CHAPTER 7 HUMAN DEVELOPMENT

The analysis of the development process based on the measurement of its outcomes such as gross domestic product or per capita income alone is only partial as these measures do not reflect the true level of human development which is the ultimate 'outcome' of the process of development. Human development refers to the enlargement of choices available to people as the result of economic development. Generally, these choices are identified as those that are related to lead a long and healthy life, acquire knowledge and access to material resources to lead a decent level of living.

There are several studies on the construction of human development indices to understand the status of human development across countries¹⁴, states in India¹⁵ and even districts¹⁶ within a state. This chapter attempts to analyse the process of human development in the Union Territory of Pondicherry, initially in the background of relative ranking of human development indices developed by the Planning Commission, Government of India and then analyses the individual indicators of human development in the Union Territory of Pondicherry both in relative and absolute quantities.

Union Territory of Pondicherry in Human Development Map of India

'National Human Development Report 2001' (Planning Commission: 2002) has constructed three core indices of human development, namely, Human Development Index (HDI), Gender Disparity Index (GDI) and Human Poverty Index (HPI). These indices have been constructed for all states and Union Territories in India and they have been ranked on the basis of these indices. The indices reflect in some sense, the common concerns, social values and development priorities of all states. The choice of variables, their measurements, and the methodology of construction of these indices have been so formulated that inter–temporal and inter–spatial comparisons of human development are possible. The HDI includes indicators that reflect the longevity of life, educational attainment and command over resources of the people of

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¹⁴ UNDP's Human Development Reports

¹⁵ Planning Commission's National Human Development Report 2001

¹⁶ A few states like Tamil Nadu & Karnataka have carried out district level analysis of human development

states and Union Territories. The GDI is estimated as proportion of attainments of females compared to that of males for a common set of variables, and this index reflects the gender bias in the development process. The HPI is a composite of variables capturing the deprivation in important aspects of human development, namely, education, health and access to resources. This index mirrors the proportion of population without access to the basic necessities of life.

Table 7.1

Human Development Indices 1991
(Relative Ranking)

| Sl.No. | Index | UT of | Tamil Nadu | Kerala | Andhra Pradesh |
|--------|-------------|-------------|------------|---------|----------------|
| | | Pondicherry | | | |
| 1. | Human | 6 | 14 | 3 | 23 |
| | Development | (0.571) | (0.466) | (0.591) | (0.377) |
| | Index (HDI) | | | | |
| 2. | Gender | 5 | 9 | 2 | 23 |
| | Disparity | (0.783) | (0.813) | (0.825) | (0.801) |
| | Index(GDI) | | | | |
| 3. | Human | 6 | 12 | 4 | 19 |
| | Poverty | (24.16) | (29.28) | (19.93) | (39.78) |
| | Index(HPI) | | | | |

Source: 'National Human Development Report 2001', Planning Commission, Government of India, New Delhi, March 2002.

Note: Figures in parentheses are index values

Table 7.1 shows the values of the three indices–HDI, GDI and HPI and the ranking based on them for the Union Territory of Pondicherry and its three neighbouring states. The Union Territory of Pondicherry has consistently attained ranks next only to Kerala among the southern states. This achievement is satisfactory and moreover the data relate to 1991. Over the last decade, both the Indian economy in general and the Union Territory of Pondicherry in particular have travelled through several changes in the development process. The effects of these changes are yet to be captured in terms of the indices of human development.

A crude measure of the composite index of thirteen socio-economic/demographic indicators (2000) for all the states and Union Territories was recently released by the National Commission on Population, Government of India. Though this index includes most of the variables considered for HDI in National Human

Development Report 2001, there are many conspicuous absentees like per capita income, inequality in per capita consumption expenditure, enrolment in schools, proportion of population below the poverty line. Yet this crude composite index reflects to some extent the successes/failures of States and Union Territories with regard to some key indicators of human development, mainly that of health (Vide Table 7.2). According to this index, the Union Territory of Pondicherry ranks first among all the states and Union Territories in India.

