80956	39.98998	45.47782	42.01571	46.15303	125.7436	140.0113	128.0018	115.2133	170.1891	150.9675	152.4154	118.0959	95.05576	82.47668	80
NAG	-	-	-	-	-	-	-	-	-	-	1545	1531	1743	1789	1890	1965	2111	2200
TRP	990	1014	1040	1063	1073	1111	1139	1115	786	677	712	1019	960	984	1365	1084	1437	1905
Total	10794	13476.34	13929.81	15151.99	16090.48	16583.02	16430.15	17214.74	17276.01	17450	19413.21	20370.19	19362.97	18831.42	19351.1	19026.06	20149.48	19638

Table 1.11: Total Income of North-Eastern States under different sectors (Rs. Lakhs)

Agriculture	137743	137054.3	146364.3	153514.5	147835.3	158927.3	154315.4	167236.3	164955	177369.6	181395.5	188837.9	187490	194838.9	188065.7	194045.1	199998.8	197398
infrastructure	26224	29821.58	29078.43	30606.16	33235.8	34200.01	33449.88	37994.22	40852.96	42974.38	46092.08	48770.62	53755.45	56459.78	57163.59	66013.97	69503.06	65073
Manufacturing	18728	22188.47	22556.37	23906.95	26697.38	25851.83	25106.03	26917.28	26897.53	27747.69	30448.07	31538.8	30933.26	30399.95	28866.06	29119.1	31564.97	29820
Primary	14896	29525.69	30393.59	29908.56	30206.13	32025.2	32446.21	32053.52	32926.35	34496.3	34004.62	34732.36	34510.8	35534.48	36115.69	36201.1	39022.95	38204
services	123134	133245.5	141071.5	146435.6	153116.3	165247.9	168466.3	176014.7	185574.3	199071.5	216633.9	232474.3	239751.9	257119	252074.2	268873.5	293501.3	291308
Unregistered	8897	9732.041	9539.862	9794.002	11387.77	10477.35	9922.454	10846.96	10646.17	11644.34	12625.84	12884.33	13045.68	12843.77	14753.52	16032.54	17711.15	16688
Registered	10794	13476.34	13929.81	15151.99	16090.48	16583.02	16430.15	17214.74	17276.01	17450	19413.21	20370.19	19362.97	18831.42	19351.1	19026.06	20149.48	19638
sPopulation	24522200	25085600	25669800	26269500	26885100	27522700	28182900	28869200	29581900	30376400	31221700	31984100	32719800	33500200	32900600	33624800	34374100	33005200
SDP	320725	351835.6	369464.2	384371.7	391091	416252.3	413783.8	440216	451206.2	481659.4	508574.2	536354	546441.5	574352.1	562285.3	594252.8	633591.1	621803

APPENDIX II

Table 2.1: State-wise Export to Bangladesh 1997-98 (up to August'97)

S. No.	Commodity	Meghalaya		Assam		Tripura	
		Quantity	Value (Rs.)	Quantity	Value (Rs.)	Quantity	Value (Rs.)
1	Onion						
2	Citrus Fruits	3168 kg	1822718	900286 No.	761832		
3	Ginger	148416 MT	1064378	9604 MT	7492432	33 MT	153153
4	Rice						
5	Coal	128972 MT	202415232	6784 MT	11440521		
6	Lime Stone	118801MT	24863442				
7	Oranges			3000 No.	2999		
8	Grapes			130 kg	3750		
9	Dry Chilly						
10	Garlic			7 MT	32288		
11	Pears	280486kg	520972				
12	Stone Boulders			160322 MT	2883794		
13	Apples						
14	Total (Rs.)		230686742		22617674		153153

Source: Industrial Development and Export Potential of the North-Eastern States, Vol. III, I.I.F.T., Report, New Delhi.

Table 2.2: State-wise Export to Bangladesh 1996-97

S. No.	Commodity	Meghalaya		Assam		Tripura	
		Quantity	Value (Rs.)	Quantity	Value (Rs.)	Quantity	Value (Rs.)
1	Onion	105013 kg	698339	9865593kg	4208918		
2	Citrus Fruits	2690420 No.	193733	232077 Nos.	2052036		
3	Ginger	481 MT	1603772	2218546 MT	33917755		
4	Rice			1088 MT	43498539	20 MT	
5	Coal	208246399 MT	640004377	85016 MT	141871557		
6	Lime Stone	304434 MT	58357042				
7	Oranges	297141 kg	2026736	805782 kg	8563442		
8	Grapes			7977 kg	194681	2825 MT	
9	Dry Chilly			42 MT	1469810		
10	Garlic			24 MT	241607		
11	Pears	131700 Nos.	32266	1299000 Nos.	38970		
12	Stone Boulders	894 MT	3022527	1666 MT	2931583		
13	Apples			2400 kg	36000	134 MT	199185
14	Total (Rs.)		705938792		299024898		456190

Source: Industrial Development and Export Potential of the North-Eastern States, Vol. III, I.I.F.T., Report, New Delhi.

Table 2.3: State-wise Export to Bangladesh 1995-96

S. No.	Commodity	Meghalaya		Assam		Tripura	
		Quantity	Value (Rs.)	Quantity	Value (Rs.)	Quantity	Value (Rs.)
1	Lime Stone	295756 MT	39217611				
2	Coal	3071377 MT	479456745	20047874 MT	284742054		
3	Oranges	2822930 kg	9085658	169151 kg	13129996		
4	Ginger	5636443 kg	58762790	6088188 kg	60041073		
5	Onion	4048320 kg	30847251	559197218 kg	60780948		
6	Rice	9389851 kg	78473046	81323262 kg	472885903	80000 kg	648000
7	Citrus Fruits	21861 Nos.	423325	2288842 Nos.	1857957		
8	Stone Boulders	3006 MT	1103723574				
9	Garlic	25411 kg	3739714	4125100 kg	413442	15000 kg	8963
10	Dry Chilly			14929935 kg	25690734	21 MT	867526
11	Apples	2141 kg	171281	795025 kg	127034	1078 kg	18564
12	Paper, cloth	17000 kg	453012			550 MT	209330
13	Grapes			105819 kg	392931	12278 kg	62625
14	Total (Rs.)		1843571618		920061532		1815008

Source: Industrial Development and Export Potential of the North-Eastern States, Vol. III, I.I.F.T., Report, New Delhi.

APPENDIX III

Table 3.1: Per capita monthly consumption in North-Eastern States (1988-89)

S. No.	Items	Expenditure (Rs.)							All India
		Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	
1	Cereals	46.55	65.69	44.2	32.77	51.77	29.58	58.03	33.64
2	Gram	0.37	0.33	0.13	0.2	0.11	0.31	0.18	0.52
3	Cereal Substitute	0.01	0.02		0.03			0.14	0.16
4	Pulses & Products	5.8	7	4.84	9.05	6.37	5.57	5.92	7.13
5	Milk & Products	17.66	3.86	19.7	15.38	16.98	22.57	25.98	23.32
6	Edible Oil	9.04	5.62	9.42	9.72	11.65	11.64	12.96	11.95
7	Meat, Egg, Fish	18.52	15.13	31.74	30.58	43.83	17.12	43.9	9.25
8	Vegitables	13.92	8.93	14.94	27.16	19.61	16.62	17.86	11.62
9	Fruits & Nuts	3.7	1.3	3.25	3.47	5.54	2.09	5.87	5.46
10	Sugar	4.6	2.42	5.35	7.39	5.24	3.88	5.09	5.86
11	Salt	0.38	0.54	0.43	0.92	0.68	0.29	0.46	0.28
12	Spices	3.13	3.15	2.53	2.89	4.93	2.67	4.51	4.81
13	Beneverages etc.	14.84	3.51	12.68	8.11	21.78	8.53	11.89	14.99
14	Pan, Tobacco & Intoxication	8.89	7.91	15.17	16.98	26.11	6.47	13.7	6.16
15	Fuel & Light	15.41	13.76	17.04	31.41	19.91	18.25	20.02	15.26
16	Clothing	12.52	8.18	13.82	9.17	36.62	5.69	8.82	14.73
17	Footwear	1.82	6.84	5.99	13.36	7.2	5.43	2.54	2.54
18	Misc. Goods & Services	39.6	16.24	49.37	27.32	84.2	57.26	46.76	49.53
19	Durable Goods	3	1.31	3.25	2.38	7.43	0.93	3.23	8.81

Table 3.2: Per capita consumption for a period of 30 days in North-Eastern States (1993-94)

Expenditure (Rs.)										
S. No.	Items	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Arunachal Pradesh	All India
1	Cereals	92.28	114.01	82.96	82.43	107.77	72.34	93.57	82.77	64.27
2	Gram	0.78	0.05	0.06	0.36	0.18	0.79	0	1.77	0.84
3	Cereal Substitute	0.02	0.01	0.12	0.11	0	0	0.11	0	0.3
4	Pulses & Products	10.65	7.04	8.11	11.41	9.9	10.52	9.38	14.9	13.92
5	Milk & Products	25.88	5.6	28.42	27.59	22.33	44.49	27.87	36.95	44.87
6	Edible Oil	17.1	9.91	19.85	16.79	13.35	20	18.47	21.7	20.09
7	Meat, Egg, Fish	37.81	24.44	55.4	62.24	57.07	27.61	51.77	53.7	15.52
8	Vegitables	29.46	17.34	35.8	51.99	38.46	32.23	33.65	41.49	25
9	Fruits									
	Fresh	9.62	2.63	6.3	6.87	7.47	7.48	8.9	8.54	10.18
	Dry	0.51	0.1	0.16	0.1	0	0.79	0.28	0.62	1.99
10	Sugar	8.27	4.37	8.89	11.77	8.41	7.87	7.04	6.99	10.91
11	Salt	0.85	0.8	0.73	1.76	1.26	0.56	1.07	1.04	0.63
12	Spices	5.47	6.25	6.53	4.96	6.06	6.87	7.08	8.11	8.79
13	Beneverages etc.	34.97	11.38	45.8	19.15	27.86	54.55	19.86	21.94	33.01
14	Pan, Tobacco & Intoxicati on	18.82	12.54	41.27	27.71	27.39	17.44	19.91	23.7	10.74
15	Fuel & Light	26.77	27.03	30.54	55.32	35.93	29.77	33	41.36	30.15
16	Clothing	20.96	5.48	24.7	32.32	11.42	14.51	24.46	31.32	21.43
17	Footwear	4.56	5.43	3.85	16.99	7.76	4.42	6.11	9.56	4.19
18	Misc.	103.29	63.2	127.54	111.75	121.79	162.94	117.53	78.12	126.03

	Goods & Services									
19	Durable Goods	10.5	1.91	3.53	7.91	5.58	3.26	9.87	9.52	15.17

Table 3.3: Production of major items in North-Eastern States(1993-94)

'000 Metric Tons

S. No.	Items	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Arunachal Pradesh	All India
1	Cereals									
	rice	3361.1	346.6	114.2	96.7	180		438.1	144	78972.4
	Wheat	100.8		6.2		1		9.1	8.5	59139.3
	Total	3461.9	346.6	120.4	96.7	181	0	447.2	152.5	138111.7
2	Gram	1.4		0.3		1.6		0.4		4903.8
3	Cereal Substitute									
	Maize	11.6	7.8	20.1	14.2	28		1.7	46.7	9479.5
	Others	4.5		2.4		10			21.5	933.3
	Total	16.1	7.8	22.5	14.2	38	0	1.7	68.2	10412.8
4	Pulses & Products	57		2.5	10.8	10		6.5	5.3	13099.6
5	Edible Oil	138	1.6	4	1.3	6.7		7.4	20	4871.6
6	Milk(million Litres)	677	59	51	8.5	39	31	36	19	60607
7	Fruits									
8	Fresh and Nuts	177.594	5.97	74.203	4.105	2.415	0	30.5	12.899	
9	Sugar	1700								233042
10	Spices									
	Turmeric	5.1		1.8	1.4			2.6	1.1	397.4
	Ginger	1.42		35.91	6.82	3		1.75	14.53	189.44
	Onion	12.7				0.3		0.3		3590.4
	Chillies	8.3	2.8	1.1	2.9	0.4		0.9	1.3	779
	Total	27.52	2.8	38.81	11.12	3.7	0	5.55	16.93	4956.24
11	Fishes	14582.3	0.09	0.01	0	0.15		0	0	10789.9
12	Pan, Tobacco, Intoxicati on	1.2		0.5	0.9			0.1		161.4

13	cotton	0.8	0.1	5.4	2.1	0.1		1.6		10712
14	Electricity (1996-97)									
22	Installed Capacity ('000 kw)	597	12	189	26	6	36	77	40	
	Generated (crore kwh)	133.2	0.2	48.6	1.4	0.3	7.2	25.2	5.8	
	Consumption (crore kwh)	192.1	28.6	29.1	10.7	12.9	9.1	27	8.6	

Table 3.4: Production and Area of Fruit Crops in North-Eastern States (1991-92)

Area: In Hectare
Production : In M.T.

Fruits	P, A	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura	Arunachl Pradesh	All India
Pineapple	P	177594	5970	74203	4105	2415	30500	12899	768513
	A	12129	6450	8502	737	1017	3560	3363	57059
orange	P	45996	5750	40885	15664		36500	8256	938192
	A	4569	1500	7024	5061		7639	4623	
other citrus	P	60996	7950	40885	17575	1863	41850	8773	2821880
	A	8169	2120	7024	5372	1511	12016	5206	
Banana	P	518128	8500	60684	9880	1656	25000	7818	7790030
	A	39490	3300	4848	2394	1166	3594	1650	
Mango	P	4680	400		1285	24	37150	248	8752134
	A	800	180		326	46	4972	303	
Guava	P	38005	1800		453	150	2200	1277	1099530
	A	2870	500		124	248	829	759	9
Litchi	P	11920			2	118	5650	389	243856
	A	3968			1	45	11870	362	
Papaya	P	75058	1450	3698	552	85		1004	805342
	A	4882	310	446	136	5		554	
Jack-fruit	P				707	658	175000	1143	
	A				120	162	6650	699	
Apple	P					185.9		9330	1147743
	A					159.7		5122	
Pears	P				210				
	A				60				
Plum & Peach	P				99	591.5		961	
	A				36	327		430	
Others	P		16920				1710		
	A		6915				1361		

Source: Industrial Development and Export Potential of the North-Eastern States, Vol. III, I.I.F.T., Report, New Delhi.

Table 3.5: Area, Production and Yield of Fruit Nuts (1991-92)

Area: In Hectare
Production : In M.T.

Nuts	P,A	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Sikkim	Tripura	Arunachl Pradesh
Cocunut	P	78.9			15			4.8	
	A	9800			14			10494	
Arecanut	P	70400		5200	80			980	
	A	63100		6100	27			1360	
Cashewnut	P							2450	
	A							8952	
Walnut	P								122
	A								1133

Source: Industrial Development and Export Potential of the North-Estern States, Vol. III, I.I.F.T., Report, New Delhi.

Table 3.6 Dependence on different items in Assam and Manipur (N-E States)

(Rs.Millian)

Items	Assam			Manipur		
	Production	Consumption	Difference	Production	Consumption	Difference
1 Cereals	2352079	26268.02	2325811	237767.6	2668.108	235099.5
2 Gram	896	222.0314	673.9686	0	1.17012	-1.17012
3 Cereal Substitute	4266.5	5.693112	4260.807	2067	0.234024	2066.766
4 Pulses & Products	39900	3031.582	36868.42	0	164.7529	-164.753
5 Edible Oil	111780	4867.611	106912.4	1296	231.9178	1064.082
6 Pan, Tobacco & Intoxication	2160	5357.218	-3197.22	0	293.4661	-293.466
7 Clothing(cotton)	720	5966.381	-5246.38	90	128.2452	-38.2452
8 Milk	3682.88	7366.887	-3684.01	320.96	131.0534	189.9066
9 Fish	174987.6	2081652	-1906664	1.08	1.44	-0.36
10 Electricity 1996-97(Crore kwt)	192.1	192.1	0	0.3	28.6	-28.3

Table 3.7 Dependence on different items in Meghalaya and Mizoram (N-E States)

(Rs.Millian)

Items	Meghalaya			Mizoram		
	Production	Consumption	Difference	Production	Consumption	Difference
1 Cereals	73346	1901.443	71444.56	57246.4	739.1993	56507.2
2 Gram	192	1.3752	190.6248	0	3.228336	-3.22834
3 Cereal Substitute	5962.5	2.7504	5959.75	3763	0.986436	3762.014
4 Pulses & Products	1750	185.8812	1564.119	7560	102.3203	7457.68
5 Edible Oil	3240	454.962	2785.038	1053	150.566	902.434
6 Pan, Tobacco & Intoxication	900	945.9084	-45.9084	1620	248.4922	1371.508
7 Clothing(cotton)	4860	566.124	4293.876	1890	289.8328	1600.167
8 Milk	277.44	651.3864	-373.946	46.24	247.4161	-201.176
9 Fish	0.12	2.28	-2.16	0	3	-3

10	Electricity1996-97(Crore kwt)	54.1	29.1	25	1.4	10.7	-9.3
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Table 3.8 Dependence on different items in Nagaland and Tripura (N-E States)

(Rs.Millian)

	Items	Nagaland			Tripura		
		Production	Consumption	Difference	Production	Consumption	Difference
1	Cereals	111426	1713.543	109712.5	297667.5	3284.756	294382.7
2	Gram	1024	2.862	1021.138	256	0	256
3	Cereal Substitute	10070	0	10070	450.5	3.861528	446.6385
4	Pulses & Products	7000	157.41	6842.59	4550	329.283	4220.717
5	Edible Oil	5427	212.265	5214.735	5994	648.3857	5345.614
6	Pan, Tobacco & Intoxication	0	435.501	-435.501	180	698.9366	-518.937
7	Clothing(cotton)	90	181.578	-91.578	1440	858.6634	581.3366
8	Milk	212.16	355.047	-142.887	195.84	978.3708	-782.531
9	Fish	1.8	5.64	-3.84	0	1.32	-1.32
10	Electricity1996-97(Crore kwt)	0.3	12.9	-12.6	19.1	27	-7.9

Table 3.9 Dependence on different items in Arunachal Pradesh (N-E States)

(Rs.Millian)

	Items	Arunachal Pradesh		
		Production	Consumption	Difference
1	Cereals	88452.5	914.774	87537.73
2	Gram	0	19.56204	-19.562
3	Cereal Substitute	18073	0	18073
4	Pulses & Products	3710	164.6748	3545.325
5	Edible Oil	16200	239.8284	15960.17
6	Pan, Tobacco & Intoxication	0	261.9324	-261.932
7	Clothing(cotton)	0	346.1486	-346.149

8	Milk	103.36	408.3714	-305.011
9	Fish	0	1.08	-1.08
10	Electricity1996-97(Crore kwt)	6.1	8.6	-2.5

Table 3.10: Area and Production of vegetables and Tuber Crops (1991-92)

Area: In Hectare
Production : In M.T.

Items		Assam	Arunachal Pradesh	Manipur	Meghalaya	Mizoram	Nagaland	Tripura	All India
Tomato	Ar.	13500	241	1100	370	143	16.5		289077
	Prd.	312436	667	2350	2220	448	230		4244366
Potato	Ar.	61727	4960		17639	457	1400	3100	1135075
	Prd.	473250	32470		153159	905	15400	56800	18192970
Cabbage	Ar.	25382	2269	950	1000	165	106		178353
	Prd.	432026	8960	11500	10200	1829	2214		2796431
Sweet Potato	Ar.	9112					37		
	Prd.	29010					87.5		
Tapioca	Ar.	2153							
	Prd.	9204							
Squash	Ar.					623			
	Prd.					21745			
Brinjal	Ar.	19805	557		330	510	22		
	Prd.	331602	1946		1280	1877	25		
Onion	Ar.	6172		415	220	52	24		331736
	Prd.	11987		4150	1560	62	165		4705662
Caulifour	Ar.	20543	984	804	830	83			202787
	Prd.	394628	3579	6450	9960	404			2998061
Other Vegetable	Ar.		3378	2000			6580		
	Prd.		12542	2150			48269		

Source: Industrial Development and Export Potential of the North-Eastern States, Vol. III, I.I.F.T., Report, New Delhi.

Annexure -1
M R B Enterprises

1. Personal Particulars:

Name of Entrepreneur /Businessman:

M. R. Baruva - Chairman cum Managing Partner/Director

S P Baruva- Partner/Director cum Chief Executive Officer

Contact Address:

*Bharali Complex, G. S. Road, Ulubari, Guwahati – 781 007,
Assam*

Telephone/Fax:

Tel: (91 361) 521438, 512270, 527967 Fax: (91 361) 511928

E-mail: mrbtea@mrbtea.com

Website: www.mrbtea.com

2. General Background/Activities:

The MRB Group is the embodiment of four generations of experience in the Tea Industry of Assam. It has its lineage from Late Rai Bahadur Radhika Prasad Baruva, grandfather of the CMD M R Baruva, who is one of the pioneer's of the Tea Industry.

The activities of the group are mainly in the Tea Industry. The activities include Cultivation, Production, Packaging, Brokering and Exports.

3. Business/Company Activities:

The MRB Group comprises of six companies which include the following:

Sonarie Tea Co. Pvt. Ltd. - This Company is the flagship of the Group, which owns Sonarie and Soonitpur Tea Estates with a production of over 1.5 million kgs p.a. of tea annually. It is recognized as a prime land mark in Tea circles. Indeed it holds the record for procuring the highest ever-price for teas sold at the Guwahati Tea Auction Center.

MRB & Associates - is a registered partnership firm and is primarily a manufacturing cum trading company, which looks after four Tea Estates and is engaged in the production of packet, branded teas. The production of this company is 3 million kgs p.a. The Tea Estates managed by the firm are:

1. Gorajan Tea Estate
2. Umabari Tea Factory (Lessee)
3. Thengalbarie Tea Factory (Lessee)
4. Dayamanti Tea Factory (Lessee)

MRB Enterprises - is a 100 % export unit dealing in trading of tea with CIS, Europe & USA. It is one of the biggest export firms of this region.

Tea Brokers (Guwahati) Pvt. Ltd. - is a registered Broker and Auctioneer in Guwahati Tea Auction. This is one of the oldest brokering house in Guwahati and has a client list of over 100 Tea Estates from the North East Region. This company was acquired by the group as a going concern in 1996.

Transpower Private Limited - is a recent acquisition for the group. It undertakes turnkey projects in the power sector. Its area of specialty is power transmission. It also manufactures and supplies galvanised/ungalvanised transmission towers, Sub Station Structures,

Equipment Mounting Structures for both low and high Voltage, Watch Towers Signal Poles (tubular & lattice) and other similar fabricated Structures.

The company has appointed a number of agents in India, Europe and CIS countries which enable it to reach out to the world market.

4. Manpower:

Unskilled & semi skilled - 921 Permanent workers

Executives - 54

5. Financial Information:

Turnover - Rs. 30.5 million

6. Instances of special achievements:

M R Baruva – Chairman cum Managing Partner/Director was awarded the “Rajiv Gandhi International Award” in the years 1995 for his contribution to the Tea Industry and for corporate excellence.

S P Baruva CEO cum Partner/Director was specially selected to be a member of the expert group to study the implementation of HACCP (Hazard Analysis Critical Control Point) in the Tea Industry. He is also a Director of FINER (Federation of Industries of North East Region).

7. Future Business / Investment Plans:

The MRB group is negotiating to acquire more properties in the Tea Industry. It also has plans to expand its packet tea business. An ambitious program has been launched for the cultivation of organic tea. One of its constituent company Trans-power Private Limited is looking for tie-ups and collaborations in turnkey projects in the power sector. The company also has plans to enter the food-processing

sector with special emphasis on Pineapple. The group is also actively exploring the potentiality of Eco-tourism in the Northeast region.

Premier Cryogenics Ltd.

1. Personal Particulars of entrepreneur :

ABHIJIT BAROOAH

C/o Premier Cryogenics Ltd.

Maniram Dewan Road, Chandmari

Guwahati 781 003, Assam

Phone No.(361) 660190 to 93

Fax No.(361) 668102/661787

E-mail : barooah@123india.com/assamair@gw1.vsnl.net.in

2. General Background/History of Business :

Mr. Barooah is a First-generation technocrat entrepreneur. He did B.Tech in Chemical Engineering from IIT, Delhi in 1983 and went on to complete a post graduate degree in Chemical Engineering from University of Rochester, USA in 1985. Immediately after that he promoted M/s. Assam Air Products (P) Ltd. to set up an Industrial Gases plant at Sivasagar in Assam. The Company went into production in 1988. Currently it markets the entire range of Industrial and Medical gases throughout the Northeastern region. Its clients includes all major industrial units and hospitals of the region. Current annual turnover of the Company is about Rs. 4 crore.

