CHAPTER 4
INDUSTRY

With agriculture's growth expected to be rather modest in the future, the role of the industrial and service sectors becomes all the more important in terms of growth. The growth of the secondary sector in general and manufacturing industry specifically has been well over 20 per cent between 1993-94 and 1998-99. Employment in the secondary sector, moreover, has increased from around 85,000 in 1993-94 to around 1,36,000 in 1999-2000, namely a growth rate of almost 7 per cent per annum.

While Pondicherry is not rich in natural resources which would provide the Union Territory comparative advantage in particular industries, its attraction to investors has been in terms of easy availability of land, water, labour and power and in terms of incentives, concessions and tax holidays. Over the last couple of decades, the Union Territory has built up infrastructure which has served as a basis for industrial growth and which can aid growth in the future. First class infrastructural facilities are imperative in a context where some tax concessions and low tax rates - one of the reasons for investing in Pondicherry - are being withdrawn in part.

As we shall highlight in this chapter, Pondicherry needs to return to the basics by creating the right climate for investment and revamping its infrastructure base which has qualitatively declined in the recent past. The withdrawal of concessions has already caused some industrial slow down and closure; there is urgent need to replace rather generous incentives by other attractions. This chapter looks at the overall industrial scenario in the recent past with a view to identifying not only industries with potential for growth, but also the measures necessary to stimulate this growth in the next two decades.

Assessing Pondicherry's Industrial Past

Industrial development in Pondicherry has been a target area for the Union Territory government for some time now. Industrial development was targeted as a thrust area as early as the Second Five Year Plan (1956-57 to 1960-61). The idea of industrial estates was floated at this time and the first industrial estate was operational by the Third Five Year Plan (1961-62 to 1965-66). During the Fourth Five Year Plan (1969-70 to 1973-74), both public and private investment in industry was emphasised and infrastructure development too. In addition, Pondicherry attracted industry through subsidies for power, 'efficient' labour and various incentives and concessions.

Pondicherry continues to place significant emphasis on industrial growth. As we shall highlight in greater detail later, the government not only has encouraged infrastructure development but also offered a lot of help in terms of entrepreneurial guidance, marketing and financial assistance. The Pondicherry Industrial Promotion and Development Corporation Limited (PIPDIC) has been the nodal agency involved in infrastructure development and financial assistance and is the lynchpin behind industrial growth in the Union Territory. PIPDIC is responsible for much of the industrial development in the Union Territory. The industrial estates, the growth centre in Karaikal, the IT Park and the Electronic Park at Thirubuvanai are all under the aegis of PIPDIC. It also operates all the refinance schemes of IDBI and SIDBI. It acts, therefore, both as the State Industrial Promotion Corporation and the State Finance Corporation.

It would appear as if PIPDIC's efforts have borne fruit, especially in the recent past. Between 1980-81 and 1992-93, the industrial sector grew at a modest 2.77 per cent. While manufacturing industry grew at 7.42 per cent and registered manufacturing at 9.38 per cent, construction which was the most important secondary sector activity (in terms of its value addition in 1980-81) grew at a negative rate of -1.85 per cent.

The nineties, however, tell another story. The growth rate for the industrial sector (in terms of value added) between 1993-94 and 1998-99 was 21.09 per cent. Manufacturing industry grew at 23.66 per cent and registered manufacturing at 26.82 per cent. There seems to have been some type of a revival in the construction industry as well which registered a growth rate of 3.61 per cent. Electricity, gas and water supply grew at 5.34 per cent (Table 4.1). Part of the higher growth rate of industry could be attributed to the liberalisation process - industries did not need to get a license from the Centre in most cases.

Table 4.1
Annual Growth Rates of the Industrial Sector, 1993-94 to 1998-99

Item	Annual Growth Rate
Manufacturing	23.66
- Manufacturing Registered	26.82
- Manufacturing Unregistered	4.47
Construction	3.61
Electricity, Gas & Water Supply	5.34
Secondary Sector Total	21.09

Source: Calculated from CSO, diskette data on GSDP for 1993-94 to 1998-99.

Contribution to GSDP

These large growth rates in the industrial sector meant that the contribution of industry to total GSDP increased significantly between 1993-94 and 1998-99. As can be seen from Table 4.2, in absolute terms the secondary sector's contribution grew from Rs. 33,633 lakh in 1993-94 to Rs. 82,173 lakh in 1998-99 in constant prices. In percentage terms, the industrial sector's contribution increased from 33.62 per cent to 45.77 per cent. This large increase was mostly due to the growth in manufacturing sector, namely from Rs. 27,970 lakh in 1993-94 to Rs. 75,303 lakh in 1998-99.

Table 4.2
Contribution of Industrial Sector to Total GSDP,
1993-94 to 1998-99 (1993-94 Constant Prices) (Rs.Lakh)

Item/Year	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
Manufacturing	27970	25403	25680	50820	61354	75303
- Registered	22781	19925	20040	44812	55144	68805
- Unregistered	5189	5478	5640	6008	6210	6498
Construction	4927	5107	5280	5481	5691	5902
Electricity, Gas & Water Supply	736	772	812	854	897	968
Secondary Sector Total	33633	31282	31772	57155	67942	82173
% Contribution of Industrial Sector to Total GSDP	**33.62**	**30.93**	**28.52**	**40.68**	**43.20**	**45.77**

Source: CSO, diskette data for GSDP, 1993-94 to 1998-99.

Employment

Employment in the secondary sector increased from 30,786 in 1971 to 55,132 in 1991, an almost two-fold increase. As can be seen from Table 4.3, much of this increase can be accounted for by the growth of employment in the manufacturing sector which increased from 25,243 in 1971 to 41,248 in 1991. Percentage-wise, however, the share of manufacturing in total secondary sector employment actually decreased from 82.00 per cent in 1971 to 75.14 per cent in 1991. Constuction, on the other hand, increased from 14.48 per cent to 20.15 per cent during the same period (Table 4.3).

Table 4.3
Employment in the Secondary Sector, 1971 to 1999-2000

Category/Year	1971	1981	1991	1993-94	1999-2000
Manufacturing	25,243 (82.00)	32,852 (80.54)	41,428 (75.14)	55,677 (65.09)	94,392 (69.18)
Electricity, Gas & Water Supply	1,086 (3.53)	1,375 (3.37)	2,596 (4.71)	4,416 (5.16)	4,141 (3.03)
Construction	4,457 (14.48)	6,562 (16.09)	11,108 (20.15)	25,450 (29.75)	37,917 (27.79)
Secondary Sector Total	30,786 (100.00)	40,789 (100.00)	55,132 (100.00)	85,543 (100.00)	1,36,450 (100.00)
Per cent to Total Employment	**21.83**	**23.54**	**21.06**	**27.60**	**37.44**

Sources: Census of India, Pondicherry Series, 1971-91and NSSO, 50th and 55th Rounds.

More recent data from the 50th and 55th rounds of NSS show that employment in the manufacturing sector has shot up between 1993-94 and 1999-2000, primarily due to a large increase in the manufacturing sector but also to a substantial increase in construction. In terms of its relative contribution, the manufacturing sector's share, moreover, has risen to 37.44 per cent between 1971 and 1999-2000. This increase has occurred mostly after 1993-94 when it accounted for only 27.60 per cent.