Table 7.2

Composite Index of Thirteen Socio–Economic / Demographic Indicators (2000)

| Sl. No | Particulars | All India | Pondicherry | Tamil Nadu | Kerala | Andhra Pradesh |
|-----------|--|--------------|--------------|---------------|--------------|-------------------|
| 1. | Population in '000s (2001) | 1 | 974 | 62111 | 31839 | 75728 |
| 2. | % of Girls Married Below 18 | 26.39 | 5.01 | 18.31 | 8.93 | 36.64 |
| 3. | Birth order 2 and above | 39.73 | 20.81 | 23.67 | 15.63 | 27.94 |
| 4. | % of Current user of Family Planning | 48.69 | 59.22 | 51.27 | 68.23 | 58.81 |
| 5. | Complete Ante – Natal care | 43.75 | 82.76 | 72.32 | 84.62 | 63.35 |
| 6. | Safe Delivery | 58.65 | 94.67 | 86.24 | 97.94 | 71.55 |
| 7. | Complete Immunisation | 63.46 | 95.28 | 91.92 | 84.44 | 75.55 |
| 8. | Female Literacy Rate (1991) | 39.29 | 74.13 | 64.55 | 87.86 | 51.17 |
| 9. | Coverage of safe Drinking water | 39.29 | 74.13 | 64.55 | 87.86 | 51.17 |
| 10. | % of village not connected by Pucca Roads (1991) | 49.94 | 2.66 | 24.38 | 1.01 | 48.97 |
| 11. | Infant Mortality Rates | 51.88 | 2.00 | 52.00 | 14.00 | 66.00 |
| 12. | Gender Difference in Infant Mortality | -4.31 | - 9.00 | 3.00 | -3.00 | -9.00 |
| 13. | Sex Ratio (2001) | 921.41 | 1001.00 | 986.00 | 1058.00 | 978.00 |
| 14. | Nutrition grade of Children Below Age 6 | 43.26 | 46.97 | 39.56 | 42.57 | 60.77 |
| 15. | Composite Index | 53.95 | 78.51 (1) | 67.97 (5) | 75.33 (2) | 57.97 (13) |

Source: National Commission on Population, Government of India.

On the whole, the Union Territory of Pondicherry has been behind the state of

Kerala in human development in the beginning of the nineties, however, the gap between the two has narrowed down through the decade of the nineties. The process of human development in the Union Territory of Pondicherry through the nineties is traced and specific areas for further development are identified in the three sections on health, education and economic attainments. Before embarking on these analyses, a note on population growth is presented here as the experiences of the Union Territory in this regard is rather peculiar and the process of human development should be seen in the background of rapid population growth in the Union Territory of Pondicherry and the reasons therefor.

Population Scenario of The Union Territory of Pondicherry

It has already been noted in chapter II–'The Pondicherry Economy', that the decadal population growth rate of the Union Territory of Pondicherry, though it has declined from 33.64 percent in 1981–91 to 20.56 per cent in 1991–2001, it is still higher than the All India figure of 21.34 for 1991-2001. The chapter further notes that the rapid population growth in the Union Territory is mainly due to large in-migration, incidentally, the rate of net in–migration is also on the decline in 1991- 2001. Given the small geographical area of 492 sq.km, the already high population density continues to increase at a rapid pace. In addition to this, the differential growth rates of population between rural and urban areas contributes to the tremendous growth of urbanisation of the Union Territory of Pondicherry. Table 7.3 shows that the growth of population and urbanisation and the population density have been consistently

Table 7.3
Population Characteristics – Census 1981 to 2001
(Urbanisation Rate & Annual Growth in Percentage and Population Density in Persons per sq. km.)

| | Urbanisation Rate | | | Annual | Average (| Population Density | | | |
|----------------|--------------------------|-------|-------|---------|-----------|--------------------|-------|-------|-------|
| States / UT | 1981 | 1991 | 2001 | 1971-81 | 1981-91 | 1991-01 | 1981 | 1991 | 2001 |
| UT of | 52.28 | 64.00 | 66.57 | 2.51 | 2.94 | 1.89 | 1,229 | 1,642 | 2,029 |
| Pondicherry | | | | | | | | | |
| Tamil Nadu | 32.95 | 34.15 | 43.86 | 1.63 | 1.44 | 1.07 | 372 | 429 | 478 |
| Kerala | 18.74 | 26.39 | 25.97 | 1.78 | 1.35 | 0.90 | 655 | 749 | 819 |
| Andhra Pradesh | 23.32 | 26.89 | 27.08 | 2.10 | 2.19 | 1.31 | 1.95 | 2.42 | 2.75 |
| All India | 23.34 | 25.71 | 27.78 | 2.26 | 2.13 | 1.95 | 216 | 274 | 324 |