3. Business/Company Expansion :

In 1995 Mr Barooah further promoted M/s. Premier Cryogenics Ltd. to set up a plant at Guwahati to manufacture Liquid Nitrogen, Industrial & Medical Oxygen gas, Nitrogen gas and Compressed Air at an investment of Rs. 10 crore. Several major Financial Institutions like IDBI, IIBI, IFCI Venture, NEDFi and AIIDC have provided venture capital to the Company and are shareholders. The Company mainly caters to the requirement of the oil exploraton & refining and defence sectors of Eastern India. Current annual turnover of the Company is about Rs. 5 crore. It is a profit-making dividend-paying Company listed in the stock exchanges of Guwahati, Calcutta and Ahmedabad.

4. Manpower :

The two Companies of the group directly employ 52 persons, apart from giving indirect employment to about 50 more. Some of the key employees are Mrs. Anamika Chowdhary, MBA (Wholetime Director), Sri Tridib Borah, B.E. (General Manager) and Sri Anjan Talukdar, ACS (Company Secretary).

5. Financial Information :

	(Rs. in lakhs)		
	1997-98	1998-99	1999-2000
Total Income	235.83	329.58	432.84
Profit before interest & depreciation	129.87	155.23	204.32
Interest	94.87	97.08	74.85
Depreciation & misc. expenses write off	25.22	47.90	48.34
Provision for taxes	-	-	-
Net Profit	13.39	13.87	84.75

1. Some instances of special achievements :

- i) Only commercial manufacturer in the Northeastern region of Liquid Nitrogen, which is a critical input in oil exploration. Made significant contribution to indigenous oil production by ensuring uninterrupted supply.
- ii) The only Defence Ministry approved aviation and medical gas manufacturer in Eastern India.
- iii) One of the first manufacturing Companies of the Northeastern region to float a public issue successfully in 1996.
- iv) One of the first Companies of the region to receive venture funding.
- v) Received senior Chevening Gurukul Scholarship to attend 10 week programme at the London School of Economics & Political Science on 'Globalization and its impact on Indian leadership' at the invitation of U.K. government.

- vi) Attended a three week programme on “Entrepreneurship in the U.S.” conducted by United States Service at the invitation of U.S. government.
- vii) Attended “Venture 2000” - a symposium on Asian Venture Capital Business at Osaka, Japan at the invitation of Asian Productivity Organisation, Tokyo as a part of a 6 member Indian delegation.

1. Future Business/Investment Plans :

- i) Based on the core competency of operating sophisticated manufacturing & distribution operations in the northeast to enter into strategic alliance for contract manufacturing.
- ii) Marketing tie-up with world leaders for all types of speciality gases/chemicals.

Guwahati Neurological Research Centre Ltd

Name of Entrepreneur : Dr N C Borah, MBBS, MD, DCP, DM
Neurologist

Contact Address : GNRC Limited
Dispur
Guwahati 781 006 (Assam)

Tel. 0361 227700
Fax.0361 227711
E-Mail : ncborah@usa.net

General Background/ History of Business :

Incorporated in 1985 the company commenced operations in 1987

Nature of Activity :

The company established a super specialty hospital at Guwahati at an investment of Rs 1 crore for care of neurological patients which over a period of time has become one of the finest and also biggest privately managed neuroscience centre in the country. The centre is popularly known as 'Institute of Neurological Sciences. It is the first ISO-9002 hospital in North Eastern India. It is an unparalleled hospital for all the seven NE States, CGHS, Railways, Defense and many other public and private sector undertakings located in the North East. It employs about 400 personnel including 50 doctors, 150 nurses and other paramedical and administrative staff. INS is also a three years DNB training centre in neurology recognised by National Board of Examinations, New Delhi under Ministry of Health and Family Welfare, Government of India.

In 1997-98 the GNRC promoted another super specialty hospital for cardiac patients with state-of-the-art technology and equipment's at an investment of Rs 15 crores. This heart hospital is known as 'GNRC Heart Institute. It has 200 employees including 25 Doctors, 100 Nurses and other paramedical and administrative staff. GNRC Heart Institute perform OHS procedures like, cardiac Bypass, Valve replacement and other congenital heart diseases. It is also an ISO-9002 hospital from British Standard Institute.

GNRC is also in the process of setting up a dedicated hospital for accident and Emergency Medical Services with state-of-the-art technology at a project cost of Rs 45 crores. This would be commercially operational from April, 2001.

Financial Position :

GNRC with its domain knowledge and expertise in hospital management system is also in the process of venturing into information technology in the health care services and has opened a division known as 'GNRC Infotech'.

GNRC is a public limited company with an equity capital of Rs 5.5 crores. IDBI, NEDFi, RCITC, AIDC etc. are having equity in the company. For last ten years the company has been making profit and paying dividend. It has paid 21% dividend during the year 1998-99 and 1999-2000.

Turnover :

1998-1999 : Rs. 11.70 crores
1999-2000 : Rs. 16.32 crores

Some Special Achievements :

- a) Amidst the hectic pace of growth and expansion GNRC has succeeded to foster a very healthy working environment between management and the employees.
- b) GNRC is a living example of providing value for money in the healthcare industry. As a result, while maintaining the larger social objective of providing highly valuable health care services in perspective, GNRC has retained the rare distinction of an uninterrupted track record of profitability.

Future Business / Investment Plan :

- a) This institution aims to expand health care facilities in Assam as a social movement
- b) GNRC expects to venture into ancillary health related economically viable projects to generate new employment.

Assam Polyester Co-operative Society Ltd

1. Personal Particulars:

Sanjib Sabhapandit
Director
Assam Polyester Cooperative Society Ltd
Chandmari
Guwahati 781 003

Tel. 0361-652917 (Direct) 551770, 551970
Fax 0361-552372

2. General Background/History of Business:

Year of Establishment : 1988 - Yarn Spinning Unit
1991 - Fabric Unit

The company announced operations 1988 with a yarn spinning unit. Later in 1991 a fabric unit was established. The principal promoters of the company are :

- i) Mr Ashim Kumar Sarma, B E
Chairman-cum-Mg Director
- ii) Mr Sanjit Sabhapandit, B E, M B A
Director
- iii) Mr Kalyan Bhagowati
Textile Technological Director

1. Business/Company Activities

The company's activities evolve around the manufacturing of

- a) Polyester Viscose blende yarn both grey & dyed
- b) 100% polyester yarn-dye
- c) 100% Acrylic yarn-dye
- d) Polyester Viscose blended shirtings, suitings and ladies dress materials and furnishing materials

- e) Cotton sarees, bed sheets etc.
- f) Readymades (indirectly)

The market for polyester materials is around Rs 500 crore in the North East India, and the company has market share of about 6%. The company has a modernised spinning, weaving, process printing & dyeing unit. Over a period the company has established a sound marketing network with about more than 60 wholesalers all over the country and about 70 authorised showrooms in the North East India.

4. Manpower:

Direct - about 1500 nos. 85% (approx) skilled.
Indirect - about 1000 nos.

5. Financial Information:

Capital investment - Rs 24.00 crores
Turnover (present) - Rs 25.00 crores
Average of the last 2 years - Rs 20.00 crores

6. Some Instances of Special Achievements :

- a) The investment in the Textile sector in the state between 1986 and 1992 was about Rs 480.00 crores. Six (6) Spinning Mills, 3 Process houses, one filament yarn unit, about 2000 power looms were installed. Out of all these APOL's unit is virtually the lone unit running along with a few other small units.
- b) There was a myth that except Oil, Tea & Plywood, nothing could be produced in the North East and marketed outside. APOL has broken this myth.
- c) Although Assam has a very rich handloom textile heritage it did not have any mechanised textile expertise. APOL can now claim to have created a very substantial expertise in the field of Textiles in the State.

4. Future Expansion/Investment Plans :

Expansion of capacity by 25% in the same line is under implementation and product diversification is the main thrust area.

ASSAM ASBESTOS LIMITED

A. ADDRESS- (0) BONDA, NARANGI PH.NO.- 0361-640213, 640243, 640678
GUWAHATI – 781026 FAX - 0361-640226, 641314.
E-MAIL NO- aalvp@gwl.vsnl.net.in
(R) SENDURI ALI PATH, R.G. BARUAH PHONE NO. - 0361-450745, 451997.
ROAD, GUWAHATI – 781 026.

C. KEY PERSONS

<u>Name</u>	<u>Experience</u>	<u>Phone No.</u>	<u>Fax No.</u>	<u>e-mail address</u>
Mr.Ramesh Pasari	President	(R) 0361-450745, 451997	0361-454553	-
Mr. Lalit Mohan Srivastava.	Vice President	(R) 0361-550225, 550676.	-	-

D. PRESENT PRODUCTS LOCATION AREA OF YR. OF ESTT. GROWTH OF TURNOVER/
FUNCTIONS OPRTN. BUSINESS IN LAST 3 YRS.(%)

MANUFACTURING (1) ASBESTOS	BONDA, NARANGI	N.E. STATES	1972
CORRUGATED & PLAIN SHEETS.	GUWAHATI - ASSAM, (INDIA)	W.BENGAL BIHAR.	
(2) GALVANIZED, IRON PLAIN & CORRUGATED SHEET & COILS.		N.E. STATES,	1995

E. SCHEME / PROJECT Under implementation. NONE

NAME	PEODUCT/SERVICES	LOCATION	EXPECTED DATE OF COMMISSIONING	PROJECT COST
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F. PROJECT/SCHEME At hand/Planned NONE

Name	Product/Service	Expected Yrly. Turnover (in Rs.)	Estimated Cost	Site in mind/ or identified	Estimated time of completion
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Buildworth Pvt Ltd

1. Personal Particulars

Name of Entrepreneur/ Businessman : Mr Deepak Singh
Contact Address : Buildworth Pvt Ltd
G S Road, Dispur
Guwahati 781 005
Telephone : 261411, 260352/3
Fax : 91-361-261411
E-Mail : bwpl@gw1.vsnl.net.in

2. General Background/History of Business

Buildworth Pvt Ltd is a medium size engineering industry with headquarters at Guwahati, ASSAM (India) and office at Kolkata. The company is established in 1959.

3. Business & Company Activities :

Buildworth has been in the field of mechanical, civil and heavy structural construction at site for over 40 years. Its range of products are Bath type Indirect Heaters, Oil & Gas Separators, Mist Extractors, Emulsion Treaters, LPG Bullets, Heat Exchangers, Pressure Vessels and other oil & gas process equipments. The company has tied up with Chesterton International Inc. Boston, USA for marketing of its its Advanced Reinforced Composite and other products in entire Eastern and North East India. Buildworth's main customers are Oil India Ltd, ONGC Ltd, Oil Refineries, Railways Defence and other industries in this region.

4. **Manpower :** Skilled : 93 Unskilled : 37

5. Financial Information

Overall Bank credit limit : Rs. 595 lacs
Turnover for the last two years : 1998-99 - 1151.35 lacs
1999-2000 - 774.57 lacs

6. **Name of the Company :** Buildworth Pvt Ltd. (Private Limited)

7. **Some instances of :** Sheer hard work, coupled with

special achievements dedication and steadfastness of purpose

8. Future/Investment Plans : As required

A F T Industries Ltd.

Registered office

Talap Apeejay House,
Dist. Tinsukia 15, Park Street,
Assam Calcutta 700016

Incorporation year :1977

Ownership group : Apeejay Group

Main activity : Tea

Listed on

Bombay Stock Exchange
Calcutta Stock Exchange
National Stock Exchange

Assam Frontier Tea Company was incorporated in England as a subsidiary of Sime Darby Holdings Ltd. with Shaw Wallace as its Indian agent. It is carrying tea plantation in Assam since 1889. The company was formerly known as Assam Frontier Tea and is a subsidiary of Assam Frontier Tea Company Limited of UK. It was incorporated in India in June 1977, in order to acquire the Indian business of UK parent. In 1982, Sime Darby Holdings Ltd sold the company to Mr. Swraj Paul of the Apeejay group. Mr. Surrendra Paul became the chairman of the company who was killed by the ULFA in 1990, following which Mrs. Shireen Paul took over as the chairperson.

As of 1999, promoters hold 44 per cent equity stake in the company while 29 per cent is held by public and 7 per cent by foreign parties.

The company owns 8 estates, all situated in Assam and having their own processing facilities.

In May 2000, the company made a foray into the web world by launching its B2C online tea boutique - teastall.com in May 2000. The Apeejay Surrendra Tea group, comprising of AFT Industries, Empire plantations and Singlo India Tea company, plans to merge the three companies into one entity.

	Plant Locations/Products	Capacity/Units	Production/Units
1.	Budlapara (Darrang, ASS) Tea	0.00 '000 tonnes	1.07 '000 tonnes
2.	Budlabeta (Dibrugarh, ASS) Tea	0.00 '000 tonnes	1.56 '000 tonnes
3.	Hapjan (Dibrugarh, ASS) Tea	0.00 '000 tonnes	1.67 '000 tonnes
4.	Hilika (Dibrugarh, ASS) Tea	0.00 '000 tonnes	1.29 '000 tonnes
5.	Hokonguri (Dibrugarh, ASS) Tea	0.00 '000 tonnes	1.29 '000 tonnes
6.	Kharjan (Dibrugarh, ASS) Tea	0.00 '000 tonnes	0.84 '000 tonnes
7.	Khobong (Dibrugarh, ASS) Tea	0.00 '000 tonnes	1.72 '000 tonnes
8.	Pengaree (Dibrugarh, ASS) Tea	0.00 '000 tonnes	1.13 '000 tonnes
9.	Talup (Dibrugarh, ASS) Tea	16.20 '000 tonnes	1.46 '000 tonnes

Financial Performance

	March 2000 12mths Rs. Crores
Gross sales	95.93
Net sales	91.17
VOP	90.59
Other income	6.41
Cost of production	49.79
Selling cost	4.68
PBDIT (NNRT)	23.82
PBDT (NNRT)	23.28
PBT (NNRT)	21.26
PAT (NNRT)	14.06
Cash profit(NNRT)	16.08
Operating cash flow	38.80
Gross value added	68.50
Exports	1.99
Imports	2.94
Gross fixed assets (net of reval & WIP)	82.84
Current assets	58.42
Net worth	81.26
Equity capital	6.00
Long term borrowings	0.00
Capital employed	81.26
Current liabilities & provisions	33.43
Total assets / liabilities (net of reval & misc. exp. n.w.o)	114.69
Break-even sales (%)	60.59
Margin of safety (%)	39.41
Growth (%)	
Gross sales	-9.00
Net sales	-11.09
Cost of production	-8.50
GFA	14.71
Total assets	3.42

Margins (%)	
PBDIT (NNRT) / Sales	24.83
PBDT (NNRT) / Sales	24.27
PAT (NNRT) / Sales	14.66
PBDIT (NNRT) / Net sales	26.13
PBDT (NNRT) / Net sales	25.53
PAT (NNRT) / Net sales	15.42
Returns ratios (%)	
PAT / Net worth	18.01
PAT / Total assets	12.47
PBDIT / Total assets	21.12
PBDIT / Capital employed	30.52
Liquidity ratios	
Long term debt / equity (times)	0.00
Total debt / equity (times)	0.01
Current ratio (times)	1.75
Interest cover (times)	40.37
Gross working capital cycle (days)	231
Net working capital cycle (days)	116
Avg. days of debtors (days)	44
Avg. days of creditors (days)	115
VOP / Total assets	0.803
VOP / GFA (times)	1.168
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

Bharat General & Textile Inds. Ltd.

Registered office

8th Floor, 9/1, R.N. Mukherjee Road
Calcutta
West Bengal.700001

Incorporation year :1944
Ownership group : Birla B.K. Group

Main activity : Diversified

	Plant Locations/Products	Capacity/Units	Production/Units
1.	Chariduar (Darrang, ASS) Cotton yarn	0.00 Spindles	0.00 Tonnes
2.	Achalpur (Amravati, MAH) Oils	36.62 '000 tonnes	0.00 '000 tonnes
3.	Malkapur (Kolhapur, MAH) Oil cakes	95.00 '000 tonnes	0.00
	Oils	36.63 '000 tonnes	0.00 '000 tonnes
	Others	0.00	7520000.00 Kgs
	Solvent extracted oil	0.00	1.24 '000 tonnes
	Dhamangaon (Solapur, MAH) Oils	36.63 '000 tonnes	3.44 '000 tonnes
	Guntur (Guntur, AP) Oils	36.62 '000 tonnes	0.00 '000 tonnes
	Solvent extracted oil	0.00	1.24 '000 tonnes

Financial Performance

	March 2000 12mths Rs. Crores
Gross sales	60.13
Net sales	59.54
VOP	58.78
Other income	4.51
Cost of production	54.06
Selling cost	3.33
PBDIT (NNRT)	4.06
PBDT (NNRT)	3.63
PBT (NNRT)	3.19
PAT (NNRT)	2.22
Cash profit(NNRT)	2.66
Operating cash flow	0.00
Gross value added	7.80
Exports	3.32
Imports	0.00
Gross fixed assets (net of reval & WIP)	9.31
Current assets	21.31
Net worth	34.59
Equity capital	5.76
Long term borrowings	2.01
Capital employed	36.60
Current liabilities & provisions	6.47
Total assets / liabilities (net of reval & misc. exp. n.w.o)	42.55
Break-even sales (%)	158.15
Margin of safety (%)	0.00
Growth (%)	
Gross sales	-33.15
Net sales	-33.09
Cost of production	-36.68
GFA	-38.47

Total assets	-7.86
Margins (%)	
PBDIT (NNRT) / Sales	6.75
PBDT (NNRT) / Sales	6.04
PAT (NNRT) / Sales	3.69
PBDIT (NNRT) / Net sales	6.82
PBDT (NNRT) / Net sales	6.10
PAT (NNRT) / Net sales	3.73
Returns ratios (%)	
PAT / Net worth	6.78
PAT / Total assets	5.00
PBDIT / Total assets	9.15
PBDIT / Capital employed	11.68
Liquidity ratios	
Long term debt / equity (times)	0.06
Total debt / equity (times)	0.16
Current ratio (times)	3.29
Interest cover (times)	8.42
Gross working capital cycle (days)	82
Net working capital cycle (days)	49
Avg. days of debtors (days)	21
Avg. days of creditors (days)	34
VOP / Total assets	1.325
VOP / GFA (times)	4.810
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

B & A Plantations & Inds. Ltd

Registered Office :

Rukmini Nagar
G S Road, Guwahati
Assam
Pin - 781 006

Incorporation Year : 1915

Ownership Group : Private (Indian)

Main Activity : Tea

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
Guwahati Stock Exchange

B & A Plantations & Industries Ltd. was originally incorporated on 1 June, 1915 as Barasali Tea Co., Ltd. with the object of taking over and running of Barasali Tea Estate in Assam from Group Tea Company Ltd. Barasali Tea Co Ltd. over the years acquired three other tea Estates before its name was changed to B & A Plantations and Industries Ltd on 4th March, 1986. BAPIL currently owns and operates five tea estates in Assam and is in the business of manufacture and state of tea. The company has two factories at Gatoonga and Salkathoni Tea Estates which process the leaf from all five tea gardens of the company.

	Plant Locations	Production/Units
1.	Barasali (Sibsagar, ASS) Tea	1.14 '000 tonnes
2.	Gatoonga (Sibsagar, ASS) Tea	0.66 '000 tonnes
3.	New Samaguri (Sibsagar, ASS) Tea	0.12 '000 tonnes
4.	Samaguri (Sibsagar, ASS) Tea	0.46 '000 tonnes
5.	Sangsua (Sibsagar, ASS) Tea	0.73 '000 tonnes

Financial Performance

	Dec'99
	12mths
	Rs. Crores
Gross sales	26.99
Net sales	24.31
VOP	26.08
Other income	0.02
Cost of production	14.06
Selling cost	1.78
PBDIT (NNRT)	4.61
PBDT (NNRT)	1.53
PBT (NNRT)	0.84
PAT (NNRT)	0.68
Cash profit(NNRT)	1.40
Operating cash flow	4.69
Gross value added	16.32
Exports	3.40
Imports	0.34
Gross fixed assets (net of reval & WIP)	27.06
Current assets	18.64
Net worth	19.98
Equity capital	3.11
Long term borrowings	9.64
Capital employed	29.62
Current liabilities & provisions	15.15
Total assets / liabilities (net of reval & misc. exp. n.w.o)	42.64
Break-even sales (%)	84.45
Margin of safety (%)	15.55
Growth (%)	
Gross sales	11.02
Net sales	8.68

Cost of production	11.69
GFA	5.54
Total assets	5.94
Margins (%)	
PBDIT (NNRT) / Sales	17.08
PBDT (NNRT) / Sales	5.67
PAT (NNRT) / Sales	2.52
PBDIT (NNRT) / Net sales	17.97
PBDT (NNRT) / Net sales	5.96
PAT (NNRT) / Net sales	2.65
Returns ratios (%)	
PAT / Net worth	3.43
PAT / Total assets	1.64
PBDIT / Total assets	11.12
PBDIT / Capital employed	15.63
Liquidity ratios	
Long term debt / equity (times)	0.48
Total debt / equity (times)	0.88
Current ratio (times)	1.23
Interest cover (times)	1.27
Gross working capital cycle (days)	4.7
Net working capital cycle (days)	328
Avg. days of debtors (days)	18
Avg. days of creditors (days)	78
VOP / Total assets	0.629
VOP / GFA (times)	0.990
Total R & D expenditure	0.03
R & D capital	0.00
R & D current	0.03

Bishunauth Tea Co. Ltd

Registered office :

**Four Mangoe Lane
Surendra Mohan Ghosh Sarani Calcutta, West Bengal
Pin 700001
Incorporation year : 1863**

**Ownership group : Williamson Magor Group
Main activity : Tea**

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
National Stock Exchange

	Plant Locations/Products	Production/Units
1.	Seajuli (Lakhimpur, ASS) Tea	0.56 '000 tonnes
2.	Behali (Darrang, ASS) Tea	1.11 '000 tonnes
3.	Bhootaeachang (Darrang, ASS) Tea	1.17 '000 tonnes
4.	Dekorai (Darrang, ASS) Tea	2.09 '000 tonnes
5.	Dimakusi (Darrang, ASS) Tea	1.02 '000 tonnes
6.	Dufflaghur (Darrang, ASS) Tea	1.46 '000 tonnes
7.	Majulighur (Darrang, ASS) Tea	1.03 '000 tonnes

Financial Performance

	Dec'99 12mths Rs. Crores
Gross sales	164.34
Net sales	157.91
VOP	158.70
Other income	13.32
Cost of production	78.67
Selling cost	14.97
PBDIT (NNRT)	50.87
PBDT (NNRT)	29.19
PBT (NNRT)	23.68
PAT (NNRT)	15.68
Cash profit(NNRT)	21.19
Operating cash flow	40.48
Gross value added	91.25
Exports	51.67
Imports	7.12
Gross fixed assets (net of reval & WIP)	208.34
Current assets	124.95
Net worth	187.15
Equity capital	14.69
Long term borrowings	55.29
Capital employed	242.44
Current liabilities & provisions	107.28
Total assets / liabilities (net of reval & misc. exp. n.w.o)	-65.21
Break-even sales (%)	41.46
Margin of safety (%)	58.54
Growth (%)	
Gross sales	-7.65
Net sales	-9.26
Cost of production	4.78
GFA	6.68
Total assets	

Margins (%)

PBDIT (NNRT) / Sales	30.95
PBDT (NNRT) / Sales	17.76
PAT (NNRT) / Sales	9.54
PBDIT (NNRT) / Net sales	32.21
PBDT (NNRT) / Net sales	18.49
PAT (NNRT) / Net sales	9.93

Returns ratios (%)

PAT / Net worth	8.66
PAT / Total assets	12.72
PBDIT / Total assets	41.25
PBDIT / Capital employed	21.50

Liquidity ratios

Long term debt / equity (times)	0.30
Total debt / equity (times)	0.73
Current ratio (times)	1.16
Interest cover (times)	2.09

Gross working capital cycle (days)	327
Net working capital cycle (days)	269
Avg. days of debtors (days)	17
Avg. days of creditors (days)	58
VOP / Total assets	1.287
VOP / GFA (times)	0.786

Total R & D expenditure	0.27
R & D capital	0.00
R & D current	0.27

Assam Co. Ltd

Registered office :

**Greenwood Tea Estate
P O Dibrugarh
Assam Calcutta
Pin 786 001**

Head / Corporate office :

**Assam Tea House,
Chowringhee Road
West Bengal
Pin 700 071**

Incorporation year : 1977

Ownership group : Mehta Mahendra Group

Main activity : Tea

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
Guwahati Stock Exchange
National Stock Exchange

The company was incorporated as Assam Co. (India) Ltd. in March 1977 as a public limited company under the Companies Act, 1956 to takeover the Indian business of six sterling tea companies - Assam Co. Ltd., Assam Estates Ltd., Greenwood Tea Co. Ltd., Salonah Tea Co. Ltd., Thanai Tea Co. Ltd. and Upper Assam Tea Co. Ltd. - all of which were incorporated in England. The Sterline companies were wholly owned subsidiaries of Assam Investments Ltd., a company incorporated in England, in which Inchcape Co. Ltd. hold 37% of share capital. Assam Co. Ltd. was the first commercial tea company in the world, having been established in 1839 under a Royal Charter of the British Parliament. Consequent to the introduction of Foreign Exchange Regulations Act in the year 1973, Duncan Macneill Holdings Ltd. of U.K. (Formerly Assam Investment Ltd.), (part of the world renowned Inchcap Group), promoted Assam Co. (India) Ltd. by amalgamating the 6 sterling tea companies in December 1977. Assam Co. (India) Ltd. is a subsidiary of DMHL since inception. In 1979 foreign shareholding in the company was reduced to 74%. The name of the company was changed to Assam Co. Ltd. in 1989. The company owns 28 tea estates located at Doom Dooma, Moran, Panitola, Dibrugarh, Nowgong and Jorhat, and spread over 7400 hectares and 17 tea manufacturing factories.