The indication is that there has been a steady annual growth in terms of employment in the secondary sector between 1971 and 1991 and a faster growth rate between 1993-94 and 1999-2000 (Table 4.3). Whereas growth of employment was around 3 per cent between 1971-81 and 1981-91, it has grown at an annual rate of 6.90 per cent between 1993-94 and 1999-2000. Growth has been most substantial in manufacturing industries (7.83 per cent) and construction (5.86 per cent). While employment in the electricity, gas and water supply sector grew fastest between 1981-91, namely at 6.56 per cent it has grown at -0.91 per cent during 1993-94 and 1999-2000.

Therefore, it would appear as if high growth rates have resulted in considerable employment generation especially within industry.

Number, Types and Location of Industries

According to government records, there were 6,555 industries in the Union Territory in 2000. Out of these 6,555 industries, 42 were large scale, 125 medium scale and 6,388 small scale. The total employment in these industries was 76,699 out of which 53,168 were in the small scale sector.[6] The value of production was Rs. 7,600 crore in current prices (Table 4.4).

Table 4.4
Industrial Units in Pondicherry, 2000

	LSI	MSI	SSI	Total
Units	42	125	6388	6555
Investment (Rs.Crore)	766.50	339.233	312.58	1418.31
Employment (in Nos.)	16098	7433	53168	76699
Production (Rs.Crore)	1375.08	2730.49	3494.45	7600.02

Source: Government of Pondicherry, Industries Department.

Table 4.5 gives details of the types of industries in the Union Territory. Chemical and chemical products is the largest category comprising 22.21 per cent of total industrial units, followed by food products (12.65), metal products (11.67), cotton and wool textiles (11.64) and leather, rubber and plastics (9.03). Most of the industries in all the sub-sectors are small-scale in nature.

As per location, 80 per cent of these industries are in the Pondicherry region, namely 5,271 out of 6,555. The remaining 20 per cent include 827 units in Karaikal, 231 in Mahe and 226 in Yanam. Most of the 827 units located in Karaikal are small-scale (818); so too the case with Mahe and Yanam, namely 230 out of 231 for Mahe and 218 out of 226 for Yanam. The bulk of both large-scale and medium-scale industries are located in the Pondicherry region. Industrial development both now and in the future is likely to be concentrated in the Pondicherry region of the Union Territory

[6] The difference between Table 4.3. and 4.4 is due to the fact that NSS classification of manufacturing is broader in that it includes household industry.

Table 4.5
Large, Medium and Small-Scale Industries in Pondicherry, 2000

Major Product Head	LSI	MSI	SSI	Total
Chemical and Chemical Products	13	24	1419	1456 (22.21)
Food Products	4	12	813	829 (12.65)
Metal Products	2	17	746	765 (11.67)
Cotton and Wool	7	6	750	763 (11.64)
Leather, Rubber and Plastics	6	26	560	592 (9.03)
Machinery and Parts	2	24	475	501 (7.64)
Wood Products	0	0	431	431 (6.58)
Paper and Printing	3	5	357	365 (5.57)
Non-Metalic Mineral Products	4	5	253	262 (4.00)
Repairing Services	0	0	239	239 (3.65)
Miscellaneous	0	0	185	185 (2.82)
Personal Services	1	6	160	167 (2.55)
Total	**42**	**125**	**6388**	**6555 (100.00)**

Source: Government of Pondicherry, Industries Department.

Note: Number in parentheses is the percentage of total.

Exports

Exports of industrial products have also picked up considerably. Whereas in 1989 exports were only Rs.28 crore, exports (mostly of manufactured goods) in 1997-98 were to the tune of Rs.320 crore. As Table 4.6 illustrates, leather, rubber and plastics accounted for Rs.82 crore, chemical and chemical products for Rs.78 crore, textile and ready made garments for Rs.59 crore, polished granites and polished diamonds for Rs.48 crore, metal products for Rs.33 crore, food products for Rs.15 crore, paper and printing products for Rs.3 crore and computer software for Rs.2 crore.

Table 4.6
Major Items of Export from Pondicherry, 1997-98 (Rs. Crore)

Item of Export	Total Value of Exports
Leather, Rubber and Plastics	82
Chemical and Chemical Products	78
Textile and Readymade Garments	59
Polished Granites and Polished Diamonds	48
Metal Products	33
Food Products	15
Paper and Printing Products	3
Computer Software	2
Total	320

Source: Government of Pondicherry, Industries Department, Pondicherry.

The overall picture, therefore, appears promising for Pondicherry with considerable industrial activity taking place especially in the nineties.

Industrial Performance of Factory Sector

It is necessary, however, to examine the industrial scenario in greater detail. The most comprehensive data source for industries is the Annual Survey of Industries (ASI). The ASI gives details pertaining to all major industries, 2-digit as well as 3-digit. The analysis undertaken here pertains, however, only to the 2-digit level as 3-digit disaggregated data is not available for Pondicherry. ASI data only covers those industries which are covered under the Factories Act and not all at that. The factories covered are mostly the large and medium scale industries plus a small number of small scale industries. Thus, this analysis will not cover many small-scale industries especially. Moreover, the number of industries covered in the most recent (1996-97) ASI is only 348 units.

Rapid Growth of the Industrial sector in the Nineties

Industrial development during the nineties took place due to the implementation of policies encouraging industrial development and due to liberalisation. These policies included incentives and concessions with regard to sales tax, income tax, power and pollution control. The response from the industrial sector was impressive in the last decade.

The rapid expansion of the industrial sector which took place in the nineties, especially in the latter half is indicated in Figure 4.1. During the period 1980-81 to 1996-97, the number of units in the Union Territory covered by the ASI has gone up from 140 to 348, a compound annual growth rate of 6.27 per cent. The same pattern can be observed with respect to value of output and employment. The growth rates of these indicators during this period were 15.13 and 5.01 per cent respectively.

Changing Industrial Profile

An analysis of the factory sector as a whole does not capture the changes, however, which took place within the sector. The first thing that is evident if one looks at the disaggregated data is that there has been a significant change in terms of the industrial profile of Pondicherry between 1980-81 and 1996-97 (Table 4.7). This can be seen if we look at total output. Cotton was once by far the biggest industry in 1980-81 contributing 56.09 per cent, followed again by sugar and beverages (10.08 per cent), Paper (6.64) and chemicals (5.54) were also relatively big contributors. By 1996-97, however, it was the chemical industry which contributed the largest share of output, namely 29.26 per cent of total output. The machinery industry contributed 12.46 per cent. Other important industries were cotton and basic metal.