Source: National Human Development Report 2001, Planning Commission,

Government of India, New Delhi, March 2002.

higher than the other southern states and All India figures over the last three decades. The addition to the teeming population is mainly due to the in-migration, and the consequent complexity of problems arising out of urbanisation makes the development efforts a stupendous task to accomplish. Further, measuring human development indicators in per capita terms, exogenous causes of population growth like in-migration must be kept in mind.

Health Attainments in the Union Territory of Pondicherry

Health and reasonable life span are important notions of personal well-being. Healthy life releases resources for realisation of other goals and ambitions of the individuals and society. Healthy workers contribute directly to economic growth as it reduces the loss of man-days due to ill–health.

A range of health indicators including demographic characteristics like birth rate, death rate, total fertility rate, infant mortality rate; and some information on institutional factors such as number of hospitals, beds, medical professionals and implementation of immunisation and family planning programmes are taken up for the analysis of health attainments in the Union Territory of Pondicherry. The statistics on life expectancy at birth is not available, but the other indicators can fairly reflect the health attainments of the Union Territory of Pondicherry.

Infant Mortality Rate (IMR) refers to the number of deaths per thousand live births in the first year of a child's life. The IMR, is more sensitive to changes that have a bearing on the quality of life, particularly to the health and longevity of people.

Table 7.4

Infant Mortality Rate (per thousand)

| States/UT | | 1981 | | 1991 | | | |
|-------------------|------|--------|---------|------|--------|---------|--|
| | Male | Female | Persons | Male | Female | Persons | |
| UT of Pondicherry | 100 | 68 | 84 | 32 | 35 | 34 | |
| Tamil Nadu | 114 | 93 | 104 | 55 | 51 | 54 | |
| Kerala | 61 | 48 | 54 | 45 | 41 | 42 | |
| Andhra Pradesh | 100 | 82 | 91 | 67 | 51 | 55 | |
| All India | 122 | 108 | 115 | 74 | 79 | 77 | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

Table 7.4 shows that the IMR in the Union Territory of Pondicherry has been

consistently lower than those of other states and the All India figures. As per the recent statistics published by the Government of Pondicherry, the IMR has declined to 27.6 in 1999 and further down to 22 in 2000. The Union Territory has also performed very well in providing both maternal and child health care services. Table 3.2 shows that the Union Territory of Pondicherry fares better than other southern states in regard to Complete Ante-Natal care, complete immunisation and nutritional grade of children below age 6.

National Human Development Report notes: "There is some evidence, even in the Indian context, indicating that mortality and morbidity patterns may often run counter to each other" (Planning Commission: 2002, p.74).

Table 7.5 Some Indicators of Morbidity (per thousand)

| States / UT | Number of Persons Reporting | | | | Persons Hospitalised During Last 365 day (1995 – 96) | | | | | |
|-------------|-----------------------------|-------|--------|-----------|---|-------|-------|-------|--|--|
| | Acute Ailm | ent | Chroni | c Ailment | Any Ai | lment | Rural | Urban | | |
| | Rural | Urban | Rural | Urban | Rural | Urban | | | | |
| UT of | 87 | 57 | 4 | 10 | 91 | 67 | 44 | 22 | | |
| Pondicherry | | | | | | | | | | |
| Tamil Nadu | 39 | 44 | 13 | 14 | 52 | 58 | 18 | 23 | | |
| Kerala | 80 | 61 | 38 | 27 | 118 | 88 | 70 | 65 | | |
| Andhra | 43 | 41 | 22 | 20 | 64 | 61 | 14 | 17 | | |
| Pradesh | | | | | | | | | | |
| All India | 42 | 41 | 13 | 14 | 55 | 54 | 13 | 20 | | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