	Plant Locations/Products	Production/Units
1.	Dibrugarh (Borborooah) (Dibrugarh, ASS) Tea	0.00 '000 tonnes
2.	Dibrugarh (Greenwood) (Dibrugarh, ASS) Tea	1.10 '000 tonnes
3.	Dibrugarh (Hazelbank) (Dibrugarh, ASS) Tea	0.54 '000 tonnes
4.	Dibrugarh (Maijan) (Dibrugarh, ASS) Tea	1.12 '000 tonnes
5.	Dibrugarh (Nudwa) (Dibrugarh, ASS) Tea	0.47 '000 tonnes
6.	Dibrugarh (Thanai) (Dibrugarh, ASS) Tea	0.99 '000 tonnes
7.	Dikom (Dibrugarh, ASS) Tea	0.47 '000 tonnes
8.	Doom Dooma (Digulturrung) (Dibrugarh, ASS) Tea	
9.	Panitola (Dinjan) (Dibrugarh, ASS) Tea	0.17 '000 tonnes
10.	Panitola (Rungagora) (Dibrugarh, ASS) Tea	1.27 '000 tonnes
11.	Jorhat (Kotalgoorie) (Jorhat, ASS) Tea	0.73 '000 tonnes
12.	Nowgong (Kondoli) (Nagaon, ASS) Tea	1.06 '000 tonnes
13.	Nowgong (Salonah) (Nagaon, ASS) Tea	2.33 '000 tonnes
14.	Moran (Doomur Dullung) (Sibsagar, ASS)	

	Tea	0.80
		'000 tonnes
15.	Moran (Hajura) (Sibsagar, ASS)	
	Tea	0.15
		'000 tonnes
16.	Moran (Khoomtaie) (Sibsagar, ASS)	
	Tea	1.42
		'000 tonnes
17.	Moran (Mohokutie) (Sibsagar, ASS)	
	Tea	0.58
		'000 tonnes

Financial Performance

Dec'99
12mths
Rs. Crores

Gross sales	148.36
Net sales	142.70
VOP	138.94
Other income	2.30
Cost of production	67.67
Selling cost	27.94
PBDIT (NNRT)	26.68
PBDT (NNRT)	12.11
PBT (NNRT)	7.98
PAT (NNRT)	7.19
Cash profit(NNRT)	11.32
Operating cash flow	30.59
Gross value added	59.34
Exports	35.88
Imports	6.32
Gross fixed assets (net of reval & WIP)	161.08
Current assets	78.80
Net worth	105.83
Equity capital	22.40
Long term borrowings	45.11
Capital employed	150.94
Current liabilities & provisions	31.16

Total assets / liabilities (net of reval & misc. exp. n.w.o)	182.10
Break-even sales (%)	76.50
Margin of safety (%)	23.50
Growth (%)	
Gross sales	4.13
Net sales	2.50
Cost of production	2.68
GFA	8.38
Total assets	-2.34
Margins (%)	
PBDIT (NNRT) / Sales	17.98
PBDT (NNRT) / Sales	8.16
PAT (NNRT) / Sales	4.85
PBDIT (NNRT) / Net sales	18.70
PBDT (NNRT) / Net sales	8.49
PAT (NNRT) / Net sales	5.04
Returns ratios (%)	
PAT / Net worth	6.89
PAT / Total assets	3.90
PBDIT / Total assets	14.48
PBDIT / Capital employed	18.24
Liquidity ratios	
Long term debt / equity (times)	0.43
Total debt / equity (times)	0.60
Current ratio (times)	2.53
Interest cover (times)	1.55
Gross working capital cycle (days)	
Net working capital cycle (days)	
Avg. days of debtors (days)	46
Avg. days of creditors (days)	47
VOP / Total assets	0.754
VOP / GFA (times)	0.897
Total R & D expenditure	0.23

R & D capital	0.04
R & D current	0.19

Vinay Cements Ltd.

Registered office
Jamunanagar, Umrangshu,
North Cachar Hills
Assam

Incorporation year : 1988
Ownership group : Private (Indian)
Main activity : Cement

Listed on : Bombay Stock Exchange

Plant Location/Product	Capacity/ Units	Production/ Units
1 Umrangshu (North Cachar Hills, ASS)		
Ordinary portland cement	148.50 '000 tonnes	184.14nt '000 tonnes

Income & Expenditure: Vinay Cements Ltd.

<i>Non-Annualised</i>	Mar 1998 12mths <i>Rs. Crore</i>
Sales	46.26
Manufacturing	46.26
Trading	0.00
Fiscal benefits	0.00
Internal transfers	0.00
Others	0.00
Other income	0.11
Dividend received	0.00
Interest earned	0.00
Miscellaneous income	0.11
Change in stocks	2.12
Finished goods	1.77
Semi-finished goods	0.35
Non-recurring income	0.00

Gain on sale of assets	0.00
Gain on sales of investment	0.00
Provisions written back	0.00
Others	0.00

Expenditure

Raw materials, stores, etc	19.19
Raw materials	13.08
Stores & spares	4.27
Packaging expenses	1.84
Purchase of finished goods	0.00
Wages & salaries	1.93
Energy (power & fuel)	5.76
Other manufacturing expenses	1.01
Indirect taxes	6.67
Excise duties	4.76
Repairs & maintenance	0.46
Plant & machinery	0.26
Other repairs	0.20
Selling & distribution expenses	4.96
Advertising	0.10
Marketing	2.23
Distribution	2.63
Provision for doubtful/bad debts	0.00
Amortisation	0.08
Miscellaneous expenses	2.04
Non-recurring expenses	0.10
Loss on sale of assets	0.01
Loss on sale of investment	0.00
Others	0.09
<i>Less: Expenses capitalised</i>	0.00
<i>Interest capitalised</i>	0.00
PBDIT	
Interest	4.41
On short term loans	0.15
On long term loans	4.26
Lease rent	0.11

PBDT	1.77
Depreciation	1.60
PBT	0.17
Tax provision	0.03
Corporate tax	0.03
Other direct taxes	0.00
PAT	0.14
Appropriation of profit	
Dividends	0.00
Equity dividends	0.00
Preference dividends	0.00
Dividend Tax	0.00
Retained earnings	0.14
Cash profit	1.82
Cash flow from business activities	5.74
Net sales	39.59
Value of output	41.71

Executive Summary : Vinay Cements Ltd.

<i>Non-Annualised</i>	Mar 1998 12mths <i>Rs. Crore</i>
Gross sales	46.26
Net sales	39.59
VOP	41.71
Other income	0.11
Cost of production	28.82
Selling cost	4.96
PBDIT (NNRT)	6.39
PBDT (NNRT)	1.87
PBT (NNRT)	0.27
PAT (NNRT)	0.24
Cash profit(NNRT)	1.92

Operating cash flow	5.74
Gross value added	9.29
Exports	0.36
Imports	0.04
Gross fixed assets (net of reval & W	30.66
Current assets	18.90
Net worth	10.85
Equity capital	7.50
Long term borrowings	20.99
Capital employed	31.84
Current liabilities & provisions	7.93
Total assets / liabilities (<i>net of reval & misc. exp. n.w.o</i>)	41.42
Break-even sales (%)	51.85
Margin of safety (%)	48.15
Growth (%)	
Gross sales	12.53
Net sales	13.67
Cost of production	21.37
GFA	4.78
Total assets	7.58
Margins (%)	
PBDIT (NNRT) / Sales	13.81
PBDT (NNRT) / Sales	4.04
PAT (NNRT) / Sales	0.52
PBDIT (NNRT) / Net sales	16.14
PBDT (NNRT) / Net sales	4.72
PAT (NNRT) / Net sales	0.61
Returns ratios (%)	
PAT / Net worth	2.23
PAT / Total assets	0.60
PBDIT / Total assets	15.99
PBDIT / Capital employed	20.12

Liquidity ratios

Long term debt / equity (times)	1.93
Total debt / equity (times)	2.02
Current ratio (times)	2.38
Interest cover (times)	1.06
Gross working capital cycle (days)	141
Net working capital cycle (days)	98
Avg. days of debtors (days)	36
Avg. days of creditors (days)	43
VOP / Total assets	1.044
VOP / GFA (times)	1.392
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

Hindustan Paper Corpn. Ltd.

Registered office

Vishal Bhawan
95, Nehru Place
New Delhi
Pin 110019

Head / Corporate office

Ruby Building
75-C Park Street
Calcutta
Pin 700016

Incorporation year : 1970
Ownership group : Central Govt. - Commercial Enterprises
Main activity : Paper

BACKGROUND

Hindustan Paper Corporation Limited was incorporated in 1970. The company was set up as a public sector undertaking, wholly owned by Government of India, to manufacture paper, paper boards, craft paper and news print and their distribution on equitable and rational basis in the country. Hindustan Paper was to act as a catalyst for ensuring adequate levels of investment in the paper industry and keep the prices stable in time of scarcity. The company has since then invested in three subsidiaries and set up two mills.

Hindustan Paper Corporation took over a sick paper mill in Karnataka in 1974 and commenced commercial operations. The sick mill Mandya National Paper Mills was made a subsidiary of the company. The company entered into joint venture with Government of Nagaland to form Nagaland Pulp & Paper Company Limited. The joint venture subsidiary commenced commercial operation from November 1982. In 1983 Hindustan paper took over the business of The News Print Mill in Kerala and formed a subsidiary company Hindustan News Print Limited.

The company started manufacturing paper and paper products from its own plant, Nagoan Paper Mill (Assam) in October 1985. its second manufacturing plant, Cacher Paper Mill in Assam commenced production in April 1988.

ACTIVITY

The company manufactures and distributes paper and paper products. The Company has its own paper mills manufacturing paper and paper products. Besides Hindustan Paper acts as a Holding company for three paper companies.

OWNERSHIP

Hindustan Paper Corporation is a public sector undertaking by virtue of being its share owned by President of India. The company is wholly owned by Government of India.

INFRASTRUCTURE

Hindustan Paper has got five paper mills. Three of the mills are in the form of subsidiaries with independent board of directors. Two mills at Nagaoan and Cachar in Assam are in the forms of units directly under its control.

Plant Location/Product	Capacity/Units	Production/Units
<i>1 Cachar (Cachar, ASS)</i>	<i>100000.00</i>	<i>60009.00</i>
<i>Writing & printing pap</i>	<i>Tonnes</i>	<i>Tonnes</i>
2 Jagi (Morigaon, ASS)	<i>100000.00</i>	<i>90174.00</i>
<i>Writing & printing pap</i>	<i>Tonnes</i>	<i>Tonnes</i>

Product/s Purchased/ Manufactured/ Traded	Capacity/ Units	Production Sales/ Units	Sales Quantity/ Units	Value Rs.Crore
Writing & Printing Paper	200000.00	138686.00	0.00	364.00

* Includes others
a Included elsewhere
Products Details

Income & Expenditure : **Hindustan Paper Corpn. Ltd.**

<i>Non-Annualised</i>	Mar 2000 12mths <i>Rs.Crore</i>
Income	
Sale	449.17
<i>Manufacturing</i>	439.28
<i>Trading</i>	0.00
<i>Fiscal benefits</i>	0.00
Internal transfers	6.68
Others	3.21
Other income	23.65

Dividend received	0.41
Interest earned	22.49
Miscellaneous income	0.75
Change in stocks	-2.28
Finished goods	-2.56
Semi-finished goods	0.28
Non-recurring income	16.77
Gain on sale of assets	0.00
Gain on sales of investment	0.00
Provisions written back	1.61
Others	15.16
ExpenditureRaw materials, stores, etc.	143.87
Raw materials	80.59
Stores & spares	54.06
Packaging expenses	9.22
Purchase of finished goods	0.00
Wages & salaries	58.51
Energy (power & fuel)	67.77
Other manufacturing expenses	1.85
Indirect taxes	41.08
Excise duties	40.31
Repairs & maintenance	30.33
Plant & machinery	28.96
Other repairs	1.37
Selling & distribution expenses	65.45
Advertising	0.41
Marketing	21.47
Distribution	26.70
Provision for doubtful/bad debts	16.87
Amortisation	0.33
Miscellaneous expenses	14.66
Non-recurring expenses	10.28
Loss on sale of assets	0.00
Loss on sale of investment	0.00
Others	10.28

Less: Expenses capitalised	0.00
<i>Interest capitalised</i>	0.00
PBDIT	53.18
Interest	28.69
On short term loans	2.04
On long term loans	26.65
Lease rent	1.95
PBDT	22.54
Depreciation	11.93
PBT	10.61
Tax provision	0.01
Corporate tax	0.00
Other direct taxes	0.01
PAT	10.60
Appropriation of profitDividends	0.00
Equity dividends	0.00
Preference dividends	0.00
Dividend Tax	0.00
Retained earnings	10.60
Cash profit	22.86
Cash flow from business activities	0.00
Net sales	408.09
Value of output	405.81
Gross value added	110.22

Executive Summary : Hindustan Paper Corpn. Ltd.

	Mar 2000
	12mths
	<i>Rs. Crore</i>
<i>Non-Annualised</i>	
Gross sales	449.17
Net sales	408.09
VOP	405.81
Other income	23.65
Cost of production	295.06
Selling cost	65.45
PBDIT (NNRT)	46.69
PBDT (NNRT)	16.05

PBT (NNRT)	4.12
PAT (NNRT)	4.11
Cash profit (NNRT)	16.37
Operating cash flow	0.00
Gross value added	110.22
Exports	26.90
Imports	2.84
Gross fixed assets (net of reval & W	688.70
Current assets	451.50
Net worth	102.28
Equity capital	554.73
Long term borrowings	208.07
Capital employed	310.35
Current liabilities & provisions	739.54
Total assets / liabilities	
<i>(net of reval & misc. exp. n.w.o)</i>	1049.89
Break-even sales (%)	90.36
Margin of safety (%)	9.64
Growth (%)	
Gross sales	5.11
Net sales	6.31
Cost of production	11.88
GFA	1.29
Total assets	3.04
Margins (%)	
PBDIT (NNRT) / Sales	10.39
PBDT (NNRT) / Sales	3.57
PAT (NNRT) / Sales	0.92
PBDIT (NNRT) / Net sales	11.44
PBDT (NNRT) / Net sales	3.93
PAT (NNRT) / Net sales	1.01
Returns ratios (%)	
PAT / Net worth	4.34
PAT / Total assests	0.40
PBDIT / Total assets	4.51
PBDIT / Capital employed	30.24
Liquidity ratios	
Long term debt / equity (times)	2.03

Total debt / equity (times)	2.03
Current ratio (times)	0.61
Interest cover (times)	1.13
Gross working capital cycle (days)	385
Net working capital cycle (days)	293
Avg. days of debtors (days)	100
Avg. days of creditors (days)	92
VOP / Total assets	0.392
VOP / GFA (times)	0.593
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

Indian Oil Corpn. Ltd.

Registered office

Indian Oil Bhavan,
G-9, Ali Yavar Jung Marg,
Bandra (East), Mumbai, Maharashtra
Pin 400051

Head / Corporate office

Scope Complex, Core 2,
7, Institutional Area, Lodhi Road,
New Delhi
Pin 1-10003

Incorporation year : 1959

Ownership group : Central Govt. - Commercial Enterprises

Main activity : Refinery

Listed on :

Bombay Stock Exchange
National Stock Exchange

Background Report

Indian Oil Corporation is the largest company in the country ranked among the Fortune 500 companies in the world. It owns the largest crude oil refining capacity of over 31 million tpa in the country. Its refineries are strategically spread across the country. IOC is also the market leader in the lube oil and lubricants segment, with over 32 per cent market share. IOC has the largest network of crude oil and product pipelines in India. The company makes lubricants and greases, wax/bitumen asphalt/lube oil drums and propylene recovery units.

IOC is a public sector unit, with the government having an 81 per cent stake in its equity capital. Public sector oil company, ONGC has a 10 per cent stakeholding in IOC, while the rest is held by financial institutions, banks and the public.

Indian Oil Corporation was incorporated in 1959 as Indian Oil Company. It was formed to organise the supply of petroleum products of the refineries of Indian Refineries Ltd at Guwahati, Assam and Barauni, Bihar. To ensure coordination between Indian Refineries Ltd and IOC, in 1964 the two were amalgamated to form a new company called Indian Oil Corporation Ltd. In 1964, the Barauni refinery was commissioned. In 1965--66, IOC started marketing LPG under the name 'Indane' and in 1981, started producing LPG from Bombay High.

As of March 1998, the company had 5026 consumer outlets, 6954 retail outlets and 3422 SKO/LDO (Light Diesel Oil) dealerships. IOC has 44 divisional offices, 33 Indane area offices, 185 terminals and depots and 50 LPG bottling plants and 2900 LPG distributors.

Plant location /Product

Capacity/Units

Production/Units

1 Panipat (Panipat, HAR)		
Petroleum products [tonnes]	60.00 Lakh tonnes	0.00 Lakh tonnes
2 Mathura (Mathura, UP)		
Petroleum products [tonnes]	75.00 Lakh tonnes	0.00 Lakh tonnes
3 Berauni (Begusarai, BIH)		
Petroleum products [tonnes]	33.00 Lakh tonnes	0.00 Lakh tonnes
4 Haldia (Medinipur, WB)		
Petroleum products [tonnes]	37.50 Lakh tonnes	0.00 Lakh tonnes
5 Guwahati (Kamrup, ASS)		
Petroleum products [tonnes]	355.50 Lakh tonnes	303.79 Lakh tonnes
6 Digboi (Tinsukia, ASS)		
Petroleum products [tonnes]	6.50 Lakh tonnes	0.00 Lakh tonnes
7 Kayali (Vadodara, GUJ)		
Petroleum products [tonnes]	95.00 Lakh tonnes	0.00 Lakh tonnes
8 Chennai (Madras, TN)		
Lubricants & greases [tonnes]	206.00 '000 tonnes	121.00 '000 tonnes

Executive Summary:Financial

Performance

Indian Oil Corpn. Ltd.

	Mar 2000
	12mths
Non-Annualised	Rs.Crore
Gross sales	97275.48
Net sales	84420.07
VOP	88082.20
Other income	429.59
Cost of production	82961.32
Selling cost	328.63
PBDIT (NNRT)	5805.74
PBDT (NNRT)	4776.59
PBT (NNRT)	2790.10
PAT (NNRT)	2262.90

Cash profit(NNRT)	4249.39
Operating cash flow	135.33
Gross value added	7159.49
Exports	1303.31
Imports	40084.09
Gross fixed assets(net of reval & W)	23109.61
Current assets	25956.14
New worth	14064.75
Equity capital	778.67
Long term borrowings	5488.26
Capital employed	19553.01
Current liabilities & provisions	25029.28
Total assets / liabilities (net of reval & misc. exp. n.w.o)	42854.37
Break-even sales (%)	60.08
Margin of safety (%)	39.92

Growth (%)

Gross sales	37.69
Net sales	34.69
Cost of production	55.23
GFA	34.14
Total assets	33.98

Margins (%)

PBDIT (NNRT) / Sales	5.97
PBDT (NNRT) / Sales	4.91
PAT (NNRT) / Sales	2.33
PBDIT (NNRT) / Net sales	6.88
PBDT (NNRT) / Net sales	5.66
PAT (NNRT) / Net sales	2.68

Returns ratios (%)

PAT / Net worth	17.19
PAT / Total assets	6.05
PBDIT / Total assets	15.52
PBDIT / Capital employed	33.16

Liquidity ratios

Long term debt / equity (times)	0.39
Total debt / equity (times)	1.05
Current ratio (times)	1.04

Interest cover (times)	3.71
Gross working capital cycle (days)	73
Net working capital cycle (days)	41
Avg. days of debtors (days)	
Avg. days of creditors (days)	32
VOP / Total assets	2.354
VOP / GFA (times)	4.367
Total R & D expenditure	77.40
R & D capital	39.40
R & D current	38.40

Income & Expenditure: IOC

Mar 2000

12mths

Rs.Crore

Income

Sales	97275.48
Manufacturing	81873.38
Trading	12472.49
Fiscal benefits	1408.55
Internal transfers	1478.43
Others	42.63

Other income

Dividend received	92.16
Interest earned	181.15
Miscellaneous income	156.28

Change in stocks

Finished goods	3392.48
Semi-finished goods	269.65

Non-recurring income

Gain on sale of assets	7.67
Gain on sales of investment	9.94
Provisions written back	6.47
Others	182.46

Expenditure

Raw materials, stores, etc.	78343.80
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Raw materials	27371.53
Stores & spares	162.45
Packaging expenses	177.47
Purchase of finished goods	50632.35
Wages & salaries	1243.51
Energy (power & fuel)	1615.19
Other manufacturing expenses	123.81
Indirect taxes	12855.41
Excise duties	12832.00
Repairs & maintenance	384.47
Plant & machinery	291.22
Other repairs	93.25
Selling & distribution expenses	328.63
Advertising	60.94
Marketing	185.22
Distribution	46.19
Provision for doubtful/bad debts	36.28
Amortisation	0.00
Miscellaneous expenses	666.64
Non-recurring expenses	26.04
Loss on sale of assets	12.14
Loss on sale of investment	0.00
Others	13.90
Less: Expenses capitalised	0.00
Interest capitalised	0.00
PBDIT	5986.24
Interest	1029.15
On short term loans	776.65
On long term loans	252.50
Lease rent	0.00
PBDT	4957.09
Depreciation	1986.49
PBT	2970.60
Tax provision	527.20

Corporate tax	527.20
Other direct taxes	0.00
PAT	2443.40
Appropriation of profit	
Dividends	584.01
Equity dividends	584.01
Preference dividends	0.00
Dividend Tax	64.24
Retained earnings	1795.15
Cash profit	4429.89
Cash flow from business activities	135.33
Net sales	84420.07
Value of output	88082.20
Gross Value Added	7159.49

India Carbon Ltd.

Registered office

Noonmati,
Guwahati Assam.
Pin 781020

Incorporation year : 1961
Ownership group : Himatsingka Group
Main activity : Lubricants, etc.

Plant Location/Product	Capacity/Units	Production/Units
1 Budge Budge (South 24 Parganas, WB)		
Calcined petroleum cok	60000.00 Tonnes	21296.00 Tonnes
2 Noonmati (Kamrup, ASS)		
Electrode carbon paste	10000.00 Tonnes	789.00 Tonnes
Thermal carbon (tamping) paste	3000.00 Tonnes	337.00 Tonnes

Executive Summary: Financial Performance

India Carbon Ltd.	Mar 1998
Non-Annualised	12mths
	Rs.Crore
Gross sales	40.66
Net sales	35.26
VOP	35.33
Other income	0.49
Cost of production	29.84
Selling cost	1.82
PBDIT (NNRT)	2.26
PBDT (NNRT)	0.63
PBT (NNRT)	0.39
PAT (NNRT)	0.01
Cash profit(NNRT)	0.25
Operating cash flow	-0.05

Gross value added		4.07
Exports		0.00
Imports		15.91
Gross fixed assets (net of reval & W		10.40
Current assets		13.72
Net worth		9.53
Equity capital		2.40
Long term borrowings		1.56
Capital employed		11.09
Current liabilities & provisions	8.45	
Total assets / liabilities (net of reval & misc. exp. n.w.o)		19.19
Break-even sales (%)		102.26
Margin of safety (%)		0.00
Growth (%)		
Gross sales		5.91
Net sales		4.38
Cost of production		26.52
GFA		0.48
Total assets		-18.76
Margins (%)		
PBDIT (NNRT) / Sales		5.56
PBDT (NNRT) / Sales	1.55	
PAT (NNRT) / Sales		0.02
PBDIT (NNRT) / Net sales		6.41
PBDT (NNRT) / Net sales		1.79
PAT (NNRT) / Net sales		0.03
Returns ratios (%)		
PAT / Net worth		0.12
PAT / Total assets		0.05
PBDIT / Total assets		10.56
PBDIT / Capital employed		22.62
Liquidity ratios		
Long term debt / equity (times)	0.16	
Total debt / equity (times)		0.66

Current ratio (times)	1.62
Interest cover (times) 1.24	
Gross working capital cycle (days)	126
Net working capital cycle (days)	84
Avg. days of debtors (days)	42
Avg. days of creditors (days)	41
VOP / Total assets	1.651
VOP / GFA (times)	3.405
Total R & D expenditure	0.03
R & D capital	0.00
R & D current	0.03

Income & Expenditure:

India Carbon Ltd.