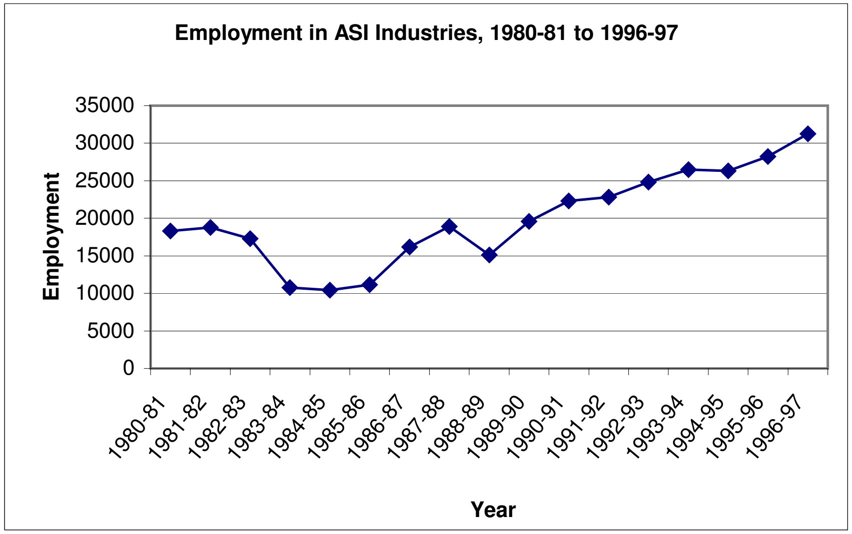
Table 4.7
Relative Contribution of Major ASI Industries to Output, 1980-81 and 1996-97
(1980-81 Constant Prices)

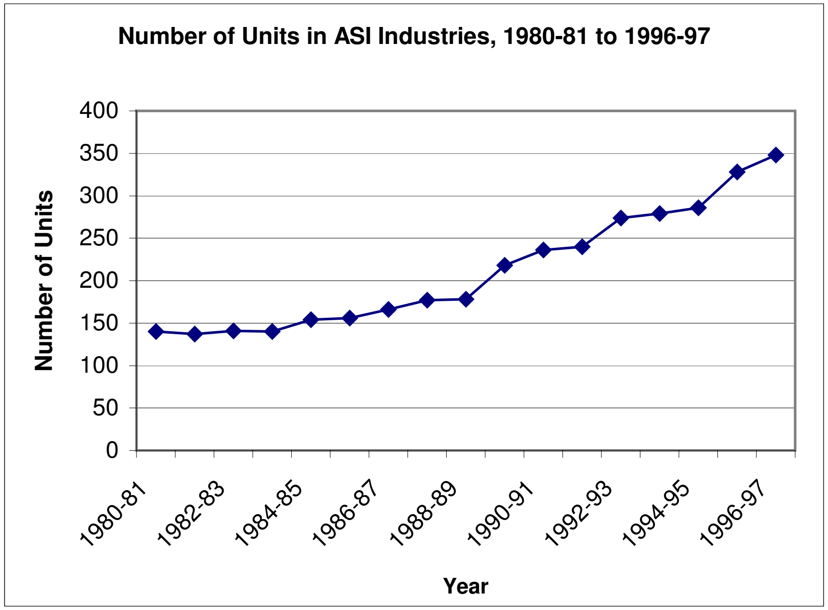
1980-81		1996-97	
Industry	**% of Total Output**	**Industry**	**% of Total Output**
Cotton	56.09	Chemical	29.26
Sugar and Beverages	10.08	Machinery	12.46
Others	6.76	Cotton	8.84
Paper and Press	6.64	Basic Metal	8.60
Chemicals	5.54	Non Metal	5.77

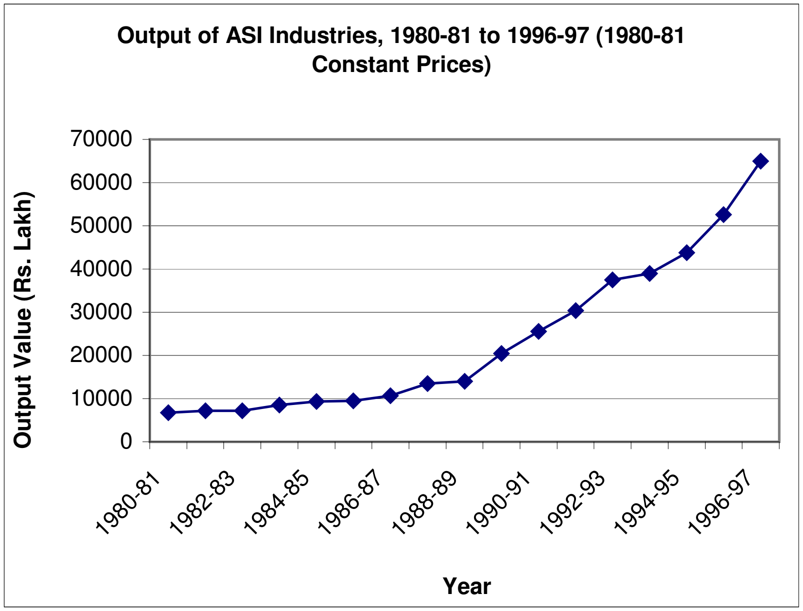
Source: Calculated from ASI data provided by Directorate of Economics and Statistics, Government of Pondicherry.

Figure 4.1

Industrial Performance of Factory Sector, 1980-81 to 1996-97







On the employment front, however, the situation is somewhat different. Cotton, which was the single most important industry in 1980-81 remained so even in 1996-97, though its share has fallen significantly. Its continuing importance suggests that it is a more labour intensive industy. The chemical and leather industries also accounted for a substantial share of total employment. Non-metal and paper industries were the fourth and fifth largest contributors to employment in 1996-97 (Table 4.8).

Table 4.8
Relative Contribution of Major ASI Industries to Employment, 1980-81 and 1996-97

1980-81		1996-97	
Industry	**% of Total Employment**	**Industry**	**% of Total Employment**
Cotton	66.07	Cotton	24.38
Sugar and Beverages	8.23	Chemical	15.24
Others	6.83	Leather	8.46
Paper and Press	6.57	Non Metal	8.43
Food	2.27	Paper and Press	6.48

Source: Calculated from ASI data provided by Directorate of Economics and Statistics, Government of Pondicherry.

Industrial Concentration/Diversification

The shift in industrial profile in the Union Territory can be captured to some extent by looking at the composition of industries in terms of agriculture related and non-agriculture related industries. Broadly speaking, agricultural industries include cotton textiles, food products and sugar and beverages. As can be seen from Table 4.9, while the contribution of agricultural industries to total output was 78.9 per cent in 1980-81, it declined to only 24.3 per cent in 1996-97. Consequently, the share of non-agricultural industries increased from 21.1 per cent to 75.7 per cent in the same period. The decline in agriculture based industries has been most prominent in the nineties with its share of output going down from 47.1 per cent in 1990-91 to 24.3 per cent in 1996-97. These figures indicate industrial diversification which is welcome. Indeed Pondicherry has achieved very good industrial performance in terms of both growth and diversification. This is further analysed later.

Table4.9
Relative Shares of Agriculture Related Industries and Non-Agriculture Related Industries in Employment and Value of Output (Per Cent of Total)

Year	Employment		Value of Output	
	Agrind	Non Agrind	Agrind	Non Agrind
1980-81	84.3	15.7	78.9	21.1
1985-86	64.5	35.5	64.4	35.6
1990-91	26.8	35.9	47.1	52.9
1996-97	48.3	51.7	24.3	75.7

Note: AGRIND – Agriculture Related Industries
NON AGRIND – Non Agriculture Related Industries

The employment picture shows a less drastic change. Whereas employment in agriculture-base industries accounted for 84.3 per cent of total employment in 1970-71, it accounted for 48.3 per cent in 1996-97. Thus, although the share of employment in agriculture-related industries declined significantly, it did not decrease at a rate proportionate to output. The other interesting point is that employment in agriculture-related industries actually increased between 1990-91 and 1996-97.