Table 7.5 gives statistics relating to some indicators of morbidity. Short duration (less than 30 days) ailment have been termed as acute ailment and long duration ailment (30 days or more) have been termed as chronic ailment. As opined by the Planning Commission both Union Territory of Pondicherry and Kerala have higher incidence of morbidity than Tamil Nadu and Andhra Pradesh that also have relatively high morbidity. One plausible explanation could be that the availability of large number of health care institutions facilitate detection and treatment of ailments, and quite naturally the morbidity comes out to the surface, otherwise, most of which would have gone unnoticed. This is substantiated by the fact that Union Territory of Pondicherry and Kerala have 320 and 291 rural persons per hospital bed whereas

Tamil Nadu and Andhra Pradesh have 1,120 and 1,526 rural persons per hospital bed.

The Union Territory of Pondicherry has one of the lowest crude death rates in the country, which was at 6.9 in 2000, and the crude birth rate was also low at 17.7. The total fertility rate was also the lowest at 1.8. Immunisation programmes have been successfully implemented, which are yielding desirable results. For instance, polio attack is reduced to near zero, incidence of malaria is reduced by 80 per cent and 100 per cent of leprosy patients are being treated and relieved from leprosy.

The Union Territory's good track record of health attainments is largely due to the strong institutional structure that it has built over time involving all budget outlays. The revised estimate of health expenditure for 1999 –2000 of the Union Territory of Pondicherry is 10.75 per cent of its total developmental expenditure and 4.27 per cent of its GSDP. These are the highest rates among states and Union Territories in India.

Apart from this the central government expends funds on its own institutions like JIPMER and Vector Control Research Centre that cater to health care needs of this region. The Union Territory administration runs four hospitals in the four regions, 26 Primary Health Centers, 76 Sub Centers and 4 Community Health Centers.

Any further improvement in health attainment of the Union Territory depends largely on integrating health sector development with the overall process of development and extending health care facilities to the poorer sections. The educational attainment, and the developmental outcomes like provision of drinking water, sanitation and public hygiene, and poverty alleviation should be synergised with health attainments for the sustainability of healthy life of the people of the Union Territory of Pondicherry.

Educational Attainment of the Union Territory of Pondicherry

Education is the single most important input for improving one's well-being as well as social welfare. Education not only increases the earning capacity of an individual, but also improves the probability of one's constructive involvement in social and political spheres. Adaptation of new technologies, reduction in fertility and mortality

rates, better nutritional, hygiene and health status, empowerment of women, social mobility and political freedom are all visibly linked with educational attainments of the people. Therefore, it is undeniably a basic component of human development.

The educational attainments in the Union Territory of Pondicherry are analysed with the help of indicators like, literacy rate, adult literacy, enrolment in schools, drop—out rates, teacher—pupil ratio, and statistics relating to institutional factors like number of educational institutions and public expenditure on education.

Table 7.6
Literacy in the UT of Pondicherry and three southern states-2001(in percentage)

| States/UT | Male | Female | Persons | Rural | Urban |
|-------------|-------|--------|---------|-------|-------|
| UT of | 88.89 | 74.13 | 81.49 | 74.28 | 85.05 |
| Pondicherry | | | | | |
| Tamil Nadu | 82.33 | 64.55 | 73.47 | 66.66 | 82.07 |
| Kerala | 94.00 | 87.86 | 90.92 | 90.05 | 93.38 |
| Andhra | 70.85 | 51.17 | 61.11 | 55.33 | 76.39 |
| Pradesh | | | | | |
| All India | 75.64 | 54.03 | 65.20 | 59.21 | 80.06 |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

Literacy rate is defined as the proportion of literates to total population in the age group of 7 years and above. The Union Territory of Pondicherry ranks next to Kerala in all types of literacy rates like overall literacy rate, male and female literacy rates and even in the gender disparity and spatial between rural and urban areas (vide Table 7.6).

The adult literacy rate is the proportion of literate population in age group 15 years and above. This rate depends crucially on the growth of non-formal education system, and it is insensitive to current effort on the existing schooling system. If the adult literacy is seen along with literacy in the age group of 7-14, a clear picture of educational attainments emerges. Table 7.7 shows that the Union Territory of Pondicherry had higher literacy rates in all age groups, in the male/boys and female/girls groups as well.