Mar 1998

12mths

Non-Annualised

Rs.Crore

Income

Sales	40.66
Manufacturing	40.37
Trading	0.00
Fiscal benefits	0.00
Internal transfers	0.00
Others	0.29

Other income

Dividend received	0.00
Interest earned	0.27
Miscellaneous income	0.22

Change in stocks

Finished goods	0.07
Semi-finished goods	0.00

Non-recurring income

Gain on sale of assets	0.02
Gain on sales of investment	0.00
Provisions written back Others	3.10

Expenditure

Raw materials, stores, etc.	26.62
Raw materials	25.92

Stores & spares	0.70
Packaging expenses	0.00
Purchase of finished goods	0.00
Wages & salaries	1.73
Energy (power & fuel)	1.48
Other manufacturing expenses	0.15
Indirect taxes	5.40
Excise duties	5.35
Repairs & maintenance	0.33
Plant & machinery	0.14
Other repairs	0.19
Selling & distribution expenses	1.82
Advertising	0.02
Marketing	0.85
Distribution	0.88
Provision for doubtful/bad debts	0.07
Amortisation	0.00
Miscellaneous expenses	1.43
Non-recurring expenses	0.00
Loss on sale of assets	0.00
Loss on sale of investment	0.00
Others	0.00
Less:Expenses capitalised	
Interest capitalised	0.00
PBDIT	5.38
Interest	1.61
On short term loans	1.60
On long term loans	0.01
Lease rent	0.02
PBDT	3.75
Depreciation	0.24
PBT	3.51
Tax provision	0.38
Corporate taxOther direct taxes	0.00
PAT	3.13
Appropriation of profit	
Dividends	0.37

Equity dividends		0.36
Preference dividends		0.01
Dividend Tax		0.03
Retained earnings		2.73
Cash profit		3.37
Cash flow from business activities	-	0.05
Net sales		35.26
Value of output		35.33

India Carbon Ltd.

Mar 1997

Product/s Purchased/ Manufactured/ Traded	Capacity/ Units	Production Sales/ Units	Sales Quantity/ Units	Value Rs.Crore
Calcined petroleum coke	120000.00 Tonnes	33784.00 Tonnes	41393.00 Tonnes	37.41
Electrode carbon paste	10000.00 Tonnes	734.00 Tonnes	632.00 Tonnes	0.90
Calcined anthracite coal Tonnes	5000.00	0.00	0.00	0.00
Thermal carbon (ping) paste	3000.00 Tonnes	40.00 Tonnes	0.00	0.00
Carbon/graphite cements & surface prim	1000.00 Tonnes	1.00 Tonnes	0.00	0.00
Others	0.00	0.00	0.00	0.09
Raw petroleum coke	0.00	0.00	401.00	0.22

* Includes others
a Included elsewhere
Products Details

Jay Shree Tea & Inds. Ltd.

Registered office

Industry House,
10, Camac Street,
Calcutta, West Bengal
Pin 700017

Incorporation year : 1945

Ownership group : Birla B.K. Group

Main activity : Tea

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
Delhi Stock Exchange
National Stock Exchange

Plant Locatin/Product	Capacity/Units	Production/Units
1 Putaudi (Gurgaon, HAR)		
Superphosphate	50.04 '000 tonnes	25.77 '000 tonnes
Sulphuric acid	26.10 '000 tonnes	19.12 '000 tonnes
2 Magarwara (Unnao, UP)		
Superphosphate	54.59 '000 tonnes	28.12 '000 tonnes
Sulphuric acid	19.77 '000 tonnes	14.48 '000 tonnes
Sodium silico fluoride Tonnes	0.00	0.00
3 Liza Hill (Darjiling, WB)		
Black tea	0.00 '000 tonnes	0.08 '000 tonnes
4 Rishihat (Darjiling, WB)		

Black tea	0.00	0.21
	'000 tonnes	'000 tonnes

5 Khardah (North 24 Parganas, WB)

Superphospate	121.09	62.37
	'000 tonnes	'000 tonnes

Granulated single supe	34.00	32.95
	'000 tonnes	'000 tonnes

Sulphuric acid	49.83	36.33
	'000 tonnes	'000 tonnes

6 Burtoll (Cachar, ASS)

Black tea	18.00	1.55
	'000 tonnes	'000 tonnes

7 Dewan (Cachar, ASS)

Black tea	0.00	2.05
	'000 tonnes	'000 tonnes

8 Jallalpure (Cachar, ASS)

Black tea	0.00	0.65
	'000 tonnes	'000 tonnes

9 Kalline (Cachar, ASS)

Black tea	0.00	1.19
	'000 tonnes	'000 tonnes

10 Labac (Cachar, ASS)

Black tea	0.00	1.37
	'000 tonnes	'000 tonnes

11 Tukvar (Cachar, ASS)

Black tea	0.00	0.20
	'000 tonnes	'000 tonnes

12 Manani (Jorhat, ASS)

Plywood, finished	4000.00	627.61
	'000 sq.metres	'000 sq.metres

Semi-finished sawn tim	6000.00	565.00
Ber	Cubic metres	Cubic metres

13 Mangalam (Sibsagar, ASS)

Black tea	0.00	0.89
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	'000 tonnes	'000 tonnes
14 Manjushree (Sibsagar, ASS)		
Black tea	0.00	0.89
	'000 tonnes	'000 tonnes
15 Meteng (Sibsagar, ASS)		
Black tea	0.00	1.38
	'000 tonnes	'000 tonnes
16 Nahor Habi (Sibsagar, ASS)		
Black tea	0.00	1.11
	'000 tonnes	'000 tonnes
17 Towkok (Sibsagar, ASS)		
Black tea	0.00	1.64
	'000 tonnes	'000 tonnes
18 Middle Andamans (Andaman, AND)		
Plywood, finished	4000.00	627.61
	'000 sq.metres	'000 sq.metres
Vaneer	0.00	10.82
		'000 cu.metres
Semi-finished sawn timber	6000.00	565.00
	Cubic metres	Cubic metres
19 Kallayar (Coimbatore, TN)		
Black tea	0.00	1.05
	'000 tonnes	'000 tonnes
20 Sholayar (Coimbatore, TN)		
Black tea	0.00	1.40
	'000 tonnes	'000 tonnes

Executive Summary :

Financial Performance

Jay Shree Tea & Inds. Ltd.

Mar 1999

Non-Annualised

12mths

Rs. Crore

Gross sales	218.31
Net sales	203.48

VOP	208.14
Other income	10.27
Cost of production	124.08
Selling cost	15.13
PBDIT (NNRT)	50.67
PBDT (NNRT)	42.31
PBT (NNRT)	38.29
PAT (NNRT)	25.89
Cash profit (NNRT)	29.91
Operating cash flow	53.28
Gross value added	110.36
Exports	20.47
Imports	19.35
Gross fixed assets (net of reval & W	115.40
Current assets	120.94
Net worth	143.47
Equity capital	12.30
Long term borrowings	52.27
Capital employed	195.74
Current liabilities & provisions	36.64
Total assets / liabilities	
(net of reval & misc. exp. n.w.o)	231.34
Break-even sales (%)	53.53
Margin of safety (%)	46.47
Growth (%)	
Gross sales	-3.30
Net sales	-3.71
Cost of production	0.63
GFA	7.00
Total assets	14.98
Margins (%)	
PBDIT (NNRT) / Sales	23.21
PBDT (NNRT) / Sales	19.38
PAT (NNRT) / Sales	11.86
PBDIT (NNRT) / Net sales	24.90
PBDT (NNRT) / Net sales	20.79
PAT (NNRT) / Net sales	12.72

Returns ratios (%)

PAT / Net worth	19.56
PAT / Total assets	11.97
PBDIT / Total assets	23.43
PBDIT / Capital employed	28.23
Liquidity ratios	
Long term debt / equity (times)	
Total debt / equity (times)	0.39
Current ratio (times)	3.30
Interest cover (times)	5.58
Gross working capital cycle (days)	212
Net working capital cycle (days)	170
Avg. days of debtors (days)	66
Avg. days of creditors (days)	43
VOP / Total assets	0.962
VOP / GFA (times)	1.865
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

Income & Expenditure :

Jay Shree Tea & Inds. Ltd

.	Mar 1999
	12mths
Non-Annualised	Rs. Crore
Income	
Sales	
Manufacturing	218.31
Trading	195.71
Fiscal benefits	0.00
Internal transfers	14.51
Others	0.17
	7.92
Other income	
Dividend received	10.27
Interest earned	0.45
Miscellaneous income	7.66
	2.16
Change in stocks	
Finished goods	4.66
	3.84

Semi-finished goods	0.82
Non-recurring income	1.76
Gain on sale of assets	0.24
Gain on sales of investment	0.00
Provisions written back	0.00
Others	1.52
Expenditure	
Raw materials, stores, etc.	60.84
Raw materials	39.64
Stores & spares	8.74
Packaging expenses	5.38
Purchase of finished goods	7.08
Wages & salaries	59.30
Energy (power & fuel)	14.04
Other manufacturing expenses	2.10
Indirect taxes	14.83
Excise duties	0.00
Repairs & maintenance	7.60
Plant & machinery	2.39
Other repairs	5.21
Selling & distribution expenses	15.13
Advertising	0.00
Marketing	6.01
Distribution	8.32
Provision for doubtful/bad debts	0.80
Amortisation	0.00
Miscellaneous expenses	8.73
Non-recurring expenses	0.00
Loss on sale of assets	0.00
Loss on sale of investment	0.00
Others	0.00
Less: Expenses capitalised	0.00
Interest capitalised	0.00
PBDIT	52.43
Interest	8.36

On short term loans		2.49
On long term loans	5.87	
Lease rent		0.00
PBDT		44.07
Depreciation		4.02
PBT		40.05
Tax provision	12.40	
Corporate tax		12.40
Other direct taxes		0.00
PAT		27.65
Appropriation of profit		
Dividends		5.41
Equity dividends		4.92
Preference dividends	0.49	
Dividend Tax		0.00
Retained earnings		22.24
Cash profit		31.67
Cash flow from business activities		53.28
Net sales		203.48
Value of output		208.14
Gross value added		110.36

Jorehaut Group Ltd.

Registered office	Head / Corporate office
P.O. Cinnamara	26, Shakespeare Sarani
Jorhat	Calcutta
Assam	Pin 700017
Pin 785008	

Incorporation year : 1975

Ownership group : Private (Indian)

Main activity : Tea

Plant Location/product	Capacity/Units	Production/Units
1 Jorehat (Jorhat, ASS)		
Tea	0.00	3.17
		'000 tonnes

Executive Summary: Financial Performance

	Mar 1999
	12mths
Non-Annualised	Rs. Crore
Gross sales	31.07
Net sales	30.52
VOP	31.61
Other income	0.01
Cost of production	18.50
Selling cost	3.46
PBDIT (NNRT)	2.58
PBDT (NNRT)	0.92
PBT (NNRT)	0.59
PAT (NNRT)	0.39
Cash profit (NNRT)	0.72
Operating cash flow	0.00
Gross value added	18.73
Exports	0.00
Imports	0.23
Gross fixed assets (net of reval & W	11.23
Current assets	9.83

Net worth	3.87
Equity capital	0.50
Long term borrowings	1.15
Capital employed	5.02
Current liabilities & provisions	12.31
Total assets / liabilities (net of reval & misc. exp. n.w.o)	17.33
Break-even sales (%)	94.19
Margin of safety (%)	5.81
Growth (%)	
Gross sales	16.80
Net sales	16.85
Cost of production	21.52
GFA	7.98
Total assets	-7.77
Margins (%)	
PBDIT (NNRT) / Sales	8.30
PBDT (NNRT) / Sales	2.96
PAT (NNRT) / Sales	1.26
PBDIT (NNRT) / Net sales	8.45
PBDT (NNRT) / Net sales	3.01
PAT (NNRT) / Net sales	1.28
Returns ratios (%)	
PAT / Net worth	10.55
PAT / Total assets	2.16
PBDIT / Total assets	14.29
PBDIT / Capital employed	55.48
Liquidity ratios	
Long term debt / equity (times)	0.30
Total debt / equity (times)	1.75
Current ratio (times)	0.80
Interest cover (times)	1.36
Gross working capital cycle (days)	232
Net working capital cycle (days)	140
Avg. days of debtors (days)	2
Avg. days of creditors (days)	92
VOP / Total assets	1.750
VOP / GFA (times)	2.923
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

Income		
Sales		31.07
Manufacturing		31.07
Trading	0.00	
Fiscal benefits		0.00
Internal transfers		0.00
Others		0.00
Other income		0.01
Dividend received		0.00
Interest earned		0.01
Miscellaneous income		0.00
Change in stocks		1.09
Finished goods	1.09	
Semi-finished goods		0.00
Non-recurring income		0.00
Gain on sale of assets		0.00
Gain on sales of investment		0.00
Provisions written back	0.00	
Others		0.00
Expenditure		
Raw materials, stores, etc.		3.20
Raw materials		0.09
Stores & spares		3.11
Packaging expenses		0.00
Purchase of finished goods		0.00
Wages & salaries		15.88
Energy (power & fuel)	2.63	
Other manufacturing expenses	0.16	
Indirect taxes		0.55
Excise duties		0.10
Repairs & maintenance	2.06	
Plant & machinery		1.06
Other repairs		1.00
Selling & distribution expenses	3.46	
Advertising		0.00
Marketing		2.24
Distribution		1.22
Provision for doubtful/bad debts		0.00
Amortisation		0.00
Miscellaneous expenses		1.65
Non-recurring expenses		0.00
Loss on sale of assets		0.00

Loss on sale of investment		0.00
Others		0.00
Less: Expenses capitalised		0.00
Interest capitalised		0.00
PBDIT		2.58
Interest	1.41	
On short term loans		1.41
On long term loans		0.00
Lease rent		0.25
PBDT		0.92
Depreciation		0.33
PBT		0.59
Tax provision		0.20
Corporate tax		0.20
Other direct taxes		0.00
PAT		0.39
Appropriation of profit		
Dividends		0.04
Equity dividends		0.04
Preference dividends		0.00
Dividend Tax		0.00
Retained earnings		0.35
Cash profit		0.72
Cash flow from business activities		0.00
Net sales		30.52
Value of output	31.61	
Gross value added		18.73

Kothari Plantations & Inds. Ltd.

Registered office

8, India Exchange Place
Calcutta
Pin 700001

Incorporation year : 1897
Ownership group : **Private (Indian)**

Main activity : Tea

Plant Location/Product	Capacity/Units	Production/Units
1 D+lhabcherra (Cachar, ASS) Tea	0.00 '000 tonnes	0.92 '000tonnes
2 Arun (Darrang, ASS) Tea	0.00 '000 tonnes	0.51 '000 tonnes
3 D+erai (Darrang, ASS) Tea	0.00 '000 tonnes	1.27 '000 tonnes
4 Borkatonee (Sibsagar, ASS) Tea	4.50 '000 tonnes	0.41 '000 tonnes
5 Dooria (Sibsagar, ASS) Tea	0.00 '000 tonnes	0.63 '000 tonnes
6 Gorunga (Sibsagar, ASS) Tea	0.00 '000 tonnes	0.49 '000 tonnes
7 Madurai (Madurai, TN)		
Formaldehyde	6000.00 Tonnes	3344.03 Tonnes
Brucine sulphate	0.00 Tonnes	9.43 Tonnes
Chloropropamide	0.00 Tonnes	60.14 Tonnes
Rice bran extraction	55.00 '000 tonnes	13.20 '000 tonnes

Hexamine	1500.00	335.25
	Tonnes	Tonnes
Tolbutamide	0.00	24509.00
		Kgs
Calcium sennocides	200.00	8.70
	Tonnes	Tonnes
Proparanol hydrochloride	0.00	6185.00
		Kgs
Berberine extract	0.00	25150.00
		Kgs
Para toluene sulphonil urea	0.00	5.00
		Tonnes
Strychnine sulphate	0.00	341.00
		kgs
8 Nagarim Sholavandan (Madurai, TN)		
Edible oil	7.20	1.35
	'000 tonnes	'000 tonnes

Executive Summary: Financial Performance

Non-Annualised	Mar 1997 12mths Rs.Crore
Gross sales	56.09
Net sales	54.85
VOP	53.01
Other income	0.75
Cost of production	42.31
Selling cost	2.18
PBDIT (NNRT)	5.39
PBDT (NNRT)	2.08
PBT (NNRT)	0.26
PAT (NNRT)	0.23
Cash profit(NNRT)	2.05
Operating cash flow	4.63
Gross value added	16.12
Exports	6.91
Imports	0.91
Gross fixed assets (net of reval & W	31.69

Current assets	14.90
Net worth	10.75
Equity capital	3.84
Long term borrowings	8.82
Capital employed	19.57
Current liabilities & provisions	14.48
Total assets/liabilities (net of reval & misc. exp. n.w.o)	34.05
Break-even sales (%)	92.40
Margin of safety (%)	7.60
Growth (%)	
Gross sales	-7.84
Net sales	-7.28
Cost of production	-17.50
GFA	8.05
Total assets	-10.82
Margins (%)	
PBDIT (NNRT)/Sales	9.61
PBDT (NNRT)/Sales	3.71
PAT (NNRT)/Sales	0.41
PBDIT (NNRT)/Net sales	9.83
PBDT (NNRT)/Net sales	3.79
PAT (NNRT)/Net sales	0.42
Returns ratios (%)	
PAT/Net worth	2.14
PAT/Total assets	0.64
PBDIT/Total assets	14.92
PBDIT/Capital employed	28.09
Liquidity ratios	
Long term debt/equity (times)	0.82
Total debt/equity (times)	1.42
Current ratio (times)	1.03
Interest cover (times)	1.08
Gross working capital cycle (days)	175
Net working capital cycle (days)	123
Avg. days of debtors (days)	30
Avg. days of creditors (days)	52

VOP/Total assets		1.468
VOP/GFA (times)		1.737
Total R & D expenditure		0.00
R & D capital		0.00
R & D current		0.00
IncomeSales		56.09
Manufacturing		38.76
Trading		16.93
Fiscal benefits		0.26
Internal transfers		0.10
Others		0.04
Other income		0.75
Dividend received		0.01
Interest earned		0.52
Miscellaneous income		0.22
Change in stocks		-1.84
Finished goods	-2.05	
Semi-finished goods		0.21
Non-recurring income		0.14
Gain on sale of assets		0.00
Gain on sales of investment		0.00
Provisions written back	0.00	
Others		0.14
Expenditure		
Raw materials, stores, etc.		28.76
Raw materials		10.24
Stores & spares		2.83
Packaging expenses		0.00
Purchase of finished goods		15.69
Wages & salaries		10.68
Energy (power & fuel)	3.14	
Other manufacturing expenses	0.44	
Indirect taxes		1.24
Excise duties		1.16
Repairs & maintenance		1.29
Plant & machinery		0.88
Other repairs		0.41
Selling & distribution expenses		2.18
Advertising		0.00

Marketing		0.61
Distribution		1.57
Provision for doubtful/bad debts		0.00
Amortisation		0.00
Miscellaneous expenses		1.88
Non-recurring expenses		0.06
Loss on sale of assets		0.06
Loss on sale of investment		0.00
Others		0.00
Less: Expenses capitalised		0.00
Interest capitalised		0.00
PEDIT		5.47
Interest	3.31	
On short term loans		2.05
On long term loans		1.26
Lease rent		0.00
PBDT		2.16
Depreciation		1.82
PBT		0.34
Tax provision		0.03
Corporate tax		0.03
Other direct taxes		0.00
PAT		0.31
Appropriation of profit		
Dividends		0.29
Equity dividends		0.29
Preference dividends		0.00
Dividend Tax		0.03
Retained earnings		-0.01
Cash profit		2.13
Cash flow from business activities		4.63
Net sales		54.85
Value of output	53.01	
Gross value added		16.12

Mcleod Russel (India) Ltd. [Erstwhile]

Registered office

Four Mangoe Lane, (7th Floor)
Surendra Mohan Ghosh Sarani
Calcutta
Pin 700001

Incorporation year : 1976
Ownership group : Williamson Magor Group
Main activity : Tea & Coffee

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
Gauhati Stock Exchange
National Stock Exchange

Mcleod Russel (India) Ltd. was incorporated on 19 March, 1976 in the State of West Bengal as a public limited company. In pursuance of its objects the company became party to Seven Schemes of Arrangement for Amalgamation, whereby the assets, liabilities and undertakings in India of the Seven Sterling Companies (the names of which are set out below) had been merged with the company with effect from 1 January, 1977. Their assets in India as at the transfer date comprised inter-alia twelve tea estates of which area under cultivation was 6685.70 hectares. (1) The Bengal United Tea Co. Ltd. (2) The British Assam Tea Co. Ltd. (3) The Cachar & Doars Tea Co.Ltd. (4) The Gingia Tea Co.Ltd. (5) The Halem Tea Co. Ltd. (6) The Hunwal Tea Co. Ltd. and (7) The Imperial Tea Co. Ltd.

The total valuation of the undertaking of the seven Sterling Companies has however been fixed by the Reserve Bank of India. It made a public issue in 1978. In 1980 it made its Bonus Issue. The company presently has 21 Tea gardens of which 13 are in Assam and 8 are in West Bengal. The company has a polypack brand Premium Gold' in the domestic retail market. The Subsidiaries are: (1) Faith Investments Ltd., (2) Union Carbide India Ltd., (3) Nepal Battery Co.Ltd. and (4) Natex Marketing Ltd. The company belongs to Williamson Magor Group of companies which is headed by Mr.B.M. Khaitan.