Another issue of importance is the extent of concentration of industries in the early eighties. The indication is that the cotton industry accounted for much of the economic activity, something which appears to have changed significantly. In order to look at the nature of change more closely, an attempt is made to construct the Hirschman-Herfindahl index (HHI) for the manufacturing sector for the period 1980-81 to 1996-97. The HHI=$\sum$ P/100 where P=percentage share of i^{th} industry in the manufacturing sector. As there are 18 main industry groups in Pondicherry, if industrial activity is equally diversified the HHI will be 5.56. If all industrial activity is concentrated in one industrial sub-sector the HHI will be 100.

Table 4.10 gives details for the HHI for employment and output for the years 1980-81 to 1996-97. As can be seen, the general trend has been towards a diversification of industrial activity. Whereas the HHI for employment has declined from 45.41 in 1980-81 to 21.87 in 1996-97, the HHI for output has declined from 34.14 to 13.40 during the same time period. The decline in HHI suggests greater diversification. Thus, there is greater diversification in output than in employment in 1996-97.

Table 4.10
HHI with Respect of Employment and Output

Year	Employment	Output
1980-81	45.41	34.14
1985-86	24.58	19.74
1990-91	24.23	12.85
1996-97	21.87	13.40

Source: Calculated from ASI data provided by Directorate of Economics and Statistics, Government of Pondicherry.

Growth Rates of Output and Employment

As highlighted above, the growth of the manufacturing sector has been very rapid, especially in the recent past. To what extent that growth has been the result of the growth of ASI industries can be partially assessed by looking at the growth of these industries. Table 4.11 gives details of annual growth rates for output and employment for the periods 1980-81 to 1989-90 and 1990-91 to 1996-97. Whereas the overall growth rate of output (value) for ASI industries was 10.55 per cent between 1980-81 and 1989-90, it increased to 13.92 per cent between 1990-91 and 1996-97. The fastest growers between 1980-81 and 1989-90 were the non-metal industry (39.08 per cent), plastics (32.24 per cent), chemicals (21.69 per cent) and food industry (21.01 per cent). Other industries which grew more than 10 per cent per annum were the transport (18.26 per cent), machinery (14.72 per cent), basic metal (12.26 per cent) and textile (11.23 per cent) industries.

During the nineties, the transport (50.59 per cent), machinery (37.48 per cent), non-metal (28.78 per cent), metal (27.68 per cent), chemical (23.46 per cent) and leather (21.24 per cent) were the fastest growers. Other industries which grew significantly were the paper (11.66 per cent) and sugar and beverages (11.45 per cent) industries. The plastic and basic metal industries, however, grew much slower than in the eighties.

Many of the smaller industry groups in the eighties in terms of their contribution to output have been growing the fastest. These include industries such as the transport, basic metal, metal and non-metal industries which have emerged as important players in terms of output as well as industries such as the leather industry which are still relatively small in terms of output, but are important in terms of employment and export potential. This would suggest that both these types of industries, capital intensive and labour intensive, have good potential.

It is also important to highlight that certain major industries of the past (in terms of the ranking we have done) have not performed very well. Cotton and cotton textiles, for example, registered growth rates of -1.22 and 3.85 per cent respectively between 1980-81 and 1989-90, and between 1990-91 and 1996-97. Sugar and beverages, an important industry in 1980-81, registered a growth rate of only 1.50 per cent between 1980-81 and 1989-90, but has grown much more quickly in the nineties. Since industries like the cotton textiles industry might still have potential, it is necessary to restructure it suitably to prevent them becoming less important.

The restructuring of certain slow growing industries is important in the context of employment. Pondicherry has relatively high unemployment rates. As can be seen from Table 4.11, the growth rate of employment as a whole was negative (-0.75 per cent) between 1980-81 and 1989-90 and around 6 per cent between 1990-91 and 1996-97. Growth rates of employment between 1990-91 and 1996-97 has been highest in machinery (20.85 per cent), metal (20.33 per cent), transport (19.22 per cent), non-metal (17.60 per cent), chemical (16.81 per cent) and leather (13.20 per cent). Although cotton textiles has registered a negative growth rate in the eighties and nineties, it is still one of the biggest employers of labour.

Small-Scale Industries

Industrial policy in Pondicherry has been very much geared toward promoting small scale industries (SSIs). In addition to general concessions offered to industry such as exemption from collection of sales tax on finished products for a period of five years, income tax holidays, subsidised power and allotment of plots by PIPDIC, SSIs have had a number of additional benefits. These include: concessional rates on central sales tax, exemption from payment of earnest money deposit and security deposit for tenders called by government departments, price preference for the supply of finished goods to government departments, interest subsidies on loans, preferential incentives of purchase of pollution control machineries etc.

Table 4.11
Annual Growth Rates of Employment and Output (Value) for Major Industries between 1980-81 and 1996-97

Industry Type	1980-81 to 1989-90		1990-91 to 1996-97	
	Employment	Output	Employment	Output
Cotton	-9.11	-1.22	-1.55	3.85
Chemical	14.06	21.69	16.81	23.46
Sugar and Beverages	-12.40	1.50	8.16	11.45
Textiles	-0.10	11.23	5.40	-1.60
Food Products	15.25	21.01	-0.81	7.05
Paper Products	0.52	2.02	2.77	11.66
Plastics	14.93	32.24	-1.74	6.90
Transport	2.13	18.26	19.22	50.59
Metal	-1.05	2.30	20.33	27.68
Non-Metal	22.77	39.08	17.60	28.78
Machinery	13.68	14.72	20.85	37.48
Basic Metal	3.55	12.26	6.01	4.81
Leather	-	-	13.20	21.24
Electricity	-	-	1.25	-1.91
Total	-0.75	10.55	6.04	13.92

Source: Calculated from ASI data provided by Directorate of Economics and Statistics, Government of Pondicherry .

Given these additional concessions, it is not surprising that SSIs have mushroomed in the Union Territory. As illustrated earlier, SSIs account for over 97 per cent of the total 6,555 listed industries.

In order to get a profile of SSIs in Pondicherry, a small sample survey of 255 industrial units (approximately 4 per cent of total listed industries) was undertaken. 186 of these industries were urban-based and 69 rural-based. Only industry types with more than 350 units in that category were considered. The sample thus included 17 paper and printing industries, 24 machinery industries, 28 leather product industries, 37 cotton, 37 metal product industries, 41 food product industries and 71 chemical and chemical product industries. 134, 81 and 40 industries were proprietary, partnership and limited company industries respectively. Total employment in these industries was 3,409.

While the results of the survey were mostly qualitative, it is possible to get some idea as to the status of SSIs in the Union Territory. Small scale industries have contributed significantly to employment generation in the Union Territory as observed from Table 4.12. The 255 units surveyed employed 3,409 persons (2,476 men and 933 women), averaging 13 persons per unit. The absorption of labour was high in paper, cotton, leather and chemical units. According to the Industries Department, Government of Pondicherry, the 6,388 SSI units employ 53,168 persons, an average of 8.3 persons per unit, accounting for 70 per cent of the industrial workforce.

Table 4.12
Employment of Sample Industries

Industries	**Male**	**Female**	**Total**	**Units**	**Workers/Unit**
Paper and Printing	200	141	341	17	20
Metal Products	214	7	221	37	6
Machinery	261	29	290	24	12
Leather Products	256	211	467	28	17
Food Products	176	48	224	41	6
Cotton	584	144	728	37	20
Chemical	785	353	1138	71	16
Total	**2476**	**933**	**3409**	**255**	**13**

Source: MSE Primary Survey (2001).