Table 7.7
Literacy in the age group of 7-14 years and 15+ years –2001

| States/UT | | 7-14 years | | 15+ years | | | |
|-------------------|-------|------------|----------|-----------|-------|----------|--|
| | Boys | Girls | Children | Boys | Girls | Children | |
| UT of Pondicherry | 92.90 | 90.65 | 91.79 | 81.32 | 59.26 | 70.38 | |
| Tamil Nadu | 88.76 | 81.16 | 85.03 | 69.92 | 43.87 | 57.02 | |
| Kerala | 97.56 | 97.39 | 97.48 | 92.65 | 83.64 | 88.00 | |
| Andhra pradesh | 70.65 | 53.83 | 62.47 | 50.35 | 26.43 | 38.51 | |
| All India | 71.44 | 56.23 | 64.16 | 61.89 | 34.09 | 48.54 | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

The current spread of school education can be captured in indicators like school enrolment ratio, drop-out rate, and teacher—pupil ratio. Gross enrolment ratio refers to total number of children in a specific level of schooling to the children population in the corresponding age-group. Due to various reasons like over-age and under—age of the students admitted and the repeat students in the specific level of schooling, gross enrolment ratio will be an over estimation of the spread of schooling. A better indicator of the current flow of education is the age—specific enrolment ratio. This is the ratio of number of children enrolled in a particular age group, irrespective of the level of schooling, to the child population in that age group. This suffers from the limitation that it does not specify the level of schooling received by the children of the particular age group. The best indicator is the net enrolment in a specific level of schooling to that of total population in that age group. Due to the lack of availability of data with regard to net enrolment ratio, we are compelled to use age-specific enrolment ratio.

In 1991 the age-specific enrolment ratios of the Union Territory of Pondicherry were only next to Kerala (Vide Table 7.8). The Rural-Urban divide, and the boys- girls divide in the enrolment ratios are less than those of Tamil Nadu and Andhra Pradesh. There is a sharp decline in the enrolment ratio from the age group of 7-14 to the age group of 11-14, in Tamil Nadu and Andhra Pradesh, whereas such a sharp decline is not found in the case of the Union Territory of Pondicherry. The decline in the enrolment ratio as we proceed from lower age group to higher age group, only reflects the increasing drop-out rates as the level of schooling increases.

Table 7.8

Age-Specific Enrolment Ratios 1991

| States/ UT | | Age group 6 to 11 years | | | | | | | Ag | e group | 11 to b | elow 14 yea | ars | | | | | |
|------------|------|-------------------------|----------|------|-------|----------|------|--------|----------|---------|---------|-------------|------|-------|----------|------|--------|----------|
| | | Rura | ıl | | Urba | n | | Combin | ned | | Rural | | | Urbai | n | | Combin | ed |
| | Boys | Girls | Children | Boys | Girls | Children | Boys | Girls | Children | Boys | Girls | Children | Boys | Girls | Children | Boys | Girls | Children |
| UT of | 87.1 | 84.2 | 85.7 | 86.4 | 85.3 | 85.8 | 86.7 | 84.9 | 85.8 | 86.9 | 77.2 | 82.1 | 86.3 | 82.3 | 84.3 | 86.5 | 80.5 | 83.5 |
| Pondicher | | | | | | | | | | | | | | | | | | |
| ry | | | | | | | | | | | | | | | | | | |
| Tamil | 78.3 | 71.6 | 75.0 | 83.1 | 81.6 | 82.4 | 82.4 | 79.8 | 74.8 | 75.9 | 59.7 | 68.1 | 82.4 | 77.1 | 79.8 | 78.1 | 65.7 | 72.1 |
| Nadu | | | | | | | | | | | | | | | | | | |
| Kerala | 90.8 | 90.7 | 90.8 | 92.8 | 92.5 | 92.5 | 91.6 | 91.3 | 91.1 | 91.2 | 93.1 | 92.4 | 92.8 | 94.1 | 95.4 | 93.4 | 92.8 | 93.1 |
| Andhra | 54.5 | 39.7 | 47.2 | 72.6 | 67.4 | 70.0 | 59.2 | 46.7 | 53.0 | 60.5 | 34.6 | 48.3 | 79.1 | 69.1 | 74.6 | 65.8 | 45.0 | 55.9 |
| Pradesh | | | | | | | | | | | | | | | | | | |
| All India | 52.3 | 39.3 | 46.0 | 67.6 | 44.4 | 56.7 | 56.6 | 45.4 | 51.2 | 70.7 | 65.8 | 68.3 | 81.0 | 73.6 | 77.5 | 71.1 | 52.2 | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

The drop out rate is the percentage of students dropping out of a class/ classes in a given year. This along with repeat students shows the wastage of education.