Plant Location/Product	Capacity/Units	Production/Units
1 Glenburn (Darjiling, WB)		
Tea	0.00	0.14
	'000 tonnes	'000 tonnes
2 Lingia (Darjiling, WB)		

Tea	0.00		0.07
	'000 tonnes		'000 tonnes
3 Nagri Farm (Darjiling, WB)			
Tea	0.00		0.23
	'000 tonnes		'000 tonnes
4 Soom (Darjiling, WB)			
Tea	0.00		0.14
	'000 tonnes		'000 tonnes
5 Central Dooars (Jalpaiguri, WB)			
Tea	0.00		1.35
	'000 tonnes		'000 tonnes
6 Chuapara (Jalpaiguri, WB)			
Tea	0.00		1.26
	'000 tonnes		'000 tonnes
7 Jaint (Jalpaiguri, WB)	0.00		0.82
Tea	'	000 tonnes	'000 tonnes
8 Matelli (Jalpaiguri, WB)			
Tea	0.00		1.07
	'000 tonnes		'000 tonnes
9 Mathura (Jalpaiguri, WB)			
Tea	0.00		0.91
	'000 tonnes		'000 tonnes
10 Bhatpara (Koch Bihar, WB)			
Tea	0.00		0.94
	'000 tonnes		'000 tonnes
11 Bogapani (Dibrugarh, ASS)	0.00		1.83
Tea	'000 tonnes		'000 tonnes
12 Dehing (Dibrugarh, ASS)			
Tea	0.00		1.03
	'000 tonnes		'000 tonnes
13 Dirok (Dibrugarh, ASS)			
Tea	0.00		1.34
	'000 tonnes		'000 tonnes
14 Margherita (Dibrugarh, ASS)			
Tea	0.00		1.08
	'000 tonnes		'000 tonnes
15 Namdang (Dibrugarh, ASS)	0.00		1.41
Tea	'000 tonnes		'000 tonnes
16 Hunwal (Sibsagar, ASS)			
Tea	0.00		1.33
	'000 tonnes		'000 tonnes
17 Addabarie (Sonitpur, ASS)	28.99		1.51
Tea	'000 tonnes		'000 tonnes
18 Gingia (Sonitpur, ASS)			
Tea	0.00		0.82
	'000 tonnes		'000 tonnes
19 Halem (Sonitpur, ASS)			
Tea	0.00		0.97
	'000 tonnes		'000 tonnes
20 Monabarie (Sonitpur, ASS)	0.00		2.54

Tea		'000 tonnes		'000 tonnes
21 Nya Gogra (Sonitpur, ASS)	0.00		1.10	
Tea		'000 tonnes		'000 tonnes
22 Taraulie (Sonitpur, ASS)	0.00		0.88	
Tea		'000 tonnes		'000 tonnes
23 Tezpore & Gogra (Sonitpur, ASS)	0.00		0.93	
Tea		'000 tonnes		'000 tonnes

Executive Summary: Financial Performance

	Non-Annualised	Mar 1996 12mths Rs.Crore
Gross sales		145.74
Net sales		143.06
VOP		144.83
Other income		22.66
Cost of production		79.67
Selling cost		17.16
PBDIT (NNRT)		35.76
PBDT (NNRT)		8.55
PBT (NNRT)		3.80
PAT (NNRT)		3.80
Cash profit(NNRT)		12.31
Operating cash flow		18.23
Gross value added		100.42
Exports		39.55
Imports		5.43
Gross fixed assets (net of reval & W)		218.27
Current assets		153.89
Net worth		350.28
Equity capital		29.83
Long term borrowings		155.88
Capital employed		506.16
Current liabilities & provisions	119.85	
Total assets/liabilities (net of reval & misc. exp. n.w.o)		623.17
Break-even sales (%)		131.87
Margin of safety (%)		0.00

Growth (%)Gross sales	6.62
Net sales	6.86
Cost of production	14.02
GFA	10.61
Total assets	6.02

Margins (%)

PBDIT (NNRT)/Sales	24.54
PBDT (NNRT)/Sales	5.87
PAT (NNRT)/Sales	2.61
PBDIT (NNRT)/Net sales	25.00
PBDT (NNRT) / Net sales	5.98
PAT (NNRT) / Net sales	2.66

Returns ratios (%)

PAT / Net worth	1.53
PAT / Total assets	0.63
PBDIT / Total assets	5.91
PBDIT / Capital employed	6.87

Liquidity ratios

Long term debt / equity (times)	0.45
Total debt / equity (times)	0.65
Current ratio (times)	1.28
nterest cover (times)	1.14
Gross working capital cycle (days)	240
Net working capital cycle (days)	124
Avg. days of debtors (days)	19
Avg. days of creditors (days)	115
VOP / Total assets	0.239
VOP / GFA (times)	0.697

Total R & D expenditure	0.25
R & D capital	0.00
R & D current	0.25

Income & Expenditure: Russel (India) Ltd.

Non-Annualised	Mar 1996
	12mths

		Rs.Crore
Income		
Sales		145.74
Manufacturing		145.17
Trading	0.57	
Fiscal benefits		0.00
Internal transfers		0.00
Others		0.00
Other income		22.66
Dividend received		6.80
Interest earned		15.09
Miscellaneous income		0.77
Change in stocks		1.77
Finished goods	1.77	
Semi-finished goods		0.00
Non-recurring income		24.20
Gain on sale of assets		5.17
Gain on sales of investment		19.00
Provisions written back	0.03	
Others		0.00
Expenditure		
Raw materials, stores, etc.		13.81
Raw materials		0.00
Stores & spares		13.45
Packaging expenses		0.00
Purchase of finished goods		0.36
Wages & salaries		60.73
Energy (power & fuel)	13.91	
Other manufacturing expenses	1.61	
Indirect taxes		2.68
Excise duties		0.36
Repairs & maintenance	10.41	
Plant & machinery		3.08
Other repairs		7.33
Selling & distribution expenses	17.16	
Advertising		0.00
Marketing		4.67

Distribution		12.49
Provision for doubtful/bad debts		0.00
Amortisation		3.76
Miscellaneous expenses		10.34
Non-recurring expenses		0.00
Loss on sale of assets		0.00
Loss on sale of investment		0.00
Others		0.00
Less: Expenses capitalised		0.00
Interest capitalised		0.00
PBDIT		59.96
Interest	23.60	
On short term loans		21.55
On long term loans		2.05
Lease rent		3.61
PBDT		32.75
Depreciation		4.75
PBT		28.00
Tax provision		0.00
Corporate tax		0.00
Other direct taxes		0.00
PAT		28.00
Appropriation of profit		
Dividends		12.01
Equity dividends		12.01
reference dividends		0.00
Dividend Tax		0.00
Retained earnings		15.99
Cash profit		36.51
Cash flow from business activities		18.23
Net sales		143.06
Value of output	144.83	
Gross value added		100.42

Kamrup Roofings Ltd.

Registered office

Saraf Building Annexe, 2nd Floor,
A. T. Road, Guwahati,
Pin 781001
Assam

Incorporation year : 1986
Ownership group : Private (Indian)
Main activity : Finished steel

Listed on :

Executive Summary : Financial Performance

Kamrup Roofings Ltd.

Mar 1999

	<i>Non-Annualised</i>	12mths Rs. Crore
Gross sales		21.48
Net sales		18.59
VOP		17.91
Other income		0.03
Cost of production		16.05
Selling cost		0.17
PBDIT (NNRT)		1.60
PBDT (NNRT)		0.39
PBT (NNRT)		0.21
PAT (NNRT)		0.21
Cash profit(NNRT)		0.39
Operating cash flow		0.00
Gross value added		2.14
Exports		0.00
Imports		0.00
Gross fixed assets (net of reval & W		3.63
Current assets		13.07
Net worth		0.61
Equity capital		3.00
Long term borrowings	3.95	
Capital employed		4.56
Current liabilities & provisions	9.43	

Total assets / liabilities (<i>net of reval & misc. exp. n.w.o</i>)		13.99
Break-even sales (%)		34.97
Margin of safety (%)		65.03
Growth (%)		
Gross sales		16.42
Net sales		15.47
Cost of production		14.27
GFA		0.28
Total assets		1.45
Margins (%)		
PBDIT (NNRT) / Sales		7.45
PBDT (NNRT) / Sales	1.82	
PAT (NNRT) / Sales		0.98
PBDIT (NNRT) / Net sales		8.61
PBDT (NNRT) / Net sales		2.10
PAT (NNRT) / Net sales		1.13
Returns ratios (%)		
PAT / Net worth		41.58
PAT / Total assets		1.51
PBDIT / Total assets		11.52
PBDIT / Capital employed		36.91
Liquidity ratios		
Long term debt / equity (times)	6.48	
Total debt / equity (times)		12.33
Current ratio (times)		1.39
Interest cover (times)		1.17
Gross working capital cycle (days)		175
Net working capital cycle (days)		80
Avg. days of debtors (days)		99
Avg. days of creditors (days)		96
VOP / Total assets		1.289
VOP / GFA (times)		4.941
Total R & D expenditure		0.00
R & D capital		0.00
R & D current		0.00

Income & Expenditure :	Kamrup Roofings Ltd.	Mar 1999
		12mths
<i>Non-Annualised</i>		<i>Rs. Crore</i>
Income		
Sales		21.48
Manufacturing		21.44
Trading	0.00	
Fiscal benefits		0.04
Internal transfers		0.00
Others -		0.00
Other income		0.03
Dividend received		0.00
Interest earned		0.00
Miscellaneous income		0.03
Change in stocks		-0.68
Non-recurring income		0.00
Gain on sale of assets		0.00
Gain on sales of investment		0.00
Provisions written back	0.00	
Others		0.00
Expenditure		
Raw materials, stores, etc.		15.11
Raw materials		14.80
Stores & spares		0.22
Packaging expenses		0.00
Purchase of finished goods		0.09
Wages & salaries		0.52
Energy (power & fuel)	0.25	
Other manufacturing expenses	0.02	
Indirect taxes		2.89
Excise duties		2.88
Repairs & maintenance		0.01
Plant & machinery		0.00
Other repairs		0.01
Selling & distribution expenses		0.17
Advertising		0.00
Marketing		0.09
Distribution		0.00

Provision for doubtful/bad debts		0.08
Amortisation		0.00
Miscellaneous expenses		0.26
Non-recurring expenses		0.00
Loss on sale of assets		0.00
Loss on sale of investment		0.00
Others		0.00
Less: Expenses capitalised		0.00
<i>Interest capitalised</i>		0.00
PBDIT		1.60
Interest	1.21	
On short term loans		0.04
On long term loans		1.17
Lease rent		0.00
PBDT		0.39
Depreciation		0.18
PBT		0.21
Tax provision		0.00
Corporate tax		0.00
Other direct taxes		0.00
PAT		0.21
Appropriation of profit		
Dividends		0.00
Equity dividends		0.00
Preference dividends		0.00
Dividend Tax		0.00
Retained earnings		0.21
Cash profit		0.39
Cash flow from business activities		0.00
Net sales		18.59
Value of output	17.91	
Gross value added		2.14

Annexure – 2
U F M Industriess Ltd.

Registered office

Meherpur,
Silchar,
Assam.
Pin 788015

Incorporation year : 1986

Ownership group : Private (Indian)

Main activity : Bakery & milling products

Listed on :

Ahmedabad Stock Exchange
Bombay Stock Exchange
Calcutta Stock Exchange
Gauhati Stock Exchange

The company was incorporated in 1986, to takeover the flour mills known as Union Flour Mills. The company is engaged in the business of wheat processing. The company processes wheat to produce atta, maida, bran and suji, The Company sells its products under the brand name ``Harvest''. The company's mills are located at Silchar(Assam).

In 1996, the company made its IPO to part finance its wheat processing project at Gauripur at Silchar (Assam). The project started its commercial production in March 1996.

	Plant Location	Production
Silchar (Cachar, Ass)		
Maida	114.00 `000 tonnes	17.92 `000 tonnes
Atta	0.00	15.55 `000 tonnes
Bran	0.00	7.95 `000 tonnes
Suji	0.00	0.62 `000 tonnes
Refraction	0.00	599.00 tonnes

Income & Expenditure:

U F M Industries Ltd.	Mar 1996	Mar 1997
	12mths	12mths
		Rs.Crore
Income		
Sales	22.52	26.01
Manufacturing	22.38	25.89
Trading	0.00	0.00
Fiscal benefits	0.00	0.00
Internal transfers	0.00	0.00
Others	0.14	0.12
Other income	0.09	0.04
Dividend received	0.00	0.00
Interest earned	0.06	0.01
Miscellaneous income	0.03	0.03
Change in stocks	0.08	-0.05
Finished goods	0.08	-0.05
Semi-finished goods	0.00	0.00
Non-recurring income	0.00	0.00
Gain on sale of assets	0.00	0.00
Gain on sales of investment	0.00	0.00
Provisions written back	0.00	0.00
Others	0.00	0.00
Expenditure		
Raw metherials, stores, etc.	20.11	23.63
Raw materials	19.76	23.04
stores & spares	0.16	0.30
Packaging expenses	0.19	0.29
Purchase of finished goods	0.00	0.00
Wages & salaries	0.26	0.28
Energy (power & fuel)	0.85	0.75
Otehr manufacturing expenses	0.08	0.05
Indiredt taxes	0.00	0.00
Excise duties	0.00	0.00

Repairs & maintenance	0.01		0.03
Plant & machinery	0.01		0.01
Other repairs	0.00		0.02
Selling & distribution expenses	0.03		0.01
Advertising	0.03		0.01
Marketing	0.00		0.00
Distribution	0.00		0.00
Provision for doubtful/bad debts	0.00		0.00
Amortisation	0.02		0.02
Miscellaneous expenses	0.16		0.14
Non-recurring expenses	0.00		0.00
Loss on sale of assets	0.00		0.00
Loss on sale of investment	0.00		0.00
Others	0.00		0.00
Less: Expenses capitalised	0.00		0.00
Interest capitalised	0.00		0.00
PBDIT	1.17		1.09
Interest	0.57	0.48	
On short term loans	0.12		0.18
On long term loans	0.45		0.30
Lease rent	0.05		0.06
PBDT	0.55		0.55
Depreciation	0.30		0.41
PBT	0.25		0.14
Tax provision	0.00		0.04
Corporate tax	0.00		0.04
Other direct taxes	0.00		0.00
PAT	0.25		0.10
Appropriation of profit			
Dividends	0.00		0.00
Equity dividends	0.00		0.00
Preference dividends	0.00		0.00
Dividend Tax	0.00		0.00
Retained earnings	0.25		0.10
Cash profit	0.57		0.53
Cash flow from business activities	1.67		1.35
Net sales	22.52		26.01
Value of output	22.60	25.96	
Gross value added	1.18		1.13

Gross sales		22.52		26.01
Net sales		22.52		26.01
VOP		22.60		25.96
Other income		0.09		0.04
Cost of production		21.53		25.05
Selling cost		0.03		0.01
PBDIT (NNRT)		1.77		1.09
PBDIT (NNRT)		0.55		0.55
PBT (NNRT)		0.25		01.4
PAT (NNRT)		0.25		0.10
Cash profit(NNRT)		0.57		0.53
Operating cash flow		1.67		1.35
Gross value added		1.48		1.43
Exports		0.00		0.00
Imports		0.00		0.28
Gross fixed assets (net of reval & W)		6.29		6.87
Current assets		6.40		5.02
Net worth		8.02		8.71
Equity caital		4.00		4.43
Long term borrowings	2.06		1.16	
Capital employed		10.08		9.87
Current liabilities & provisions	0.84		0.22	
Total assents / liabilities (net of reval & misc. exp. n. w. o)		10.91		10.03
Break-even sales (%)		54.41		69.56
Margin of safety (%)		45.59		30.44
Growth (%)				
Gross sales		16.62		15.50
Net sales		16.74		15.50
Cost of production		26.88		16.32
GFA		3.97		9.22
Total assets		13.53		-8.07
Margins (%)				
PBDIT (NNRT) / Sales		5.20		4.19
PBDT (NNRT) / Sales	2.44		2.11	
PAT (NNRT) / Sales		1.11		0.38
PBDIT (NNRT) / Net sales		5.20		4.19
PBDT (NNRT) / Net sales		2.44		2.11
PAT (NNRT) / Net slaes		1.11		0.38
Returns ratios (%)				
PAT / Net worth		3.66		1.20

PAT / Total assets	2.44	0.96
PBDIT / Total assets	11.40	10.41
PBDIT / Capital employed	12.64	10.93

Liquidity ratios

Long term debt / equity (times)	0.26	0.13
Total debt / equity (times)	0.33	0.13
Current ratio (times)	7.62	22.82
Interest cover (times)	1.40	1.26
Gross working capital cycle (days)	53	38
Net working capital cycle (days)	49	35
Avg. days of debtors (days)	17	16
Aug. days of creditors (days)	4	3
VOP / Total assets	2.203	2.479
VOP / GFA (times)	3.663	3.945
Total R & D expenditure	0.00	0.00
R & D capital	0.00	0.00
R & D current	0.00	0.00

Assam Carbon Products Ltd.

Registered office

Birkuchi,
Guwahati,
Assam
Pin 781026

Head / Corporate office

Everest House
46-C, Chowringhee Road
Calcutta, West Bengal
Pin 700071

Incorporation year : 1962
Ownership group : Private (Indian)
Main activity : Lubricants, etc.
Listed on :

Plant Locations

Location/Products	Capacity/ Units	Production/ Units
1 Birkuchi (Kamrup, ASS)		
Electrical carbon brushes	2500.00 <i>'000 nos</i>	2420.19 <i>'000 nos</i>
EG & RB Carbon blocks	125.00 <i>Tonnes</i>	118.59 <i>Tonnes</i>
MG & SG Carbon blocks	125.50 <i>Tonnes</i>	92.77 <i>Tonnes</i>
2 Patancheru (Medak, AP)		
Machined & special carbon components	700.00 <i>'000 nos</i>	302.26 <i>'000 nos</i>
Iso-Graphite components	36.00 <i>'000 nos</i>	35.25 <i>'000 nos</i>
Mechanical & sp. Carbon block & blanks	90.00 <i>Tonnes</i>	23.66 <i>Tonnes</i>

Product/s Manufactured/	Capacity Quantity	Production /Units	Sales /Units	Sales /Units Rs.Crore Mar 1999
EG & RB Carbon blocks	125.00 Tonnes	118.60 Tonnes	70.90 Tonnes	6.89
MG & SG Carbon blocks	125.50 Tonnes	92.78 Tonnes	77.28 Tonnes	2.98
Electrical carbon brushes	2500.00 '000 nos	2420.19 '000 nos	2404.24 '000 nos	14.30
Machined & special carbon components	700.00 '000 nos	302.27 '000 nos	385.25 '000 nos	2.64

Mechanical & sp.	90.00		23.66	3.26	0.84
carbon blocks & blank	Tonnes		Tonnes	Tonnes	
Iso-Graphite	36.00		35.26	35.17	0.92
components	'000 nos		'000 nos	'000 nos	
Copper moulding &	0.08		0.06	0.00	0.31
linking powder	'000 tonnes		'000 tonnes	'000 tonnes	
NH Coke	200.00		138.04	72.00	0.96
	Tonnes		Tonnes	Tonnes	
Commutator Maintenance	0.00	0.00	0.97	0.11	
Accessories				'000 nos	
Miscellaneous Sales	0.00	0.00	0.00	0.00	0.01

*Income & Expenditure***Mar 1999**
12mths
Rs.Crore

IncomeSales		29.98
Manufacturing		28.76
Trading	1.19	
Fiscal benefits		0.02
Internal transfers		0.00
Others		0.01
Other income		0.10
Dividend received		0.00
Interest earned		0.02
Miscellaneous income		0.08
Change in stocks		0.48
Finished goods	0.30	
Semi-finished goods		0.18
Non-recurring income		0.01
Gain on sale of assets		0.00
Gain on sales of investment		0.00
Provisions written back	0.00	
Others		0.01
Expenditure		
Raw materials, stores, etc.		7.31
Raw materials		5.60
Stores & spares		0.78
Packaging expenses		0.00
Purchase of finished goods		0.93
Wages & salaries		6.41
Energy (power & fuel)	1.44	
Other manufacturing expenses	0.47	
Indirect taxes		4.07
Excise duties		4.04
Repairs & maintenance		0.66
Plant & machinery		0.46
Other repairs		0.20
Selling & distribution expenses		1.14
Advertising		0.03
Marketing		0.66
Distribution		0.37
Provision for doubtful/bad debts		0.08

Amortisation		0.00
Miscellaneous expenses		3.65
Non-recurring expenses		0.01
Loss on sale of assets		0.01
Loss on sale of investment		0.00
Others		0.00
Less: Expenses capitalised		0.00
<i>Interest capitalised</i>		0.00
PBDIT		5.41
Interest	1.06	
On short term loans		0.83
On long term loans		0.23
Lease rent		0.00
PBDT		4.35
Depreciation		0.53
PBT		3.82
Tax provision		1.30
Corporate tax		1.30
Other direct taxes		0.00
PAT		2.52
Appropriation of profit		
Dividends		1.27
Equity dividends		1.27
Preference dividends		0.00
Dividend Tax		0.14
Retained earnings		1.11
Cash profit		3.05
Cash flow from business activities		4.81
Net sales		25.91
Value of output	26.39	
Cross value added		12.10

Executive Summary:

	Mar 1999
	12mths
	Rs.Crore
Gross sales	29.98
Net sales	25.91
VOP	26.39
Other income	0.10
Cost of production	14.52
Selling cost	1.14
PBDIT (NNRT)	5.41
PBDT (NNRT)	4.35
PBT (NNRT)	3.82
PAT (NNRT)	2.52
Cash profit(NNRT)	3.05
Operating cash flow	4.81
Gross value added	12.10
Exports	1.11
Imports	2.44
Gross fixed assets (net of reval & W)	11.76
Current assets	20.06
Net worth	7.46
Equity capital	2.83
Long term borrowing	2.55
Capital employed	10.01
Current liabilities & provisions	15.74
Total assets / liabilities (net of reval & misc. exp. n.w.o)	23.11
Break-even sales (%)	64.62
Margin of safety (%)	35.38
Growth (%)	
Gross sales	20.98
Net sales	21.36
Cost of production	17.38
GFA	5.28
Total assets	14.12
Margins (%)	
PBDIT (NNRT) / Sales	18.05
PBDT (NNRT) / Sales	14.51
PAT (NNRT) / Sales	8.41
PBDIT (NNRT) / Net sales	20.88
PBDT (NNRT) / Net sales	16.79
PAT (NNRT) / Net sales	9.73

Returns ratios (%)PAT / Net worth	36.47
PAT / Total assets	11.62
PBDIT / Total assets	24.95
PBDIT / Capital employed	56.83
Liquidity ratios Long term debt / equity (times)	0.34
Total debt / equity (times)	0.84
Current ratio (times)	1.27
Interest cover (times)	4.60
Gross working capital cycle (days)	339
Net working capital cycle (days)	217
Avg. days of debtors (days)	113
Avg. days of creditors (days)	122
VOP / Total assets	1.217
VOP / GFA (times)	2.302
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

Tata Tea Ltd.

Registered office

1, Bishop Lefroy Road,
Calcutta
West Bengal
Pin 700020

Incorporation year : 1962

Ownership group : Tata Tea Group

Main activity : Tea

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
London Stock Exchange
National Stock Exchange

Tata Tea was incorporated in 1962 as Tata-Finlay Private Ltd and became a public limited company in the following year. It was set up by the Tatas under a technical and financial collaboration agreement with James Finlay & Co Ltd, UK. This agreement expired in 1971. The packet tea plant was commissioned in 1964 and the instant tea plant commenced production in 1965.

The Tatas had a 40 per cent stake in Tata Finaly Ltd. Subsequent to the expiry of the collaboration agreement, the overseas company sold off its entire stake to Tata Industries in 1982. After the sale of equity holdings, the name of the company was changed to Tata Tea during 1983.

In 1976, Tata Tea expanded its business operations after it acquired the business of James Finlay & Co and its seven associate tea companies operating in India. During 1985, the company set up a tea factory at Chundavurrai tea estate in Kerala with a capacity to process 4.5 to 5 million kg of black tea per annum.

In 1984, it floated an investment company as a 100 per cent owned subsidiary called Bambino Investment & Trading Co Pvt Ltd. In 1986, Tata Tea set up a 100 per cent subsidiary in the US, Tata Tea Inc, after acquiring the instant tea processing facilities of Tritea Inc, USA. During 1990-91, Consolidated Coffee Ltd, along with its two subsidiaries, became subsidiaries of Tata Tea.

In 1993, it set up Tata Tetley Ltd, a joint venture company with the Lyons Tetley group of UK, in Cochin. In March 2000, Tata Tea acquired the world-wide tea business of UK based tea major Tetley Tea for a consideration of 270 million pounds (Rs 1,890 crore). In the same

month, Tata Tea had made its Global Depository Receipt issue for part- funding this acquisition. It had issued 75.98 lakh GDRs at \$9.87 (Rs 430) per GDR. Tata Tea's acquisition of Tetley is expected to provide the company access to markets in North America, Europe and Australia. The company also set up a wholly-owned subsidiary, Tata Tea, Great Britain for the purpose of acquiring the UK firm.