Future absorption of labour in the industrial sector will depend critically on the small scale sector. Small-scale units will have to adapt to a new environment of uniform floor rates of sales tax which has sustained many of them in the past. Nearly half (43.5 per cent) the units surveyed said the incentives and concessions provided by the Union Territory government was a major reason for locating in Pondicherry. In the future, SSIs will have to build up their own capabilities so that they are able to compete in the market and not depend on low sales tax rates. However, other concessions such as the income tax holidays can continue.

These concessions are particularly important in the case of Pondicherry because a substantial amount of the raw materials purchased as well as the marketing of finished products is done outside the Union Territory as seen in the following table (Table 4.13). While SSIs have been the thrust area of industrial policy in the Union Territory, in order for them to compete, they will have to invest heavily in building up their own capabilities. The government can also play an enabling role by investing in infrastructure which would help make SSIs more competitive. Though in the short run, uniform sales tax might be a problem, the extent of this is often exaggerated.

Table 4.13
Source of Raw Material and Destination of Finished Products

Destination/Item	Raw Material Purchases		Finished Product	
	Number of Units	Percentage to Total	Number of Units	Percentage to Total
Local	100	39.2	83	32.5
Outside Union Territory	113	44.3	100	39.2
Both	42	16.5	72	28.2
Total	**255**	**100.0**	**255**	**100.0**

Source: MSE Survery (2001).

Public Sector Units (PSUs)

An issue of considerable importance in Pondicherry, as in most states, is the state of public sector units (PSUs). Pondicherry has a number of public sector industrial units primarily, spinning mills, distilleries and sugar mills. These units were established both as a means to stimulate growth and to generate employment in the Union Territory. In addition to these government-owned units, there are a number of other autonomous government bodies in which the government has invested significantly such as PIPDIC and PASIC. These PSUs are not production oriented in the same way as the industrial units but still demand considerable investment from the government.

The need for keeping and sustaining the PSUs is increasingly becoming the subject of discussion. PSUs in general are considered 'white elephants' utilising considerable public money but not generating adequate goods and services. This seems to be the case in Pondicherry as well. Table 4.14 gives details with regard to profits/losses of select PSUs (mostly government corporations) as furnished in the Report of the CAG of India

Table 4.14
Financial Status of Select Public Sector Units in Pondicherry (Rs. Lakh)

Name of PSU	Profit/Loss	Paid Up Capital
PASIC	+ 41.14	544.28
PAPSCO	- 94.19	425.26
Pondicherry Distilleries	- 113.62	645.00
PIPDIC	+ 577.73	3526.21
PELECON	+ 2.49	9.65
Pondicherry Textile Corporation Ltd.	- 2,083.19	7,248.81
Pondicherry Adi Dravidar Development Corporation Ltd	+ 1.32	171.35
Pondicherry Corporation for Developmentof Women Ltd.	- 43.36	95.70
Pondicherry Tourism and Transport Development Corporation Ltd.	- 122.48	360.81
Pondicherry Corporation Ltd.	+ 148.63	9,939.39
Total	**- 1,685.54**	**22,966.46**

Source: CAG (2000).

We have also independently collected data from five of the industrial PSUs for the period 1985-2000. Some PSUs such as the Pondicherry Co-operative Sugar Mill and the Pondicherry Co-operative Spinning Mill have intermittently been making profit. On the other hand, PSUs such as Swadeshi Cotton Mills, Anglo French Textiles and Shri Bharathi Mills have been continuously running at a loss.

From data made available to us for the public sector industrial units, it is difficult to undertake a similar analysis in terms of performance as has been done for the ASI industries as a whole as there is not adequate information with regard to input, output, fixed capital, number of workers etc. For a detailed analysis of the state of PSUs, it will be necessary to establish a commission which can look at performance as a whole. The issues with regard to public sector industries and autonomous corporations will be quite different and need to be dealt with separately.

A number of important issues nonetheless emerge from the analysis of the limited data and reports provided to us. The main reason that PSUs do not seem to be faring well is that they are unable to compete in the market. Besides the fact that raw material costs are going up, most PSUs have technologically obsolete equipment with low levels of productivity. In addition to this, PSUs have surplus labour (and costly labour at that) which has resulted in low net value added/worker ratios.

PSUs have taken a number of corrective steps to address these problems. Swadeshi Cotton Mills, for example, has shut down uneconomic weaving and processing units and sold old and surplus machinery for revenue modernisation purposes. Similar steps have been taken by Shri Bharathi Mills. These steps have been aimed essentially at improving machine utilisation and worker productivity. In addition to these measures, many of the PSUs have started to offer VRS so as to trim their labour force.

These measures, however, have only helped in stemming losses, not making profit. As a result, many PSUs are still requesting assistance from the government not only for working capital but also to pay salaries. In the case of Shri Bharathi Mills, the government bailed it out to the order of Rs.1.22 crore for overdue electricity bills. Thus the overall scenario, despite certain measures taken, is not very promising in terms of the financial viability of PSUs.

With regard to government bodies such as PASIC, PIPDIC etc., the remedy is clearly different. These government bodies will need to generate revenue from their activities to the extent possible so that the subsidy component of their activities does not result in excessive burden on the government.

As mentioned above, a disinvestment commission can look at the various possibilities in terms of the future of PSUs in general. The commission should first of all consider whether privatisation is a viable option or not. The Government of Pondicherry has highlighted the fact that closure of Anglo French Textiles, for example, would lead to signficant employment loss. Consequently, the government has already prepared a comprehensive modernisation programme which is proposed to be implemented over a period of 3 1/2 years. An issue of concern with regard to Pondicherry Distilleries is that of regulation. Since there are other private sector units involved in alcohol production, there does not seem to be any good reason why this unit should not be privatised. It is also not worthwhile for the government to endlessly subsidise the Pondicherry Khadi and Village Industries Board.

Conclusion

We may conclude that there has been vibrant and diversified growth in Pondicherry in the nineties. The growth has been contributed by large-scale, medium-scale and small-scale industries. According to CII, as of 1997, there were 25 large enterprises, 88 medium enterprises and 5,492 small-scale enterprises. There are now 6,388 SSI units, employing about 53,000 persons according to the Industries Department. Though there has been some industrial slow down because of the general down turn in the economy and possibly because of withdrawal of some concessions, growth is still continuing. According to CII, 187 proposals are currently in the pipeline (40 per cent of these are in various stages of implementation) with a total outlay of Rs. 2,042 crore, having a potential of employing over 64,000 persons.

Pondicherry can look forward, therefore, to continued industrial growth of a diversified nature provided the environment and the infrastructure are atleast not less attractive than elsewhere in the south of the country.

Vision for the Future Industrial Growth

Pondicherry's industrial policy (1997) has already set forth a broad vision for the future. This vision is:

- To promote sustainable industrialisation in the Union Territory of Pondicherry,
- To participate in the globalisation of the economy with greater exports and imaginative imports,
- To ensure balanced industrial development in all regions of the Union Territory,
- To take advantage of the special features of Pondicherry including its heritage and culture,
- To conserve the environment of Pondicherry for sustained and rapid industrial growth,
- To gainfully utilize the human resources of the Union Territory and maximise employment, and
- To improve the standard of living and quality of life of the people of the Union Territory.