Plant Location

Location/Products	Capacity/Units	Production/Units
1. Ghaziabad (Ghaziabad, UP)		
Packet tea & instant Tea	0.00 '000 tonnes	0.00 '000 tonnes
2 Dooars Region (West Bengal, WB)		
Tea	0.00	4.41 '000 tonnes
3 Jorhat & Golaghat (Assam, ASS)		
Tea	0.00	6.39 '000 tonnes
4 North Bank (Assam, ASS)		
Tea	0.00	5.48 '000 tonnes
5 Nowgong (Assam, ASS)		
Tea	0.00	4.11 '000 tonnes
6 Upper Assam (Assam, ASS)		
Tea	0.00	8.66 '000 tonnes
7 Bangalore (Bangalore, KAR)		
Packet tea & instant Tea	5.35 '000 tonnes	24.54 '000 tonnes
8 Kerala (Kerala, KER)		
Tea	0.00	27.14 '000 tonnes
9 Munnar (Idukki, KER)		

Pepper	0.00	1629.00 Tonnes
Packet tea & instant Tea	0.00 '000 tonnes	0.00 '000 tonnes
10 Tamil Nadu (Tamil Nadu, TN)		
Tea	0.00	4.90 '000 tonnes
11 Coimbatore (Coimbatore, TN)		
Packet tea & instant Tea	0.00 '000 tonnes	0.00 '000 tonnes
12 Valparai (Coimbatore, TN)		
Coffee	0.00	0.54 '000 tonnes
13 Valparai, Pachaimallai, Pannimade (Coimbatore, TN)		
Cardamom	0.00	38.00 Tonnes

Income & Expenditure	Mar 1999	Mar 2000
	12mths	12mths
	Rs. Crore	
Income		
Sales	876.02	913.39
Manufacturing	868.47	906.38
Trading	0.55	0.45
Fiscal benefits	1.79	0.93
Internal transfers	0.00	0.00
Others	5.21	5.63
Other income	38.53	61.07
Dividend received	16.47	38.36
Interest earned	14.72	14.91
Miscellaneous income	7.34	7.80
Change in stocks	31.70	-3.61
Finished goods	31.67	-3.62
Semi-finished goods	0.03	0.01
Non-recurring income	1.35	10.64
Gain on sale of assets	0.00	0.04
Gain on sales of investment	0.00	9.71
Provisions written back	1.35	0.89
Others	0.00	0.00
Expenditure		
Raw materials, stores, etc.	232.18	271.33
Raw materials	140.14	202.83
Stores & spares	1.74	1.57
Packaging expenses	54.90	60.36
Purchase of finished goods	35.40	6.57
Wages & salaries	132.00	153.37
Energy (power & fuel)	30.72	33.61
Other manufacturing expenses	105.95	115.15
Indirect taxes	32.96	18.37
Excise duties	27.58	13.20
Repairs & maintenance	30.86	29.72
Plant & machinery	19.43	19.95
Other repairs	11.43	9.77
Selling & distribution expenses	102.16	100.94
Advertising	73.47	68.19
Marketing	8.55	8.80
Distribution	17.10	15.37

Provision for doubtful/bad debts	3.04	8.58
Amortisation	0.00	0.00
Miscellaneous expenses	45.47	42.76
Non-recurring expenses	0.08	0.00
Loss on sale of assets	0.08	0.00
Loss on sale of investment	0.00	0.00
Others	0.00	0.00
Less: Expenses capitalised	0.00	0.00
Interest capitalised	0.00	0.00
PBDIT	235.22	216.24
Interest	32.79	32.52
On short term loans	1.79	2.83
On long term loans	31.00	29.69
Lease rent	0.00	0.00
PBDT	202.43	183.72
Depreciation	17.67	18.65
PBT	184.76	165.07
Tax provision	56.00	40.50
Corporate tax	25.00	20.60
Other direct taxes	31.00	19.90
PAT	128.76	124.57
Appropriation of profit		
Dividends	53.49	49.57
Equity dividends	53.49	49.57
Preference dividends	0.00	0.00
Dividend Tax	5.89	5.45
Retained earnings	69.38	69.55
Cash profit	146.43	143.22
Cash flow from business activities	166.40	107.02
Net sales	843.06	895.02
Value of output	874.76	891.41
Gross value added	970.53	363.94

Executive Summary

	Mar 1999 12mths	Mar 2000 12mths
	Rs. Crore	
Gross sales	876.02	913.39
Net sales	843.06	895.02
VOP	874.76	891.41
Other income	38.53	61.07
Cost of production	498.32	566.04
Selling cost	102.16	100.94
PBDIT (NNRT)	233.95	205.60
PBDT (NNRT)	201.16	173.08
PBT (NNRT)	183.49	154.43
PAT (NNRT)	127.49	113.93
Cash profit (NNRT)	145.16	132.58
Operating cash flow	166.40	107.02
Gross value added	370.53	363.94
Exports	143.99	98.05
Imports	14.49	6.03
Gross fixed assets (net of reval & W)	337.50	410.88
Current assets	377.07	425.15
Net worth	448.41	830.24
Equity capital	48.62	56.22
Long term borrowings	190.80	217.91
Capital employed	639.21	1048.15
Current liabilities & provisions	247.71	282.64
Total assets / liabilities (net of reval & misc. exp. n.w.o)	885.46	1328.29
Break-even sales (%)	40.34	51.10
Margin of safety (%)	59.66	48.90
Growth (%)		
Gross sales	0.50	4.27
Net sales	-2.53	6.16
Cost of production	-6.02	13.59
GFA	0.56	21.74
Total assets	6.45	50.01
Margins (%)		
PBDIT (NNRT) / Sales	26.71	22.51
PBDT (NNRT) / Sales	22.96	18.95

PAT (NNRT) / Sales	14.55	12.47
PBDIT (NNRT) / Net sales	27.75	22.97
PBDT (NNRT) / Net sales	23.86	19.34
PAT (NNRT) / Net sales	15.12	12.73

Returns ratios (%)

PAT / Net worth	30.82	17.82
PAT / Total assets	14.85	10.29
PBDIT / Total assets	27.25	18.57
PBDIT / Capital employed	37.64	24.37

Liquidity ratios

Long term debt / equity (times)	0.43	0.26
Total debt / equity (times)	0.53	0.32
Current ratio (times)	1.52	1.50
Interest cover (times)	6.60	5.75

Gross working capital cycle (days)	185	185
Net working capital cycle (days)	126	119
Avg. days of debtors (days)	35	33
Avg. days of creditors (days)	59	66
VOP / Total assets	1.019	0.805
VOP / GFA (times)	2.599	2.382

Total R & D expenditure	4.64	5.08
R & D capital	1.99	1.50
R & D current	2.65	3.58

Arunachal Plywood Inds. Ltd.

Registered office

Poddar Point
113, Park Street
CalcuttaPin 700016

Incorporation year : 1918
Ownership group : Private (Indian)
Main activity : Wood

Plant Location

Location/Products	Capacity/ Units	Production/ Units
1 Namsai, Nefa (Lohit, ARU)		
Plywood	10765.00 <i>'000 sq.metres</i>	3071.65 <i>'000 sq.metres</i>
Sawn timber	0.00	2804.00 <i>Cubic metres</i>
U.F. solution	1200.00 <i>Tonnes</i>	916.26 <i>Tonnes</i>

Products Details

Product/s Manufactured/ Traded	Capacity /Units	Production /Units	Sales Quantity /Units	Sales Rs. Crore	Purchase Value Rs. Crore
					Mar 1999
Plywood	10765.00 <i>'000 sq.metres</i>	0.00 <i>'000 sq.metres</i>	0.34 <i>'000 cu.metres</i>	0.75	0
Sawn timber	0.00	0.00 <i>Cubic metres</i>	33.29 <i>Cubic metres</i>	0.03	0.
Veneer	0.00	0.00	67.89 <i>'000 cu.metres</i>	0.09	0.
Logs	0.00	0.00	0.07 <i>'000 cu.metres</i>	0.09	2.

Income & Expenditure:

	Mar 1995	Mar 1996
	12mths	12mths
		<i>Rs. Crore</i>
IncomeSales	16.20	19.54
Manufacturing	14.80	19.45
Trading	0.00	0.00
Fiscal benefits	0.00	0.00
Internal transfers	0.07	0.09
Others	1.33	-0.00
Other income	0.07	0.11
Dividend received	0.00	0.00
Interest earned	0.05	0.11
Miscellaneous income	0.02	0.00
Change in stocks	0.58	-0.35
Finished goods	0.36	-0.13
Semi-finished goods	0.22	-0.22
Non-recurring income	0.30	0.62
Gain on sale of assets	0.27	0.57
Gain on sales of investment	0.00	0.00
Provisions written back	0.00	0.00
Others	0.03	0.05
Expenditure		
Raw materials, stores, etc.	7.74	7.24
Raw materials	7.42	6.68
Stores & spares	0.31	0.56
Packaging expenses	0.01	0.00
Purchase of finished goods	0.00	0.00
Wages & salaries	1.21	1.29
Energy (power & fuel)	0.51	0.72
Other manufacturing expenses	0.50	0.53
Indirect taxes	1.81	2.51
Excise duties	1.75	2.43
Repairs & maintenance	0.29	0.33
Plant & machinery	0.13	0.16
Other repairs	0.16	0.17
Selling & distribution expenses	1.79	2.65
Advertising	0.00	0.00
Marketing	0.13	0.18

Distribution	1.66		2.47
Provision for doubtful/bad debts	0.00		0.00
Amortisation	0.00		0.00
Miscellaneous expenses	0.72		1.08
Non-recurring expenses	0.01		0.12
Loss on sale of assets	0.01		0.01
Loss on sale of investment	0.00		0.00
Others	0.00		0.11
Less: Expenses capitalised	0.00		0.00
<i>Interest capitalised</i>	0.00		0.00
PBDIT	2.57		3.45
Interest	0.78		1.36
On short term loans	0.41		0.72
On long term loans	0.37		0.64
Lease rent	0.07		0.34
PBDT	1.72		1.75
Depreciation	0.23		0.32
PBT	1.49		1.43
Tax provision	0.46		0.00
Corporate tax	0.46		0.00
Other direct taxes	0.00		0.00
PAT	1.03		1.43
Appropriation of profit			
Dividends	0.15		0.32
Equity dividends	0.14		0.31
Preference dividends	0.01		0.01
Dividend Tax	0.00		0.00
Retained earnings	0.88		1.11
Cash profit	1.26		1.75
Cash flow from business activities	0.82		0.73
Net sales	14.39		17.03
Value of output	14.97		16.68
Gross value added	3.57		4.00
Executive Summary:			
Gross sales	16.20		19.54
Net sales	14.39		17.03
VOP	14.97		16.68
Other income	0.07		0.11
Cost of production	9.74		10.09
Selling cost	1.79		2.65

PBDIT (NNRT)	2.28	2.95
PBDT (NNRT)	1.43	1.25
PBT (NNRT)	1.20	0.93
PAT (NNRT)	0.74	0.93
Cash profit(NNRT)	0.97	1.25
Operating cash flow	0.82	0.73
Gross value added	3.57	4.60
Exports	0.00	0.20
Imports	0.11	0.09
Gross fixed assets (net of reval & W	8.36	9.28
Current assets	9.93	12.36
Net worth	4.22	4.36
Equity capital	0.62	1.56
Long term borrowings	3.11	4.71
Capital employed	7.33	9.07
Current liabilities & provisions	7.22	8.29
Total assets / liabilities (<i>net of reval & misc. exp. n.w.o</i>)	14.55	17.36
Break-even sales (%)	56.56	67.39
Margin of safety (%)	43.44	32.61
Growth (%)		
Gross sales	8.33	20.58
Net sales	5.68	18.30
Cost of production	8.88	3.66
GFA	18.41	11.00
Total assets	22.68	19.31
Margins (%)		
PBDIT (NNRT) / Sales	14.07	15.10
PBDT (NNRT) / Sales	8.83	6.40
PAT (NNRT) / Sales	4.57	4.76
PBDIT (NNRT) / Net sales	15.84	17.32
PBDT (NNRT) / Net sales	9.94	7.34
PAT (NNRT) / Net sales	5.14	5.46
Returns ratios (%)		
PAT / Net worth	19.55	21.68
PAT / Total assets	5.60	5.83
PBDIT / Total assets	17.27	18.49
PBDIT / Capital employed	35.54	36.24

Liquidity ratios

Long term debt / equity (times)	0.74	1.08	
Total debt / equity (times)	1.61	1.97	
Current ratio (times)	1.38	1.49	
Interest cover (times)	2.41	1.55	
Gross working capital cycle (days)	313	306	
Net working capital cycle (days)	251	239	
Avg. days of debtors (days)	55	66	
Avg. days of creditors (days)	62	67	
VOP / Total assets	1.134	1.045	
VOP / GFA (times)	1.942	1.891	
Total R & D expenditure	0.00	0.00	
R & D capital	0.00	0.00	
R & D current		0.00	0.00

Eastern Mining & Allied Inds. Ltd.

Registered office

Nongrim Hills,
Shillong,
Meghalaya
Pin 793003

Incorporation year : 1985

Ownership group : Private (Indian)

Main activity : Coal & lignite

Listed on :

Ahmedabad Stock Exchange
Bombay Stock Exchange
Delhi Stock Exchange
Gauhati Stock Exchange
Jaipur Stock Exchange
National Stock Exchange

1 Meghalaya (Meghalaya, MEG)

Coal	480000.00 Tonnes	272225.79 Tonnes
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Product/s Manufactured/ Traded	Capacity /Units	Production /Units	Sales Quantity /Units	Sales Rs. Crore	Purchase Value Rs. Crore
					Mar 1998
Coal	480000.00 Tonnes	272225.80 Tonnes	261605.62 Tonnes	22.45	0.

Income & Expenditure

	Mar 1997 12mths	Mar 1998 12mths
	Rs. Crore	
Income		
Sales	20.03	22.45
Manufacturing	20.03	22.45
Trading	0.00	0.00
Fiscal benefits	0.00	0.00
Internal transfers	0.00	0.00
Others	0.00	0.00
Other income	0.04	0.03
Dividend received	0.00	0.00
Interest earned	0.00	0.00
Miscellaneous income	0.04	0.03
Change in stocks	2.57	0.02
Finished goods	2.57	0.02
Semi-finished goods	0.00	0.00
Non-recurring income	0.00	0.00
Expenditure		
Raw materials, stores, etc.	0.03	2.33
Raw materials	0.00	0.00
Stores & spares	0.03	2.33
Packaging expenses	0.00	0.00
Purchase of finished goods	0.00	0.00
Wages & salaries	1.11	0.74
Energy (power & fuel)	0.26	0.00
Other manufacturing expenses	10.29	13.33
Indirect taxes	0.00	0.00
Excise duties	0.00	0.00
Repairs & maintenance	0.00	0.00
Plant & machinery	0.00	0.00
Other repairs	0.00	0.00
Selling & distribution expenses	2.62	0.23

Advertising	0.04	0.02
Marketing	0.00	0.20
Distribution	2.58	0.00
Provision for doubtful/bad debts	0.00	0.01
Amortisation	0.39	0.41
Miscellaneous expenses	1.41	0.91
Non-recurring expenses	0.00	0.50
Loss on sale of assets	0.00	0.01
Loss on sale of investment	0.00	0.00
Others	0.00	0.49
Less: Expenses capitalised	0.00	0.00
Interest capitalised	0.00	0.00
PBDIT	6.53	4.05
Interest	0.39	0.33
On short term loans	0.39	0.33
On long term loans	0.00	0.00
Lease rent	0.00	0.63
PBDT	6.14	3.09
Depreciation	1.19	0.96
PBT	4.95	2.13
Tax provision	0.00	0.00
Corporate tax	0.00	0.00
Other direct taxes	0.00	0.00
PAT	4.95	2.13
Appropriation of profit		
Dividends	0.00	0.00
Equity dividends	0.00	0.00
Preference dividends	0.00	0.00
Dividend Tax	0.00	0.00
Retained earnings	4.95	2.13
Cash profit	6.53	3.50
Cash flow from business activities	5.64	4.37
Net sales	20.03	22.45
Value of output	22.60	22.47
Gross value added	7.84	0.00
Executive Summary:		

Gross sales	20.03	22.45
Net sales	20.03	22.45
VOP	22.60	22.47
Other income	0.04	0.03
Cost of production	12.55	17.14
Selling cost	2.62	0.23
PBDIT (NNRT)	6.53	4.55
PBDT (NNRT)	6.14	3.59
PBT (NNRT)	2.57	0.30
Imports	0.00	0.00
Gross fixed assets (net of reval & W)	35.74	51.49
Current assets	26.03	29.24
Net worth	81.91	83.45
Equity capital	24.45	24.45
Long term borrowings	0.06	1.33
Capital employed	81.97	84.78
Current liabilities & provisions	5.12	10.07
Total assets / liabilities (net of reval & misc. exp. n.w.o)	87.06	94.82
Break-even sales (%)	43.06	57.18
Margin of safety (%)	56.94	42.82
Growth (%)		
Gross sales	20.16	12.08
Net sales	21.03	12.08
Cost of production	43.84	36.59
GFA	2.52	44.07
Total assets	9.36	8.91
Margins (%)		
PBDIT (NNRT) / Sales	32.60	20.27
PBDT (NNRT) / Sales	30.65	15.99
PAT (NNRT) / Sales	24.71	11.71
PBDIT (NNRT) / Net sales	32.60	20.27
PBDT (NNRT) / Net sales	30.65	15.99
PAT (NNRT) / Net sales	24.71	11.71
Returns ratios (%)		
PAT / Net worth	6.24	3.18
PAT / Total assets	5.94	2.89
PBDIT / Total assets	7.84	5.00
PBDIT / Capital employed	8.23	5.46

Liquidity ratios

Long term debt / equity (times)	0.00	0.02
Total debt / equity (times)	0.01	0.03
Current ratio (times)	5.08	2.90
Interest cover (times)	13.69	3.74
Gross working capital cycle (days)	1243	178
Net working capital cycle (days)	1161	110
Avg. days of debtors (days)	74	75
Avg. days of creditors (days)	82	68
VOP / Total assets	0.271	0.247
VOP / GFA (times)	0.640	0.515
Total R & D expenditure	0.00	0.00
R & D capital	0.00	0.00
R & D current	0.00	0.00

Nagaland Pulp & Paper Co. Ltd.

Registered office

P.O. Papernagar
Nagaland
Pin 798623

Incorporation year : 1971

Ownership group : Central Govt.-Commercial Enterprises

Main activity : Paper

Nagaland Pulp & Paper Company limited is a subsidiary of HindustanPaper Corporation.

1 Tuli (Mokokchung, NAG)

Writing & printing paper	33000.00	0.00
	Tonnes	

Products Details

Product/s Manufactured/ Traded	Capacity /Units	Production /Units	Sales Quantity /Units	Sales Rs. Crore	Purchase Value Rs. Crore Mar 1995
Pulp	33000.00 Tonnes	0.00	0.00	0.00	0.
Writing & printing paper	33000.00 Tonnes	0.00 Tonnes	6.00	0.01	0.

Income & Expenditure:

	Mar 1999	Mar 2000
	12mths	12mths
		Rs. Crore
Income		
Sales	0.00	0.00
Manufacturing	0.00	0.00
Trading	0.00	0.00
Fiscal benefits	0.00	0.00
Internal transfers	0.00	0.00
Others	0.00	0.00
Other income	0.10	0.00
Dividend received	0.00	0.00
Interest earned	0.00	0.00
Miscellaneous income	0.10	0.00
Change in stocks	0.00	0.00
Finished goods	0.00	0.00
Semi-finished goods	0.00	0.00
Non-recurring income	0.08	0.00
Gain on sale of assets	0.00	0.00
Gain on sales of investment	0.00	0.00
Provisions written back	0.00	0.00
Others	0.08	0.00
Expenditure		
Raw materials, stores, etc.	0.00	0.00
Raw materials	0.00	0.00
Stores & spares	0.00	0.00
Packaging expenses	0.00	0.00
Purchase of finished goods	0.00	0.00
Wages & salaries	6.00	5.83
Energy (power & fuel)	0.09	0.09
Other manufacturing expenses	0.26	0.24
Indirect taxes	0.00	0.00
Excise duties	0.00	0.00
Repairs & maintenance	0.01	0.01

Plant & machinery		0.00	0.00
Other repairs		0.01	0.01
Selling & distribution expenses		0.23	0.04
Advertising		0.00	0.00
Marketing		0.00	0.00
Distribution		0.00	0.00
Provision for doubtful/bad debts		0.23	0.04
Amortisation		0.05	0.03
Miscellaneous expenses		1.73	1.83
Non-recurring expenses		0.58	0.46
Loss on sale of assets		0.02	0.00
Loss on sale of investment		0.00	0.00
Others		0.56	0.46
Less: Expenses capitalised		0.00	0.00
Interest capitalised		0.00	0.00
PBDIT		-8.77	-8.53
Interest	3.44		5.71
On short term loans		1.63	2.89
On long term loans		1.81	2.82
Lease rent		0.00	0.00
PBDT		-12.21	-14.24
Depreciation		0.76	0.76
PBT		-12.97	-15.00
Tax provision		0.00	0.00
Corporate tax		0.00	0.00
Other direct taxes		0.00	0.00
PAT		-12.97	-15.00
Appropriation of profit			
Dividends		0.00	0.00
Equity dividends		0.00	0.00
Preference dividends		0.00	0.00
Dividend Tax		0.00	0.00
Retained earnings		-12.97	-15.00
Cash profit		-12.16	-14.21
Cash flow from business activities		0.00	0.00
Net sales		0.00	0.00
Value of output	0.00		0.00

Gross value added	2.27	2.24
Executive Summary:		
Gross sales	0.00	0.00
Net sales	0.00	0.00
VOP	0.00	0.00
Other income	0.10	0.00
Cost of production	5.31	5.17
Selling cost	0.23	0.04
PBDIT (NNRT)	-8.27	-8.07
PBDT (NNRT)	-11.71	-13.78
PBT (NNRT)	-12.47	-14.54
PAT (NNRT)	-12.47	-14.54
Cash profit(NNRT)	-11.66	-13.75
Operating cash flow	0.00	0.00
Gross value added	-2.27	-2.24
Exports	0.00	0.00
Imports	0.00	0.00
Gross fixed assets (net of reval&W)	74.37	74.37
Current assets	2.61	2.33
Net worth	-38.99	-53.99
Equity capital	120.20	120.20
Long term borrowings	8.80	13.07
Capital employed	-30.19	-40.92
Current liabilities & provisions	44.22	53.74
Total assets / liabilities (net of reval & misc. exp. n.w.o)	14.03	12.82
Break-even sales (%)		
Margin of safety (%)		

Growth (%)

Gross sales		
Net sales		
Cost of production	11.53	-2.62
GFA	0.00	0.00
Total assets	-11.98	-8.62

Margins (%)

PBDIT (NNRT) / Sales		
PBDT (NNRT) / Sales		
PAT (NNRT) / Sales		
PBDIT (NNRT) / Net sales		
PBDT (NNRT) / Net sales		
PAT (NNRT) / Net sales		

Returns ratios (%)

PAT / Net worth	38.98	31.28
PAT / Total assets	-83.22	-108.31
PBDIT / Total assets	-55.19	-60.11
PBDIT / Capital employed	32.96	22.70

Liquidity ratios

Long term debt / equity (times)	-0.23	-0.24
Total debt / equity (times)	-0.23	-0.24
Current ratio (times)	0.06	0.04
Interest cover (times)	-2.63	-1.55
Gross working capital cycle (days)		
Net working capital cycle (days)		
Avg. days of debtors (days)		
Avg. days of creditors (days)	137	320
VOP / Total assets	0.000	0.000
VOP / GFA (times)	0.000	0.000
Total R & D expenditure	0.00	0.00
R & D capital	0.00	0.00
R & D current	0.00	0.00

Assam Asbestos Ltd.

Registered office

Bonda, Narangi,
Guwahati
Pin 781026

Incorporation year : 1972
Ownership : Private (Indian)
Main activity : Cement & asbestos products
Listed on :

Products Details

Product/s Manufactured/ Traded	Capacity/ Units	Production/ Units	Sales/ Units	Sales Quantity Rs.Crore	Purcha Value Rs.Cro
Mar 1999					
Asbestos sheets	46000.00 Tonnes	24275.00 Tonnes	24504.00 Tonnes	18.31	0.
Galvanised sheets	20.00 '000 tonnes	3702.00 '000 tonnes	3.65 '000 tonnes	11.34	0.
Scrap	0.00	0.00	123.00 Tonnes	0.20	0.
PVC fittings	0.00	0.00	10386.00 Piece	0.03	0.

North Eastern Electric Power Corpn. Ltd.