While the objectives in general and that of sustainable industrial development in particular are desirable ones, it is both unlikely and undesirable that industrial growth is evenly divided throughout the four regions of the Union Territory. Industries should only be established where there is a comparative advantage to do so. For the other objectives to be realised, moreover, Pondicherry must take specific initiatives which foster industrial growth.

Initiatives in terms of industrial growth in the future need to take into account the relative growth of industries as well as the priorities of the Union Territory as articulated in the Industrial Policy of 1997. For example, while the chemical industry has been growing at fast rates since the eighties, it is a potentially hazardous industry in terms of environmental damage. The Union Territory government will, therfore, have to take initiatives that ensure that industrialisation is sustainable both in terms of taking measures to prevent damage to the environment and in terms of promoting environmentally more friendly industries. In addition, emphasis on employment generation will be necessary.

Agro-Processing Industry

While Pondicherry does not have any comparative advantage in terms of its natural resource base, there are many areas in which it can develop comparative advantage over time. With emphasis being placed on a diversified agricultural base driven considerably by horticultural and floricultural crops, the agro-processing industry is one industry in which such a comparative advantage can be developed. Marine product processing must also be an important component of it. Pondicherry's long coastline offers it the opportunity to develop its fisheries sector and consequently a sea food processing industry as well.

For this to happen, effective forward and backward linkages need to be established so as to sustain a symbiosis between agriculture and industry. If farmers are assured of having outlets to market their vegetables, fruits and flowers, they will be encouraged to grow more of these crops. The government, therefore, needs to take the initiative in encouraging entrepreneurs to start such industries by giving them the necessary facilities and some concessions in the initial years.

Agro-processing industries will have a number of other benefits. Besides establishing a link between agriculture and industry, many of these industries will locate themselves in rural areas and thus provide much needed employment to the rural workforce which is not able any longer to depend on agriculture alone. Moreover, the food processing industry is a relatively labour intensive industry and thus an important source of employment in general.

Computer Hardware, Software and IT Enabled Industries

A number of the major hardware producers are located in Pondicherry, namely HCL, WIPRO, IBM and Pragati. Most of these industries located themselves in Pondicherry originally to avail principally income tax concessions. Most of these industries now have sizeable operations in Pondicherry. However, unless the government actively encourages these industries to stay, some of these industries could leave if they have not invested much in their Pondicherry operations. The government could induce them not to do so by providing them with a conducive environment and a much better infrastructure than available in the neighbourhood.

A large hardware industry in Pondicherry can also help in promoting the software industry. At present, the software industry is relatively stagnant in the Union Territory. With a thriving hardware industry, forward linkages can be established with the software industry. Pondicherry has a relatively well-trained technical workforce for the software industry though it needs to strengthen its IT training in line with existing market demands. The Institute of Information Technology needs to be reactivated so that a good pool of software professionals can emerge from it. As we stress in the chapter on human development, the standards of curricula, teaching and research in the technical institutions have to be strengthened considerably.

In the short-run, the greatest potential, however, exists in IT-enabled services. Call-centres and back office centres only require a moderately educated workforce. Pondicherry must actively seek large companies to establish shop in Pondicherry as a single entrant into the market could have a potential multiplier effect. Pondicherry must exploit its French connection as this is its area of comparative advantage. [The IT industry is discussed in considerable detail in the services chapter.]

Biotechnology

There are plans in the offing for establishing a biotechnology park in Pondicherry. A biotechnology policy has also been drafted. With Pondicherry's strong educational base, especially in the sciences, medicine and engineering, good potential exists for promoting biotechnology. The Union Territory may be in a good position to compete in this field with support from the Department of Biotechnology, JIPMER and Pondicherry University. A comprehensive human resource development programme has to be launched to attract both experts and entrepreneurs to this emerging field. Infrastructure for the Biotechnology Park should include library, computers, bioinformatics network, wet labs, green houses, animal testing and office area. It may be desirable to link up with French or American universities to develop the biotechnology park.

Light Engineering including Auto Components

Another thrust area emphasised in the Industrial Policy is light engineering/auto components. As the transport sector is growing rapidly in the country, there is considerable potential for this industry to develop. Major actors such as Lucas TVS already have a large operation in Pondicherry. As this is a relatively power intensive industry, Pondicherry's low power tariffs could act as an incentive to attract more industries here. Moreover, this industry is compatible with Pondicherry's fragile ecological base.

The flip side of the coin, however, is that Tamil Nadu has a vibrant automobile industry which with it will have to compete. If Pondicherry is to do so, it will have to have a much more pro-active policy which encourages such industries to invest in Pondicherry. One area of focus must be to give encouragement to ancillary industries to emerge as well so that supply sources are readily available.

Basic Metal and Metal Industries

The basic metal and metal industries have been two of the fastest growing industries in the Union Territory over the last couple of decades. Basic metal and metal industries are complementary industries to each other and are also an important source of components for industries such as the automobile industry. Efforts need to be made, therefore, to facilitate linkages between these industries and consumer goods industries such as the automobile industry. As these industries are polluting industries, strict environmental regulations will have to be enforced.

Leather Products and Footwear

As shown earlier, the leather industry is one of the fastest growing industries in the Union Territory. The leather industry is a good industry to promote for a number of reasons: it is to a great extent a small-scale industry with considerable employment potential although it has become much more capital intensive over time. Another major advantage of the leather industry is that it is a major export earner. Though Pondicherry does not need to promote export activity as such, export markets provide another base for the growth of indigenous industry. Here, the rest of India also offers a large market.

The focus will have to be, however, on value addition and not on tanning. As it is an export-oriented industry, it will have to meet international standards. Another dimension to this is marketing. In order to capture an increasing share of the market, the leather industry with the help of the government will have to spend considerable effort in promoting leather products so as to compete with goods produced in other countries.

Textiles and Garments

The textile industry in Pondicherry has not been faring very well in the recent past. This to a considerable extent is due to the inefficiency of large textile mills, some of which are PSUs. The emphasis should be, therefore, on well-managed, small scale spinning and powerloom units with modern equipment.

The garment industry is also a labour-intensive industry with an excellent domestic market and export potential. However, it is a very competitive industry. Efforts will have to be made not only to stay abreast of the latest fashion in potential export markets, but also to develop a 'unique' Pondicherry flavour to export garments which match with consumer sensibilities.

French Connection

In regard to some of the consumer industries that we have mentioned above, as well others such as the hospitality industry, Pondicherry must strive to make effective use of its French connection. There is great admiration in India for French culture, language, literature, fashion in clothes, shoes and furniture and also in French cuisine. Pondicherry should make itself a centre in South Asia for the production and distribution of French-oriented products. Attempts should be made to promote joint-ventures with French entrepreneurs and fashion designers. Pondicherry should advertise itself as a distribution point for French products in India. Later on when the South Asian Free Trade Area comes into existence, French products from Pondicherry can be exported to other South Asian countries. Elsewhere in the report, we are recommending that Pondicherry should exploits its good tourist potential. Here again, the French connection could be effectively made use of.

Strengthening the Infrastructure

To continue its achievements despite considerable achievements over the last few years in the field of industrial growth, Pondicherry must focus its attention on considerably upgrading its infrastructural base in order to encourage investment. A major reason why many industries located themselves in the Union Territory was the good infrastructure base that existed, particularly industrial estates, good roads, reliable power supply and adequate water. Over the last few years, however, many of these strengths have turned into weaknesses. The government must be a major player in trying to revamp the infrastructure base both through public sector investments and by encouraging more private sector participation in infrastructure development.

Industrial Estates

Industrial estates were to be the pillar of industrial policy in the Union Territory. At present there are six industrial estates in Pondicherry, and an electronic estate in Thirubuvanai ready for plot allotment. Moreover, a modern growth centre-cum industrial estate is at the final stages of completion at Polagam in Karaikal. In additon to these industrial estates, there are a number of industrial areas home to many industries.

Industrial estates in particular were meant to provide a good infrastructural base to industries located within them. Besides good roads, assured water and power supply, was to be the norm. PIPDIC, moreover, has leased plots at concessional rates to industries and is in charge of continual maintenance of the estates.

Over time, however, the infrastructure situation in industrial estates has deteriorated significantly. The road conditions in many of the industrial estates are dismal despite the fact that industrialists often pay a monthly service charge for the upkeep of the estates. Power cuts are much more frequent than they once were and often occur without notice resulting in large losses to industries who depend on uninterrupted power supply.

Serious efforts need to be made, therefore, to revamp these industrial estates so that they provide the necessary infrastructure. PIPDIC not only needs to invest sufficiently in improving the basic road infrastructure within these industrial estates, but needs to work much more closely with departments such as the Electricity Department to ensure that power supply is continuous. As power tariffs are still much lower in the Union Territory than in the neigbouring states, that incentive remains very much in place. But cheaper tariffs are no substitute for good power supply. Other common facilities that need to be developed are sewage and effluent disposal facilities, security and banking. Much more effort also needs to be undertaken to bring industries aboard. Industries should be more actively involved in the planning of industrial estates and in decisions that affect them within the estates.

Power

Many of the problems within industrial estates are problems of industry in general. Power has become a major problem within the Union Territory. As part of the southern grid, adequate power has been allocated to Pondicherry. The problem is, therefore, not with supply or generation but with distribution (see Power Chapter). Industrialists are increasingly concerned with sudden cuts in power supply, often without notice. While many industries (especially larger industries) have their own captive generation, the costs of this captive generation are substantially higher than the power bought from the Electricity Department.

The process of getting a power connection is also extremely tardy in the Union Territory. Many industries have had to wait for months, even years, to obtain power after having been promised it. As a result, while these industries have been ready for production, they have been either unable to commence or once again have had to depend on captive generation. The same problem exists with regard to obtaining additional power supply. Although many industries have expressed interest in expanding their operations in the Union Territory, they have been unable to get the necessary power.

Efforts, therefore, need to be made to improve the efficiency of power supply. As will be highlighted in the Power Chapter, efficiency can be improved by adopting a new institutional framework for the distribution of power. This new framework with a distribution board and private actors will go a long way to create a more competitive atmosphere which will encourage better service delivery. If that happens, a great fillip will be given to industry as power tariffs are still considerably lower in the Union Territory, thus giving industry an incentive to invest.

Transport

Roads

The transport network, both within and connecting the Union Territory, is critical for industrial growth. Pondicherry is well-connected by national and state hightways, especially after the completion of the East Coast Road which makes it easily accessible from Chennai and smaller towns such as Cuddalore and Chidambaram. The quality of roads, however, barring the East Coast Road is not very good. While the deterioration is perhaps largely due to the increase in vehicular traffic, efforts will have to be made to maintain these roads in good condition.

The condition of roads is of concern within the Union Territory itself. Traffic congestion has become so bad, within Pondicherry town especially, that the roads have taken a real battering. Quality control is paramount and this will depend to a great extent on regulation of traffic movement.

Rail

The rail network in Pondichery is in the process of being upgraded. At present, Pondicherry is connected only by metre gauge but the broad gauge line is soon to be started. Plans are also in the offing to connect Yanam with Kakinada and Karaikal with Nagapattinam.

The advantage of having a good rail connection to Pondicherry is that it makes it possible for industries to use this link for transporting their goods to and from Pondicherry. As Chennai is now well connected with the East Coast Road, the rail link will be more useful within the Union Territory and between Pondicherry and smaller towns which are not connected by good quality roads.

Port

Pondicherry has an old port located near the Light House and a new port near Ariyankuppam. A cargo quay 150 metres long has been constructed in order to avoid the multiple handling of cargo. The handling capacity of the port has also been increased significantly to around 1000 to 1500 tonnes per day. The port is also equipped with cargo handling equipment like launchers, cranes, tractors and trailers.

At present, however, the port is not being used much by industry. Besides for molasses, few goods are currently being transported through the port despite the modernisation of the port facility. There are a number of reasons for this. Container facilities are still limited at the port. Moreover, the Port Authority is not actively seeking business by offering industry incentives to use its facilities.

Efforts will have to be stepped up so as to activate the port and encourage industry to utilise it. While Pondicherry cannot compete with large ports in Chennai and Tuticorin, a medium size port itself will help industry considerably. Although plans to privatise the port have fallen through in the past, initiative should be taken to involve private parties once again. In the short run, the government's plan to set up a Port Corporation must be pursued much more aggressively.

Airport

Pondicherry has a medium-sized airport, but it is not operational. Though the viability of an airport at Pondicherry depends largely on the economics of it, a more active effort should be made to pursue the possibility. The closure of the airport was largely due to the fact that no serious background work was done vis-à-vis possible demand. From the perspective of industrial growth, a well-functioning airport could encourage entrepreneurs to invest in Pondicherry. At present, industrialists have to fly into Chennai and then travel by road to Pondicherry, a possible disincentive to many.

Telecommunications

If Pondicherry is serious about promoting its IT industry, telecommunication facilities should be top notch. While Pondicherry has been upgrading its telecommunication facilities in the recent past, it is still no match for nearby centres such as Chennai, Bangalore and Hyderabad. The government needs to prioritise attention to telecommunications and promote investment in that field in the future. The possibility of allowing private actors to enter the telecommunications market needs to be actively pursued.

Water Resources

Another critical input for industries is water. Pondicherry has always boasted having excellent quality and a sufficient quantity of water. The tide, however, is turning due mostly to over-exploitation but also to salinization in the coastal belt. As it is the government's policy to promote sustainable industrialisation, the government must be pro-active not only in encouraging industries which are less water dependent (to the extent possible) but also in ensuring that industries pay adequately for the quantity they utilise and treat the effluent water as well.

The Industrial Policy already offers small-scale industries financial incentives for adopting pollution control machinery. Moreover, industries with ISO certification are being recognised and promoted. This should go some way in ensuring that water quality (amongst other things) is maintained in the long-run. It should also help in ensuring that water is not an input constraint for industrial growth.

Export Processing Zone

The Pondicherry government has proposed to set up an Export Processing Zone in Pondicherrry. Land of the order of 102.63 acres has already been allocated in Sedarapet village for this purpose and currently the land acquisition is being processed through the Revenue Department. An Export Processing Zone will go a long way in promoting industrial exports from Pondicherry given the incentives (see later section) in place of

100 per cent export units. The government must ensure, however, that the infrastructural facilities in this zone are top notch and do not deteriorate as in the other industrial estates.