Registered office

``Brookland Compound"

Lower New Colony

Laitumkhrah, Shillong

Pin 793003

Incorporation year : 1976

Ownership group : Central Govt.-Commercial Enterprises

Main activity : Electricity generation

Plant Locations

Location/Products	Capacity /Units	Production /Units
Electricity	0.00 Mw	516.34 Million units

1 Kopili (Darrang, ASS)

Electricity	1503.00 Million units	995.17 Million units
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2 Kathalguri (Dibrugarh, ASS)

Electricity	1123.00 Million units	743.39 Million units
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3 Agartala (West Tripura, TRI)

Electricity	298.00 Million units	197.37 Million units
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North Eastern Electric Power Mar 1999

Electricity	2924.00 Million units	1935.93 Million units
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Income & Expenditure:

	Mar 1998	Mar 1999
	12mth+	12mths
	Rs.Crore	
Income		
Sales	177.98	259.18
Manufacturing	177.61	258.34
Trading	0.00	0.00
Fiscal benefits	0.00	0.00
Internal transfers	0.37	0.84
Others	-0.00	0.00
Other income	24.58	62.72
Dividend received	0.00	0.00
Interest earned	24.57	62.71
Miscellaneous income	0.01	0.01
Change in stocks	0.00	0.00
Finished goods	0.00	0.00
Semi-finished goods	0.00	0.00
Non-recurring income	0.08	0.00
Gain on sale of assets	0.00	0.00
Gain on sales of investment	0.00	0.00
Provisions written back	0.00	0.00
Others	0.08	0.00
Expenditure		
Raw materials, stores, etc.	19.80	52.87
Raw materials	0.00	0.00
Stores & spares	0.34	0.47
Packaging expenses	0.00	0.00
Purchase of finished goods	19.46	52.40
Wages & salaries	10.02	17.32
Energy (power & fuel)	0.44	1.10
Other manufacturing expenses	4.42	7.31
Indirect taxes	0.06	0.04
Excise duties	0.00	0.00

Repairs & maintenance	3.76	2.70
Plant & machinery	0.57	0.99
Other repairs	3.19	1.71
Selling & distribution expenses	0.93	8.29
Advertising	0.03	0.10
Marketing	0.90	8.19
Distribution	0.00	0.00
Provision for doubtful/bad debts	0.00	0.00
Amortisation	0.00	0.14
Miscellaneous expenses	9.11	16.83
Non-recurring expenses	0.44	3.78
Loss on sale of assets	0.00	0.00
Loss on sale of investment	0.00	0.000
Others	0.44	3.78
Less: Expenses capitalised	0.00	0.00
Interest capitalised	0.00	0.00
PBDIT	153.66	211.52
Interest	73.46	78.61
On short term loans	0.03	1.40
On long term loans	73.43	77.21
Lease rent	0.00	0.00
PBDT	80.20	132.91
Depreciation	54.30	74.69
PBT	25.90	58.22
Tax provision	0.00	0.00
Corporate tax	0.00	0.00
Other direct taxes	0.00	0.00
PAT	25.90	58.22
Appropriation of profit		
Dividends	2.00	4.00
Equity dividends	2.00	4.00
Preference dividends	0.00	0.00
Dividend Tax	0.20	0.40
Retained earnings	23.70	53.82
Cash profit	80.20	133.05
Cash flow from business activities	0.00	0.00

Net sales	177.92	259.14
Value of output	177.92	259.14
Gross sales	177.98 2	59.18
Net sales	177.92	259.14
VOP	177.92	259.14
Other income	24.58	62.72
Cost of production	86.54	149.08
Selling cost	0.93	8.29
PBDIT (NNRT)	154.02	215.30
PBDT (NNRT)	80.56	136.69
PBT (NNRT)	26.26	62.00
PAT (NNRT)	26.26	62.00
Cash profit (NNRT)	80.56	136.83
Operating cash flow	0.00	0.00
Gross value added	164.06	232.64
Exports	0.00	0.00
Imports	47.98	66.59
Gross fixed assets (net of reval & W)	1244.89	1541.92
Current assets	354.68	368.33
Net worth	1001.75	1772.59
Equity capital	840.30	1557.57
Long term borrowings	1394.13	1580.12
Capital employed	2395.88	3352.71
Current liabilities & provisions	153.76	262.27
Total assets / liabilities (net of reval & misc. exp. n.w.o)	3320.44	3833.11
Break-even sales (%)	48.11	56.65
Margin of safety (%)	51.89	43.35
Growth (%)		
Gross sales	28.06	45.45
Net sales	28.02	45.48
Cost of production	9.68	72.26
GFA	34.96	23.86
Total assets	15.20	15.44
Margins (%)		
PBDIT (NNRT) / Sales	86.54	83.07
PBDT (NNRT) / Sales	45.26	52.74
PAT (NNRT) / Sales	14.75	23.92
PBDIT (NNRT) / Net sales	86.57	83.08
PBDT (NNRT) / Net sales	45.28	52.75
PAT (NNRT) / Net sales	14.76	23.93

Returns ratios (%)

PAT / Net worth	2.70	4.47
PAT / Total assets	0.85	1.73
PBDIT / Total assets	4.97	6.02
PBDIT / Capital employed	5.97	7.49

Liquidity ratios

Long term debt / equity (times)	1.39	0.89
Total debt / equity (times)	1.39	0.89
Current ratio (times)	-2.31	1.40
Interest cover (times)	1.36	1.79
Gross working capital cycle (days)	42582	41705
Net working capital cycle (days)	42535	41636
Avg. days of debtors (days)	424	479
Avg. days of creditors (days)	46	69
VOP / Total assets	0.057	0.072
VOP / GFA (times)	0.164	0.186
Total R & D expenditure	0.00	0.00
R & D capital	0.00	0.00
R & D current	0.00	0.00

Oil & Natural Gas Corpn. Ltd.

Registered office

Jeevan Bharti', Tower II,
124, Indira Chowk
New Delhi
Pin 110001

Head/Corporate office

Tel Bhavan,
Dehradun,
Uttar Pradesh
Pin 248003

Incorporation year : 1959

Ownership group : Central Govt.-Commercial Enterprises

Main activity : Crude oil & natural gas

Listed on :

Bombay Stock Exchange
National Stock Exchange

BACKGROUND GIST: The Oil and Natural Gas Corporation LTD (ONGC) is engaged in the exploration and production of crude oil and the production of liquefied petroleum gas, naphtha and kerosene. Since the year 1989-90, the production of oil has been declining. The peak level of crude oil production in this year was 42.17 million MT. Since then, production has been declining and usually hovers in a range of 25 to 30 million MT. With the gradual opening up of the oil sector, companies such as ONGC will have to contend with dramatic changes in the competitive structure of the industry. As on 31st March 1998, the company had gross fixed assets of Rs 54183 core and a net worth of Rs 22323 crore. The Government holds a 96 per cent stake in the company.

BACKGROUND DETAILS:

HISTORY: The Oil and Natural Gas Corporation LTD (ONGC) was incorporated in 1959. It was formed under an Act of Parliament as a 'Commission'. It turned into a 'Corporation' governed by the Companies Act in June 1993. Its creation in 1956 was to reflect the philosophy of self-reliance contained in the Industrial Policy Resolution of that year. At that time, it was decided that core sectors such as oil and gas exploration would be reserved for the state-owned units.

ONGC is engaged in the exploration and production of crude oil, production of liquefied natural gas, naphtha and kerosene. The first well was spudded at Jwalamukhi in April 1957. A significant on shore discovery of oil was made at Ankeleshwar in May 1960. This was followed by the discovery of oil at Kalol and Rudrasagar in Assam. In March 1970, the first off-shore well was spudded at Bhavanagar. Off-shore drilling commenced at Bombay High in 1973. IN March 1976, oil was found at the Bassein structure. In July 1978, the oil pipeline system from Bombay High to Trombay was commissioned. In 1984, ONGC's gas and pipeline division was converted into another company, Gas Authority of India LTD (GAIL). Until the late eighties, ONGC was focussed on crude oil production. The refining and marketing of petroleum products was reserved for the public sector company. Indian Oil Corporation. However, this would

change with the deregulation of the oil sector. With the gradual opening up of the oil sector, companies such as ONGC will have to contend with dramatic changes in the competitive structure of the industry.

ACTIVITY: ONGC is into exploration and production of crude oil, production of liquefied petroleum gas, naphtha and kerosene. The company's sites are located at Gandak (Patna, Bihar), Upper Assam (Assam, Gauhati), Ankleshwar (Bharuch, Gujarat) Hazira (Surat, Gujarat) and Uran (Raigarh, Maharashtra). Its offshore sites are at Cambay, Gandhar and at the Krishna-Godavari basin.

Since the year 1989--90, the production of oil has been on a decline. The peak level of crude oil production was in this year at 42.17 million MT. Since then, production has been declining and usually hovers in a range of 25 to 30 million MT. ONGC has been trying to reduce its massive manpower. The size of the company's workforce dropped from 48300 personnel on 1st April 1992 to 42000 in 1998. As on 31st March 1998, the company had gross fixed assets of Rs 54183 crore and a net worth of Rs 22323 crore.

SUBSIDIARIES: ONGC Videsh Ltd. (100%).

Gandak (Patna, BIH)

Liquefied natural gas	0.00	0.00
		Million cu.metres

2 Guwahati (Kamrup, ASS)

Crude	0.00	0.00
		'000 tonnes

Liquefied natural gas	0.00	0.00
		Million cu.metres

3 Krishna-Godavari Offshore (Krishna Godavari Offshore, MS)

Crude	0.00	0.00
		'000 tonnes

Liquefied natural gas	0.00	0.00
		Million cu.metres

4 Ankleshwar (Bharuch, GUJ)

Natural gas (gaseous)	2060000.00	400506.00
	Tonnes	Tonnes

LPG	0.00	0.00
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'000 tonnes '000 tonnes

5 Hazira (Surat, GUJ)

Crude	0.00	26180.76 '000 tonnes
LPG	1111.00 '000 tonnes	1205.97 '000 tonnes
Liquefied natural gas	0.00	0.00 Million cu.metres
Natural gas (gaseous)	0.00 Tonnes	0.00 Tonnes

6 Uran (Raigarh (MAH), MAH)

Ethane-propane	510000.00 Tonnes	556579.00 Tonnes
LPG	0.00 '000 tonnes	0.00 '000 tonnes
Natural gas (gaseous)	0.00 Tonnes	0.00 Tonnes

7 Cambay (Cambay Offshore, MS)

Liquefied Natural Gas	0.00	24596.72 Million cu.metres
Crude	0.00	0.00 '000 tonnes

8 Gandhar Offshore (Gandhar Offshore, MS)

LPG	0.00 '000 tonnes	0.00 '000 tonnes
Crude	0.00	0.00 '000 tonnes

Natural gas (gaseous)	0.00 Tonnes	0.00 Tonnes
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Product/s Manufactured/ Traded	Capacity /Units	Production /Units	Sales Quantity /Units	Sales Rs. Crore	Purchase Value Rs. Crore Mar 2000
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Crude	0.00	26180.76 '000 tonnes	23436.32 '000 tonnes	11561.38	0.
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Liquefied natural gas	0.00	24596.73	20100.12 Million cu.metres	4714.71 Million cu.metres	0.
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LPG	1111.00 '000 tonnes	1205.97 '000 tonnes	1207.72 '000 tonnes	927.94	0.
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Natural gas (gaseous)	2040000.00 Tonnes	400506.00 Tonnes	544825.00 Tonnes	92.12	0
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Ethane-propane	510000.00 Tonnes	556579.00 Tonnes	556732.00 Tonnes	384.37	0
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Aromatic rich naptha	751715.00 Tonnes	1263401.00 Tonnes	1253784.00 Tonnes	1214.19	0
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Superior kerosene oil	285320.00 Tonnes	228263.00 Tonnes	228081.00 Tonnes	102.81	0.
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Heavy cut	0.00	39238.00 Tonnes	40374.00 Tonnes	43.60	0
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Others	0.00	0.00	0.00	1.50	0
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Pipeline transportation receipts	0.00	0.00	0.00	110.94	0.
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Contractual short lifted gas receipts	0.00	0.00	0.00	11.23	0.
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Reimbursement received from Govt. of India	0.00	0.00	0.00	3.20	0.
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Other contractual receipts	0.00	0.00	0.00	119.49	0.
Share of profit on investment in partn	0.00	0.00	0.00	1.40	0.

Income & Expenditure:

	Mar 1999	Mar 2000
	12mths	12mths
	Rs. Crore	
Income		
Sales	15107.82	20228.88
Manufacturing	14759.41	19982.62
Trading	0.00	0.00
Fiscal benefits	21.48	3.20
Internal transfers	0.00	0.00
Others	326.93	243.06
Other income	909.53	856.85
Dividend received	1.06	85.26
Interest earned	841.33	687.76
Miscellaneous income	67.14	83.83
Change in stocks	0.19	15.21
Finished goods	0.19	15.21
Semi-finished goods	0.00	0.00
Non-recurring income	51.75	156.23
Gain on sale of assets	0.00	0.00
Gain on sales of investment	7.27	0.97
Provisions written back	44.48	125.83
Others	0.00	29.43
Expenditure		
Raw materials, stores, etc.	202.47	200.69
Raw materials	0.00	0.00
Stores & spares	202.47	200.69
Packaging expenses	0.00	0.00
Purchase of finished goods	0.00	0.00
Wages & salaries	341.55	700.15
Energy (power & fuel)	115.01	119.19
Other manufacturing expenses	1252.76	3423.75
Indirect taxes	4667.64	3057.40
Excise duties	1925.46	2349.95
Repairs & maintenance	124.13	395.55
Plan & machinery	0.00	0.00

Other repairs	124.13	395.55
Selling & distribution expenses	580.11	820.31
Advertising	0.00	0.00
Marketing	0.00	0.00
Distribution	510.36	740.24
Provision for doubtful/bad debts	69.75	80.07
Amortisation	0.00	0.00
Miscellaneous expenses	1398.64	1714.19
Non-recurring expenses	7.28	195.26
Loss on sale of assets	1.01	1.03
Loss on sale of investment	0.00	0.00
Others	6.27	194.23
Less: Expenses capitalised	217.16	181.80
Interest capitalised	0.00	0.00
PBDIT	7596.86	10812.48
Interest	830.40	600.32
On short term loans	216.63	101.93
On long term loans	613.77	498.39
Lease rent	0.00	0.00
PBDT	6766.46	10212.16
Depreciation	3191.81	4252.29
PBT	3574.65	5959.87
Tax provision	820.15	2330.40
Corporate tax	819.10	2330.00
Other direct taxes	1.05	0.40
PAT	2754.50	3629.47
Appropriation of profit		
Dividends	784.26	926.85
Equity dividends	784.26	926.85
Preference dividends	0.00	0.00
Dividend Tax	86.27	141.17
Retained earnings	1883.97	2561.45
Cash profit	5946.31	7881.76
Cash flow from business activities	6926.01	8483.70
Net sales	10440.18	17171.48
Value of output	10440.37	17186.69
Gross sales	15107.82	20228.88

Net sales	10440.18	17171.48
VOP	10440.37	17186.69
Other income	909.53	856.85
Cost of production	5001.14	8486.03
Selling cost	580.11	820.31
PBDIT (NNRT)	7552.39	10851.51
PBDT (NNRT)	6721.99	10251.19
PBT (NNRT)	3530.18	5998.90
PAT (NNRT)	2710.03	3668.50
Cash profit(NNRT)	5901.84	7920.79
Operating cash flow	6926.01	8483.70
Gross value added	7893.94	11551.66
Exports	35.81	52.73
Imports	3353.44	3541.44
Gross fixed assets (net of reval & W	58315-.90	63115.69
Current assets	11462.93	17871.38
Net worth	24171.15	26736.83
Equity capital	1425.92	1425.92
Long term borrowings	7531.48	6850-.08
Capital employed	31702.63	33586.91
Current liabilities & provisions	8661.65	10426.16
Total assets/liabilities (net of reval & misc. exp. n.w.o.)	37118.91	38258.48
Break-even sales (%)	62.84	53.30
Margin of safety (%)	37.16	44.70
Growth (%)		
Gross sales	-1.37	33.90
Net sales	0.73	64.47
Cost of production	-10.35	69.68
GFA	7.63	8.23
Total assets	3.84	3.07
Margins (%)		
PBDIT (NNRT)/Sales	49.99	53.64
PBDT (NNRT)/Sales	44.49	50.68
PAT (NNRT)/Sales	17.94	18.13
PBDIT (NNRT)/Net sales	72.34	63.19
PBDT (NNRT)/Net sales	64.39	59.70
PAT (NNRT)/Net sales	25.96	21.36
Returns ratios (%)		
PAT/Net worth	11.66	14.41

PAT/Total assets	7.44	9.73
PBDIT/Total assets	20.73	28.79.
PBDIT/Capital employed	23.86	33.24

Liquidity ratios

Long term debt / equity (times)	0.31	0.26
Total debt/equity (times)	0.34	0.27
Current ratio (times)	1.32	1.71
Interest cover (times)	5.25	10.99
Gross working capital cycle (days)	3015	2737
Net working capital cycle (days)	2987	2722
Avg. days of debtors (days)	29	26
Avg. days of creditors (days)	28	15
VOP / Total assets	0.287	0.456
VOP / GFA (times)	0.186	0.283
Total R & D expenditure	57.75	71.04
R & D capital	8.98	5054
R & D current	48.77	65.50

George Williamson (Assam) Ltd.

Registered office

`WM HOUSE', Khandapara, Six Mile,
G. S. Road, Guwahati,
Assam
Pin 781022

Incorporation year : 1977

Ownership group : Williamson Magor Group

Main activity : Tea

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
National Stock Exchange

George Williamson (Assam) Ltd.

Planting Locations	production Capacity	Production
	/units	/units
1 Attareekhat (Darrang, Ass)		
Tea	0.00	0.93 `000 tonnes
2 Bargany (Darrang, ASS)		
Tea	0.00	2.29 `000 tonnes
3 Borengajuli (Darrang, ASS)		
Tea	0.00	1.42 `000 tonnes
4 Boroï (Darrang, ASS)		
Tea	0.00	0.85 `000 tonnes
5 Corramore (Darrang, ASS)		
Tea	0.00	1.09 `000 tonnes
6 Paneery (Darrang, ASS)		
Tea	0.00	0.86 `000 tonnes
7 Rupajuli (Darrang, ASS)		

Tea	0.00	0.88 `000 tonnes
8 Bordubi (Dibrugarh, Ass)		
Tea	0.00	2.09 `000 tonnes
9 Dirial(Dibrugarh, ASS)		
Tea	0.00	1.47 `000 tonnes
10 Itakhooli (Dibrugarh, ASS)		
Tea	0.00	0.88 `000 tonnes
11 Keyhung(Dibrugarh, ASS)		
Tea	0.00	1.66 `000 tonnes
12 Koomsong (Dibrugarh, ASS)		
Tea	0.00	1.69 000 tonnes
13 Phillobari (Dibrugarh, ASS)		
Tea	0.00	0.70 `000 tonnes
14 Behora (Sibsagar, ASS)		
Tea	0.00	1.85 `000 tonnes
15 Rajmai (Sibsagar, ASS)		
Tea	0.00	0.82 `000 tonnes

Executive Summary Financial Perfomance

Mar 2000
12mths
Rs.Crore

Gross sales	191.73
Net sales	184.61
VOP	185.16
Other income	7.00
Cost of production	85.26
Selling cost	18.99
PBDIT (NNRT)	56.14
PBDT (NNRT)	48.24
PBD(NNRT)	41.38
PAT (NNRT)	28.98
Cash profit (NNRT)	35.84

Operating cash flow	42.78
Gross value added	119.24
Exports	75.63
Imports	24.11
Gross fixed assets (net of reval & W)	186.36
Current assets	233.70
Net worth	111.38
Equity capital	14.18
Long term borrowings	32.66
Capital employed	144.04
Current liabilities & provisions	193.82
Total assets / liabilities (net of reval & misc. exp. n. w. o)	215.53
Break-even sale (%)	57.17
Margin of safety (%)	42.83
Growth (%)	
Gross sales	-1.44
Net sales	-3.01
Cost of production	10.45
GFA	11.73
Total assets	8.77
Margins (%)	
PBDIT (NNRT) / Sales	29.28
PBDT (NNRT) / Sales	25.16
PAT (NNRT) / Sales	15.12
PADIT (NNRT) / Net sales	30.41
PBDT (NNRT) / Net sales	26.13
PAT (NNRT) / Net sales	15.70
Returns ratios (%)	
PAT / Net worth	27.65
PAT / Total assets	14.01
PBDIT / Total assets	27.14
PBDIT / Capital employed	39.21
Liquidity ratios	
Long term debt / equity (times)	0.29
Total debt / equity (times)	0.42
Current ratio (times)	1.21
Interest cover (times)	6.24

Gross working capital cycle (days)		208
Net working capital cycle (days)		158
Avg. days of debtors (days)		11
Avg. days of creditors (days)		50
VOP / Total assets		0.895
VOP / GFA (times)		1.049
Total R & D expenditure		0.00
R & D Capital		0.00
R & D current		0.00
Income		
Sales		191.73
Manufacturing		191.61
Trading	0.00	
Fiscal benefits		0.12
Internal transfers		0.00
Others		-0.00
Other income		7.00
Dividend received		0.00
Interest earned		4.93
Miscellaneous income		2.07
Change in stocks		0.55
Finished goods	0.55	
Semi-finished goods		0.00
Non-recurring income		0.43
Gain on sale of assets		0.09
Gain on sales of investment		0.00
Provisions written back	0.00	
Others		0.34
Expenditure		
Raw materials, stores, etc.		13.67
Raw materials		0.00
Stores & spares		10.29
Packaging expenses		0.00
Purchase of finished goods		3.38
Wages & salaries		62.28
Energy (power & fuel)	14.79	
Other manufacturing expenses	1.63	

Indirect taxes	7.12
Excise duties	3.18
Repairs & maintenance	13.78
Plant & machinery	4.71
Other repairs	9.07
Selling & distribution expenses	18.99
Advertising	0.00
Marketing	7.08
Distribution	11.91
Provision for doubtful/bad debts	0.00
Amortisation	0.00
Miscellaneous expenses	10.88
Non-recurring expenses	0.14
Loss on sale of assets	0.14
Loss on sale of investment	0.00
Others	0.00
Less: Expenses capitalised	0.00
Interest capitalised	0.00
PBDIT	56.43
Interest	7.40
On short term loans	4.19
On long term loans	3.21
Lease rent	0.50
PBDT	48.53
Depreciation	6.86
PBT	41.67
Tax provision	12.40
Corporate tax	12.40
Other direct taxes	0.00
PAT	29.27
Appropriation of profit	
Dividends	14.17
Equity dividends	14.17
Preference dividends	0.00
Dividend Tax	1.95

Retained earnings	13.15
Cash profit	36.13
Cash flow from business activities	42.78
Net sales	184.61
Value of output	185.16
Gross value added	19.24

Gillanders Arbuthnot & Co. Ltd.

Registered office

A-1, Gillander House
Netaji Subhas Road
Calcutta
Pin 700001

Incorporation year : 1935
Ownership group : Private (Indian)
Main activity : Diversified

Listed on :
Calcutta Stock Exchange

Plant Locations

1. Taipoo (Darjiling, WB)

Saleable tea	0.00	.51
	'000 tonnes	'000 tonnes

2. Gairkhata (Jalpaiguri, WB)

Saleable tea	3.60	1.14
	'000 tonnes	'000 tonnes

3. Konnagar (Hugli, WB)

4. Behala (Calcutta, WB)

Kalamazoo sheets	11982.00	177.82
	'000 nos	'000 nos
Kalamazoo binders & accessories	18000.00	4848.00
	Numbers	Numbers

5. Betjan (Dibrugarh, ASS)

Saleable tea	0.00	0.76
	'000 tonnes	'000 tonnes

6. Jatlibari (Dibrugarh, ASS)

Saleable tea	0.00	0.69
	'000 tonnes	'000 tonnes

7. Tengpani (Dibrugarh, ASS)

Saleable tea	0.00	0.51
	'000 tonnes	'000 tonnes

8. Maduranthagam (Chengalpattu MGR, TN)

Plastic containers

370.00
'000 nos

78.80
'000 nos

Executive Summary:**Financial Performance.****Mar 1999****12mths****Rs. Crore**

Gross sales	52.03
Net sales	51.34
VOP	51.34
Other income	5.54
Cost of production	37.14
Selling cost	2.22
PBDIT (NNRT)	11.99
PBDT (NNRT)	11.98
PBT (NNRT)	10.39
PAT (NNRT)	7.19
Cash profit(NNRT)	8.78
Operating cash flow	10.14
Gross value added	24.62

Exports	0.12
Imports	1.66
Gross fixed assets (net of reval & W	31.68
Current assets	23.95
Net worth	39.92
Equity capital	0.29
Long term borrowings	40.21
Capital employed	13.83
Current liabilities & provisions	
Total assets / liabilities	
(net of reval & misc. exp. n.w.o)	51.03
Break-even sales (%)	64.64
Margin of safety (%)	35.36

Growth (%)

Gross sales	19.79
Net sales	20.65
Cost of production	27.23
GFA	4.87
Total assets	17.28

Margins (%)

PBDIT (NNRT) / Sales	23.04
PBDT (NNRT) / Sales	23.03
PAT (NNRT) / Sales	13.82
PBDIT (NNRT) / Net sales	23.35

PBDT (NNRT) / Net sales	23.33
PAT (NNRT) / Net sales	14.00

Returns ratios (%)

PAT / Net worth	19.75
PAT / Total assets	15.21
PBDIT / Total assets	25.36
PBDIT / Capital employed	32.71

Liquidity ratios

Long term debt / equity (times)	0.01
Total debt / equity (times)	0.01
Current ratio (times)	1.73
Interest cover (times)	1040.00
Gross working capital cycle (days)	108
Net working capital cycle (days)	56
Avg. days of debtors (days)	36
Avg. days of creditors (days)	52
VOP / Total assets	1.086
VOP / GFA (times)	1.659
Total R & D expenditure	0.00
R & D capital	0.00
R & D current	0.00

Income & Expenditure**Mar 1999
12mths
Rs. Crore**

IncomeSales		52.03
Manufacturing		32.60
Trading	17.67	
Fiscal benefits		0.00
Internal transfers		0.04
Others		1.72
Other income		5.54
Dividend received		1.04
Interest earned		1.51
Miscellaneous income		2.99
Change in stocks		0.00
Finished goods	0.00	
Semi-finished goods		0.00
Non-recurring income		1.43
Gain on sale of assets		0.02
Gain on sales of investment		0.11
Provisions written back	1.17	
Others		0.13
Expenditure		
Raw materials, stores, etc.		23.32
Raw materials		8.14
Stores & spares		1.83
Packaging expenses		0.00
Purchase of finished goods		13.35
Wages & salaries		12.48
Energy (power & fuel)	2.50	
Other manufacturing expenses	0.26	
Indirect taxes		0.69
Excise duties		0.00
Repairs & maintenance		1.19
Plant & machinery		0.73
Other repairs		0.46
Selling & distribution expenses		2.22
Advertising		0.00
Marketing		0.81

Distribution	1.24
Provision for doubtful/bad debts	0.17
Amortisation	0.00
Miscellaneous expenses	2.92
Non-recurring expenses	0.00
Loss on sale of assets	0.00
Loss on sale of investment	0.00
Others	0.00
Less: Expenses capitalised	0.00
Interest capitalised	0.00
PBDIT	13.42
Interest	0.01
On short term loans	0.00
On long term loans	0.01
Lease rent	0.00
PBDT	13.41
Depreciation	1.59
PBT	11.82
Tax provision	3.20
Corporate tax	3.20
Other direct taxes	0.00
PAT	8.62
Appropriation of profit	
Dividends	1.43
Equity dividends	1.43
Preference dividends	0.00
Dividend Tax	0.16
Retained earnings	7.03
Cash profit	10.21
Cash flow from business activities	10.14
Net sales	51.34
Value of output	51.34
Gross value added	24.02

Oil India Ltd.