Creating the Right Investment Climate

Increasing emphasis is being placed throughout the world on establishing an 'investment friendly' climate. Even in India, states are being ranked according to their investment climate. This ranking is being taken very seriously by foreign investors especially those who do not want to be met with too much red-tapism.

While infrastructure development is key to creating the right investment climate, an equally important component is hastening the process of obtaining clearance for establishing industries. While Pondicherry's industrial policy has emphasised a single window clearance system, in practice this system is not operational. Though the District Industries Centre is the nodal agency for the single window clearance system, i.e it is supposed to forward the applications of industrialists to the concerned municipality/commune panchayat after getting the necessary clearances, industrialists are still made to run around to the concerned departments to pursue their applications. This is an extremely tedious job as it involves getting a NOC from the Department of Science, Technology and Environment, approval of the factory lay out from the Inspectorate of Factories, site clearance from the Town and Country Planning Department, permission of land conversion from the Agricultural Department, power feasibility certificate from the Electricity Department, building plan approval from the Pondicherry Planning Authority, clearance from the Heath, Fire Service, and Revenue Departments and licenses from the Food and Drugs Administration and Civil Supplies Department.

The government's priority, therefore, should be to operationalise this single window clearance system in such a manner that investing in Pondicherry is not a cumbersome process. In the Draft Tenth Five Year Plan for Industries, the government has stressed the need for simplifying procedures but not in line with a single window clearance system. Thus, slow clearance procedures are likely to continue. Even if multiple permissions are required, a nodal agency such as the Industries Department can act as the coordinator so that the entrepreneur does not have to run from department to department.

A single window clearance system can only be effective if the process itself is computerised in order to facilitate inter-department transactions. Once this is done, it will be possible for industrialists to pursue their applications on-line and consequently speed up the process. A redressal cell should also be established so that any unnecessary delays can be expeditiously pursued.

For all of this to happen, considerable effort will have to be taken to improve the overall efficiency of government departments. While the computerisation of line departments will help to a great extent, equally as important is improving the 'friendliness' of public servants. Government employees need to undergo training for the necessary attitudinal changes so that they perceive of the public as customers.

Also, central to creating the right environment is promoting Pondicherry as an industrial location. Pondicherry needs to much more actively seek out industries to invest in the Union Territory by holding industrial trade fairs, meeting with industrialists on a one to one basis and actively advertising the infrastructural and economic incentives it has to offer. This is all the more important in a climate where states are competing with each other for industrial investment. A single big investor in Pondicherry could lead to more investment in basic infrastructure which will lead to more interest in Pondicherry. At present, Pondicherry is not pro-active enough in doing so, and as a result investors are going elsewhere.

Incentives and Concessions

We have often heard it said that many industries came to establish themselves in Pondicherry because of low sales tax rates that had been maintained by the government there. It is further stated that since the Pondicherry has had to adopt uniform floor rates for sales tax in accordance with an all-states agreement, the advantage of low rates has gone, many industries are closing down and consequently there is not much prospect of future industrial growth. While low rates of local sales tax would have some advantage, since Pondicherry comprises a small territory, in many industries local sales tax would have constituted only a small share. However, low local sales tax rates would also help to some extent inter-state sales because CST has a ceiling of 4 per cent. The five year income tax holiday given to industries in Pondicherry must have been of much greater help.

We find from data made available to us that the process of industrial growth is continuing. There is a case, therefore, for urging the Central government to continue the tax holiday for income tax for another period of ten years. It is also necessary to phase out CST as early as possible as they work against the interests of small and not highly industrial states like Pondicherry. Meanwhile, Pondicherry should bring down its CST rate to an average of 1 per cent.

The Role of Government

Creating the right environment must be part of a wider strategy to redefine the roles of the public and private sector. We have already discussed the role of the government must play in terms of improving infrastructure, creating the right investment climate and offering the right incentives. In addition to this, however, the government has a few other important tasks. The government can play an important role in enhancing the efficiency of labour. In the past, many companies came to Pondicherry because of cheap and skilled labour. Today, however, labour has become more of a constraint and many companies are recruiting their workforce from outside the Union Territory. This is not beneficial to the Union Territory in the sense that unemployment rates are increasing steadily. As there are a number of industrial training institutes (ITIs) in Pondicherry run by the government, a concerted effort should be made to provide skills which are in demand. The government needs to liaise with industries much more actively so as to assess what their labour requirements are and then provide the necessary skills to those undergoing training.

PIPDIC has an important role to play in terms of liaison. To date, PIPDIC has been largely responsible for setting up industrial estates and growth centres and offering a range of subidies and incentives to industry. It should, however, also assume a much more active liaison role between the government and industry. This should be of a two way nature. PIPDIC should become a channel through which industrialists can air their concerns and at the same time it can offer consultancy services to industrialists.

The government also has certain regulatory functions it needs to fulfil. The most important of these is zoning. As Pondicherry is actively attempting to promote a industrialisation policy which is sustainable, it must ensure that industries do not crop up in an unregulated manner. While the government should not discourage entrepreneurs from investing in the Union Territory by enforcing cumbersome rules and regulations with regard to converting land for industrial purposes, it must also not encourage or permit haphazard growth. Zones classified as 'industrial areas' have already been earmarked by the government and industrial activity should be confined to these zones. Equally important is that the government enforces pollution norms and encourages industry to establish individual and common effluent treatment plants.

In the process of redefining the role of the government, the government will have to address the issue of PSUs. As illustrated above, most of the PSUs are running at a loss and placing a huge burden on the exchequer. There are difficult issues involved in resolving the crisis which exists in most PSUs. On the one hand, a closure of these units would result in significant employment loss. On the other hand, they cannot be kept open merely for this reason given the huge losses they are incurring. The government has suggested that some of these units be modernised, namely, Anglo-French Textiles and Pondicherry Distilleries Ltd. While this needs to be explored, privatisation cannot be totally ruled out. The Pondicherry government must set up a Disinvestment Commission to look into the possibility of allowing private investors to take over these companies.

Alongside exploring the possibilities of disinvestment, the government must more actively pursue voluntary retirement schemes (VRS). In the case of Anglo-French Textiles, the company has already sent a proposal for a new VRS with an enhanced VRS package for approval for closing down the weaving department and the financial commitment required on the part of the government. Similar options need to be explored in the other PSUs.

World Trade Organisation (WTO)

Pondicherry must develop its industrial potential keeping in mind WTO. Economic liberalization and the opening up of the economy to foreign trade and capital flows will require industry to become more competitive because of greater competition. Not only will tariffs be reduced but also new environmental and labour standards will come into effect. Industry must ready itself for these new challenges which in turn will offer greater export potential as foreign markets will be more readily accessible if international standards are adhered to judiciously.

The Government of Pondicherry must play a pro-active role with regard to WTO. A WTO Cell should be created with the necessary expertise to aid industry in finding new markets. This Cell should have a close working relationship with industry so that exchange of ideas is a two way process.

This vision for the industrial sector will help Pondicherry to fulfil the goals of its Industrial Policy. The vision is also aimed at employment creation and environmental sustainability. On the one hand, emphasis has been placed on promoting industries such as the leather industry which have good employment potential. On the other hand, emphasis has also been placed on promoting industries which are less polluting and to reward industries which meet environmental standards.

Much of the industrial development will, however, take place in the Pondicherry region. The potential for industry in other areas is much less and the focus should be therefore to promote other sectors such as agriculture and services in these regions.