Registered office Corporate Office

P.O. Duliajan, Dibrugarh distt., Assam Pin 786602	Allahabad Bank Bldg. 17, Parliament Street New Delhi Pin 110001
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Incorporation year : 1959

Ownership group : Central Govt.-Commercial Enterprises

Main activity : Crude oil & natural gas

BACKGROUND GIST: Oil India Ltd (OIL) is a public sector undertaking involved in the exploration and production of hydrocarbons (crude oil and natural gas), extraction of liquefied petroleum gas and the transportation of hydrocarbons through its pipeline network. The operations of the company are largely concentrated in the North-East region of the country and account for about 7 per cent of the total area being explored in the 26 sedimentary basins in India. OIL holds mining leases covering an area of about 1990 square kms in Assam. It also holds petroleum exploration licenses governing an area of 552 square kms in Arunachal Pradesh.

BACKGROUND DETAILS :

HISTORY: Oil India Private Ltd was registered as a company in February 1959 as a joint venture between the Government of India and the Burmah Oil Company, UK. The government had a 33.33 per cent stake and the rest of the equity was held by the Burmah Oil Company. The company's name changed to Oil India Ltd (OIL) in 1961 and the equity stakes were realigned to 50:50. The objective of the company was to develop the oil fields discovered in Assam. During the mid-fifties, Assam Oil Company, a subsidiary of Burmah Oil Company, had discovered oil in Nahorkatiya and Moran. In 1981, the Government acquired the entire equity of the company.

ACTIVITY: OIL is engaged in the exploration and production of hydrocarbons (crude oil and natural gas), extraction of liquefied petroleum gas and the transportation of hydrocarbons through its pipeline network. The operations of the company are largely concentrated in the North-East region of the country and account for about 7 per cent of the total area being explored in the 26 sedimentary basins in India. As of 31st March 1998, OIL had gross fixed assets of Rs 2632 crore and a net worth of Rs 2035 crore.

INFRASTRUCTURE: OIL holds mining leases covering an area of about 1900 square kms in Assam. It also holds petroleum exploration licenses governing an area of 552 square kms in Arunachal Pradesh. It has constructed a pipeline to transport crude oil from the oil fields to the refineries at Gauhati, Barauni and Digboi.

Plant Locations :

1 Dulaijan (Dibrugarh, ASS)

Crude oil	0.00	3073.63	
		'000 tonnes	
Natural gas	0.00	1541.09	
		Million cu.metres	
LPG	50.00	51.32	
	'000 tonnes	'000 tonnes	

Product/s Manufactured/ Traded	Capacity /Units	Production /Units	Sales Quantity /Units	Sales Rs. Crore	Purchase Value Rs. Crore
Crude oil	0.00	3073.64	3062.07	1422.53	0.
		`000 tonnes	`000 tonnes		
Natural gas	0.00	1541.10	1169.87	131.76	0.
		Million cu.metres	Million cu.metres		
LPG	50.00	51.33	51.61	38.18	0.
	`000 tonnes	`000 tonnes	`000 tonnes		
Electricity	41.50	101630.00	0.00	0.01	0.
	Mw	Kwh			
Gas condensate	0.00	24000.00	0.00	0.00	0.
		Tonnes			
Income from transpor- tation & scrap	0.00	0.00	0.00	42.63	0.
Scrap	0.00	0.00	.00	0.34	0.

Income & Expenditure:

	Mar 1999	Mar 2000
	12mths	12mths
		Rs.Crore
Income		
Sales	1328.11	1694.04
Manufacturing	1207.69	1592.80
Trading	0.00	0.00
Fiscal benefits	93.64	58.60
Internal transfers	0.00	0.00
Others	26.78	42.64
Other income	82.12	114.16
Dividend received	0.00	0.00
Interest earned	78.47	106.48
Miscellaneous income	3.65	7.68
Change in stocks	4.05	4.32
Finished goods	4.05	4.32
Semi-finished goods	0.00	0.00
Non-recurring income	59.87	116.77
Gain on sale of assets	0.00	0.00
Gain on sales of investment	0.00	0.00
Provisions written back	0.00	0.00
Others	59.87	116.77
Expenditure		
Raw materials, stores, etc.	156.30	150.99
Raw materials	0.00	0.00
Stores & spares	156.30	150.99
Packaging expenses	0.00	0.00
Purchase of finished goods	0.00	0.00
Wages & salaries	281.57	283.56
Energy (power & fuel)	57.76	59.53
Other manufacturing expenses	204.21	246.89
Indirect taxes	280.33	275.86
Excise duties	0.00	0.00
Repairs & maintenance	87.46	99.34
Plant & machinery	0.00	0.00

Other repairs	87.46	99.34
Selling & distribution expenses	1.82	7.83
Advertising	1.82	1.52
Marketing	0.00	0.00
Distribution	0.00	0.00
Provision for doubtful/bad debts	0.00	6.31
Amortisation	86.68	168.60
Miscellaneous expenses	41.28	50.29
Non-recurring expenses	4.60	76.77
Loss on sale of assets	0.56	1.32
Loss on sale of investment	0.00	0.00
Others	4.04	75.45
Less: Expenses capitalised	311.71	312.03
Interest capitalised	0.00	0.00
PBDIT	583.85	821.66
Interest	31.74	30.38
On short term loans	11.79	12.49
On long term loans	19.95	17.89
Lease rent	0.00	0.00
PBDT	552.11	791.28
Depreciation	138.78	160.46
PBT	413.33	630.82
Tax provision	121.73	221.03
Corporate tax	121.73	221.03
Other direct taxes	0.00	0.00
PAT	291.60	409.79
Appropriation of profit		
Dividends	78.47	107.00
Equity dividends	78.47	107.00
Preference dividends	0.00	0.00
Dividend Tax	8.63	17.26
Retained earnings	204.50	285.53
Cash profit	517.06	738.85
Cash flow from business activities	0.00	0.00
Net sales	1047.78	1418.18

Value of output	1051.83	1422.50
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Executive Summary:

	Mar 1999 12mth+	Mar 2000 12mths Rs.Crore
Gross sales	1328.11	1694.04
Net sales	1047.78	1418.18
VOP	1051.83	1422.50
Other income	82.12	114.16
Cost of production	754.15	816.36
Selling cost	1.82	7.83
PBDIT (NNRT)	528.58	781.66
PBDT (NNRT)	496.84	751.28
PBT (NNRT)	358.06	590.82
PAT (NNRT)	236.33	369.79
Cash profit(NNRT)	461.79	698.85
Operating cash flow	0.00	0.00
Gross value added	814.49	1071.91
Exports	0.15	0.15
Imports	73.46	58.43
Gross fixed assets (net of reval & W)	3250.79	3427.71
Current assets	906.61	1238.21
Net worth	2481.29	2766.82
Equity capital	142.67	142.67
Long term borrowings	281.44	260.62
Capital employed	2762.73	3027.44
Current liabilities & provisions	569.75	518.22
Total assets/liabilities (net of reval & misc. exp. n.w.o)	3332.48	3545.66
Break-even sales (%)	103.64	76.14
Margin of safety (%)	0.00	23.86
Growth (%)		
Gross sales	15.83	27.55
Net sales	-8.62	35.35
Cost of production	49.89	8.25
GFA	10.64	5.44
Total assets	8.15	6.40

Margins (%)

PBDIT (NNRT)/Sales	39.80	46.14
PBDT (NNRT)/Sales	37.41	44.35
PAT (NNRT)/Sales	17.79	21.83
PBDIT (NNRT)/Net sales	50.45	55.12
PBDT (NNRT)/Net sales	47.42	52.97
PAT (NNRT)/Net sales	22.56	26.07

Returns ratios (%)

PAT/Net worth	9.93	14.09
PAT/Total assets	7.37	10.75
PBDIT/Total assets	16.48	22.73
PBDIT/Capital employed	19.79	27.00

Liquidity ratios

Long term debt/equity (times)	0.11	0.09
Total debt/equity (times)	0.12	0.10
Current ratio (times)	1.59	2.39
Interest cover (times)	12.28	20.45

Gross working capital cycle (days)	537	561
Net working capital cycle (days)	489	504
Avg. days of debtors (days)	71	62
Avg. days of creditors (days)	48	57
VOP/Total assets	0.328	0.414
VOP/GFA (times)	0.340	0.426

Total R & D expenditure	0.00	8.20
R & D capital	0.00	0.34
R & D current	0.00	7.86

Rossell Industries Ltd.

Registered office

``Bally-High", 1st Floor,1
Ballygunge Park Road
Calcutta
West Bengal
Pin 700019

Incorporation year : 1975

Ownership group : Private (Foreign)

Main activity : Tea

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
National Stock Exchange

Originally known as Jokai (Assam) Tea Company Ltd, Rossell Industries was established way back in 1872 when it was registered as a British company in London. In 1973, with the enactment of FERA, the holding pattern and name of the company changed to Jokai India Ltd. The management control then went into the hands of US-based NRI, Rajendra Sethia. But soon he became insolvent with huge liabilities pending with Punjab National Bank (PNB) which he couldn't pay. PNB then became the custodian and tried to manage the company with the help of professionals but with little success. In the early-nineties, the Y. K. Modia and H.L. Gupta purchased the entire equity of the company from PNB in partnership. The name of the company changed to Rossell Industries.

Eventually, in 1995, Y.K.Modi parted with the H.L. Gupta. Y.K.Modi retained the Jokai brand and Rossell Industries with eight of the eleven tea gardens, while H.L.Gupta took the other three and set up Rossell Tea Ltd. In April 1999, the company sold off its largest tea estate-Koilamari to Mumbai-based M.K. Shah Exports Ltd, which is merchant-exporter of tea and owns Dorar region of West Bengal.

In December 1999, it was reported that Unilever Plc, US, parent company of Hindustan Lever Ltd (HLL) has acquired 65 per cent stake in the company's equity. Unilever also intends to make an open offer to acquire the balance 35 per cent from the shareholders by making a public offer.

Plant Locations

1 Koilamari (Lakhimpur, ASS)

Tea	0.00	1.63
		`000 tonnes

2 Bokel (Dibrugarh, ASS)		
Tea	0.00	1.49 `000 tonnes
3 Daisajan (Dibrugarh, ASS)		
Tea	0.00	1.17 `000 tonnes
4 Dikom (Dibrugarh, ASS)		
Tea	0.00	0.00 `000 tonnes
5 Hattialli (Dibrugarh, ASS)		
Tea	0.00	0.91 `000 tonnes
6 Muttuck (Dibrugarh, ASS)		
Tea	0.00	0.80 `000 tonnes
7 Nalani (Dibrugarh, ASS)		
Tea	0.00	1.43 `000 tonnes
8 Nokhroy (Dibrugarh, ASS)		
Tea	0.00	0.00 `000 tonnes
9 Panitola (Dibrugarh, ASS)		
Tea	0.00	1.59 `000 tonnes
10 Singlijan (Dibrugarh, ASS)		
Tea	0.00	0.56 `000 tonnes

Income & Expenditure:

	Dec 1997	Dec 1998
	15mths	12mths
	Rs.Crore	
Income		
Sales	89.46	75.40
Manufacturing	89.16	75.07
Trading	0.00	0.00
Fiscal benefits	0.00	0.03
Internal transfers	0.00	0.00
Others	0.30	0.30

Other income		2.59	2.26
Dividend received		0.01	0.01
Interest earned		1.94	1.29
Miscellaneous income		0.64	0.96
Change in stocks		-6.99	5.65
Finished goods	6.99		5.65
Semi-finished goods		-13.98	0.00
Non-recurring income		1.92	0.53
Gain on sale of assets		0.00	0.00
Gain on sales of investment		0.00	0.00
Provisions written back	0.00		0.00
Others		1.92	0.53
Expenditure			
Raw materials, stores, etc.		9.87	12.03
Raw materials		-0.00	0.00
Stores & spares		6.86	6.43
Packaging expenses		0.00	0.00
Purchase of finished goods		3.01	5.60
Wages & salaries		26.24	26.49
Energy (power & fuel)	4.76		4.93
Other manufacturing expenses	0.88		0.73
Indirect taxes		1.67	1.72
Excise duties		1.57	1.54
Repairs & maintenance		3.43	4.16
Plant & machinery		1.25	2.02
Other repairs		2.18	2.14
Selling & distribution expenses		9.28	8.53
Advertising		0.08	0.04
Marketing		2.57	2.84
Distirbution		6.63	5.65
Provision for doubtful/bad debts		0.00	0.00
Amortisation		0.08	0.03
Miscellaneous expenses		9.49	8.97
Non-recurring expenses		0.71	0.62
Loss on sale of assets		0.04	0.40
Loss on sale of investment		0.00	0.11
Others		0.67	0.11
Less: Expenses capitalised		0.00	0.00

Interest capitalised		0.00	0.00
PBDIT		20.57	15.63
Interest		9.08	6.91
On short term loans		2.30	2.48
On long term loans		6.78	4.43
Lease rent		0.93	0.60
PBDT	10.56		8.12
Depreciation	2.32		1.91
PBT	8.24		6.21
Tax provision	0.00		0.51
Corporate tax	0.00		0.51
Other direct taxes	0.00		0.00
PAT	8.24		5.70
Appropriation of profit			
Dividends	1.52		1.52
Equity dividends	1.52		1.52
Preference dividends	0.00		0.00
Dividend Tax	0.15		0.15
Retained earnings	6.57		4.03
Cash profit	10.64		7.64
Cash flow from business activities	17.34		12.25
Net sales	87.79		73.68
Value of output	80.80	79.33	
Gross value added	46.80		43.10

Executive Summary:

	Dec 1997	Dec 1998
	15mths	12mths
	Rs.Crore	
Gross sales	89.46	75.40
Net sales	87.79	73.68
VOP	80.80	79.33
Other income	2.59	2.26
Cost of production	51.43	40.16
Selling cost	9.28	8.53
PBDIT (NNRT)	19.36	15.72
PBDT (NNRT)	9.35	8.21
PBT (NNRT)	7.03	6.30
PAT (NNRT)	7.03	5.79
Cash profit(NNRT)	9.43	7.73
Operating cash flow	17.34	12.25
Gross value added	46.80	43.10
Exports	17.41	19.53
Imports	2.02	3.19
Gross fixed assets (net of reval & W)	58.97	60.43
Current assets	26.03	31.66
Net worth	53.47	57.53
Equity capital	10.12	10.12
Long term borrowings	33.49	24.73
Capital employed	86.96	82.26
Current liabilities & provisions	17.11	28.26
Total assets/liabilities (net of reval & misc. exp. n.w.o)	104.07	110.52
Break-even sales (%)	69.17	73.98
Margin of safety (%)	30.83	26.02
Growth (%) Gross sales	27.36	-15.72
Net sales	27.45	-16.07
Cost of production	3.73	-21.90
GFA	5.04	2.48
Total assets	7.23	6.20
Margins (%)		
PBDIT (NNRT)/Sales	21.64	20.85
PBDT (NNRT)/Sales	10.45	10.89
PAT (NNRT)/Sales	7.86	7.68

PBDIT (NNRT)/Net sales	22.05	21.34
PBDT (NNRT)/Net sales	10.65	11.14
PAT (NNRT)/Net sales	8.01	7.86

Returns ratios (%)

PAT/Net worth	14.02	10.43
PAT/Total assets	6.99	5.40
PBDIT/Total assets	19.25	14.65
PBDIT/Capital employed	22.84	18.58

Liquidity ratios

Long term debt/equity (times)	0.63	0.43
Total debt/equity (times)	0.73	0.65
Current ratio (times)	1.52	1.12
Interest cover (times)	1.70	1.84
Gross working capital cycle (days)	234	278
Net working capital cycle (days)	219	256
Avg. days of debtors (days)	25	37
Avg. days of creditors (days)	15	22
VOP/Total assets	0.804	0.739
VOP/GFA (times)	1.404	1.329

Total R & D expenditure	0.00	0.00
R & D capital	0.00	0.00
R & D current	0.00	0.00

Warren Tea Ltd.

Registered office
Deohall Tea Estate,
P.O. Hoogrijan,
Dist. Tinsukia, Assam Pin 700016
Pin 786601

Head / Corporate office
31, Chowringhee Road
Calcutta

Incorporation year : 1977

Ownership group : Goenka S. P. Group

Main activity : Tea

Listed on :

Bombay Stock Exchange
Calcutta Stock Exchange
Gauhati Stock Exchange
National Stock Exchange

Plant Location

1 Balijan North (Dibrugarh, ASS)

Tea	0.00	1.30
		'000 tonnes

2 Balijan(H) (Dibrugarh, ASS)

Tea	0.00	0.95
		'000 tonnes

3 Deamoolie (Dibrugarh, ASS)

Tea	0.00	1.39
		'000 tonnes

4 Deodham (Dibrugarh, ASS)

Tea	0.00	1.95
		'000 tonnes

5 Deohall (Dibrugarh, ASS)

Tea	0.00	1.01
		'000 tonnes

6 Duamara (Dibrugarh, ASS)

Tea	0.00	1.26
		'000 tonnes

7 Hatimara (Dibrugarh, ASS)

Tea	0.00	0.68
		'000 tonnes

8 Rajahalli (Dibrugarh, ASS)

Tea	0.00	0.56
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'000 tonnes

9 Rupai (Dibrugarh, ASS)

Tea	0.00	1.46
		'000 tonnes

10 Sealkotee (Dibrugarh, ASS)

Tea	0.00	0.89
		'000 tonnes

11 Tara (Dibrugarh, ASS)

Tea	0.00	1.44
		'000 tonnes

12 Zaloni (Dibrugarh, ASS)

Tea	0.00	1.07
		'000 tonnes

13 Thowra (Sibsagar, ASS)

Tea	0.00	0.67
		'000 tonnes

Income & Expenditure:

	Mar 1999	Mar 2000
	12mths	12mths
		Rs. Crore
IncomeSales	131.85	141.69
Manufacturing	131.36	134.87
Trading	0.00	0.00
Fiscal benefits	0.00	0.00
Internal transfers	0.00	0.00
Others	0.49	6.82
Other income	3.25	2.70
Dividend received	0.02	0.05
Interest earned	2.95	2.23
Miscellaneous income	0.28	0.42
Change in stocks	-3.44	1.21
Finished goods	-3.44	1.21
Semi-finished goods	0.00	0.00
Non-recurring income	0.24	0.41
Gain on sale of assets	0.00	0.01
Gain on sales of investment	0.00	0.00
Provisions written back	0.03	0.05
Others	0.21	0.35
ExpenditureRaw materials, stores, etc.	17.14	20.59
Raw materials	0.00	0.00
Stores & spares	17.14	20.59
Packaging expenses	0.00	0.00
Purchase of finished goods	0.00	0.00
Wages & salaries	46.48	49.37
Energy (power & fuel)	4.72	5.61
Other manufacturing expenses	0.87	7.61
Indirect taxes	0.48	3.03
Excise duties	0.48	3.03
Repairs & maintenance	8.01	2.38
Plant & machinery	0.95	1.16
Other repairs	7.06	1.22
Selling & distribution expenses	11.75	14.88

Advertising	0.00	0.00
Marketing	2.64	2.70
Distribution	9.11	10.72
Provision for doubtful/bad debts	0.00	1.46
Amortisation	0.00	0.00
Miscellaneous expenses	8.68	10.13
Non-recurring expenses	0.12	0.25
Loss on sale of assets	0.02	0.00
Loss on sale of investment	0.00	0.00
Others	0.10	0.25
Less: Expenses capitalised	0.00	0.00
Interest capitalised	0.00	0.00
PBDIT	33.65	32.16
Interest	2.42	2.69
On short term loans	2.06	2.69
On long term loans	0.36	0.00
Lease rent	0.00	0.00
PBDT	31.23	29.47
Depreciation	4.66	5.06
PBT	26.57	24.41
Tax provision	8.00	7.50
Corporate tax	8.00	7.50
Other direct taxes	0.00	0.00
PAT	18.57	16.91
Appropriation of profit		
Dividends	8.56	8.56
Equity dividends	8.56	8.56
Preference dividends	0.00	0.00
Dividend Tax	0.90	1.00
Retained earnings	9.11	7.35
Cash profit	23.23	21.97
Cash flow from business activities	32.40	19.45
Net sales	131.37	38.66
Value of output	127.93	139.87
Gross value added	82.36	84.09

Executive Summary

	Mar 1999	Mar 2000
	12mths	12mths
		Rs. Crore
Gross sales	131.85	141.69
Net sales	131.37	138.66
VOP	127.93	139.87
Other income	3.25	2.70
Cost of production	60.88	74.59
Selling cost	11.75	14.88
PBDIT (NNRT)	33.53	32.00
PBDT (NNRT)	31.11	29.31
PBT (NNRT)	26.45	24.25
PAT (NNRT)	18.45	16.75
Cash profit (NNRT)	23.11	21.81
Operating cash flow	32.40	19.45
Gross value added	82.36	84.09
Exports	23.80	22.86
Imports	4.80	6.29
Gross fixed assets (net of reval & W)	96.75	107.46
Current assets	75.29	90.21
Net worth	87.69	95.04
Equity capital	10.70	10.70
Long term borrowings	6.00	12.46
Capital employed	93.69	107.50
Current liabilities & provisions	43.97	46.82
Total assets / liabilities (net of reval & misc. exp. n.w.o)	137.66	154.32
Break-even sales (%)	60.71	62.14
Margin of safety (%)	39.29	37.86
Growth (%)		
Gross sales	3.00	7.46
Net sales	2.62	5.55
Cost of production	0.63	22.53
GFA	7.23	11.07
Total assets	8.90	12.10

Margins (%)

PBDIT (NNRT) / Sales	25.43	22.58
PBDT (NNRT) / Sales	23.59	20.69
PAT (NNRT) / Sales	13.99	11.82
PBDIT (NNRT) / Net sales	25.52	23.08
PBDT (NNRT) / Net sales	23.68	21.14
PAT (NNRT) / Net sales	14.04	12.08

Returns ratios (%)

PAT / Net worth	22.19	18.33
PAT / Total assets	13.97	11.47
PBDIT / Total assets	25.39	21.92
PBDIT / Capital employed	36.78	31.81

Liquidity ratios

Long term debt / equity (times)	0.07	0.13
Total debt / equity (times)	0.07	0.13
Current ratio (times)	1.71	1.93
Interest cover (times)	11.93	10.01

Gross working capital cycle (days)	133	143
Net working capital cycle (days)	68	76
Avg. days of debtors (days)	24	32
Avg. days of creditors (days)	64	67
VOP / Total assets	0.969	0.958
VOP / GFA (times)	1.368	1.370

Total R & D expenditure	0.00	0.00
R & D capital	0.00	0.00
R & D current	0.00	0.00