Table 7.9
Drop-out Rates in classes I–V, I--VIII, and I--X (1998–99 provisional)
(in percentage)

| States/ UT | | I-V | | | I–VIII | | I–X | | | |
|---------------|--------|-------|----------|-------|--------|----------|-------|-------|----------|--|
| | Boys | Girls | Children | Boys | Girls | Children | Boys | Girls | Children | |
| UT of | -3.37 | -2.15 | -2.78 | -2.11 | -2.05 | -2.08 | 37.71 | 35.73 | 36.78 | |
| Pondicherry | | | | | | | | | | |
| Tamil Nadu | 13.99 | 16.18 | 15.05 | 26.05 | 34.81 | 30.13 | 57.72 | 58.35 | 58.01 | |
| Kerala | -11.06 | -6.83 | -9.00 | -5.48 | -3.46 | -4.49 | 30.02 | 19.16 | 24.70 | |
| AndhraPradesh | 44.61 | 47.03 | 45.74 | 72.68 | 74.10 | 73.30 | 76.52 | 78.65 | 77.44 | |
| All India | 38.23 | 41.34 | 39.58 | 54.40 | 60.09 | 56.82 | 65.44 | 70.22 | 67.44 | |

Source: National Human Development Report 2001, Planning Commission, Government of India, NewDelhi, March 2002

Note: Figures relate to 1997 – 98 from VI All India Educational Survey.

The drop—out rates are lower, next to Kerala, at all levels of schooling in the Union Territory of Pondicherry. But the cause for worry is that nearly 37 per cent in drop—out rate as we move from class VIII to class X. Though the positive correlation between drop—out rates and level of schooling is a general phenomenon in the Indian Sub-Continent, the sharp increase in drop—out rate in the secondary school levels in the case of the Union Territory of Pondicherry needs exploration. Moreover, the age-specific enrolment ratios for the year 1991 shows that the enrolment ratio for the age group of 6-11 was 85.8 percent of the ratio for the age group of 11-14. These statistics do not seem consistent with drop—out rate statistics of 1997—98. That is, comparing the high age-specific enrolment ratio of 85.8 per cent for the age group of 11-14 in 1991, with the high drop-out rate of 39 per cent in the class group VIII-X, it can be inferred that the increasing drop—out rate in higher levels of schooling should be a post 1990 phenomenon, and should be studied to frame corrective measures and for appropriate programme implementation.

The pupil-teacher ratio is the number of pupils per teacher. The quality of education provided by schools depends significantly on the pupil-teacher ratio. As per the data given in Table 7.10, the Union Territory of Pondicherry has the lowest pupil-teacher ratio among the southern states, implying that every teacher has the least number

of students to teach, hence the quality of school education provided in the Union Territory can be expected to be higher than in other states.

Table 7.10 Pupil -Teacher Ratio

| States /UT | | 1992-1993 | | | 1997-1998 | |
|-------------------|---------|------------------|-----------|---------|------------------|-----------|
| | Primary | Upper Primary | secondary | Primary | Upper Primary | Secondary |
| UT of Pondicherry | 27 | 28 | 31 | 27 | 24 | 27 |
| Tamil Nadu | 47 | 47 | 41 | 39 | 40 | 45 |
| Kerala | 32 | 31 | 30 | 30 | 29 | 29 |
| Andhra Pradesh | 53 | 50 | 34 | 49 | 39 | 32 |
| All India | 45 | 43 | 29 | 42 | 37 | 29 |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2001.

The Post–Matric education scenario in the Union Territory of Pondicherry appears really good. When the total enrolment in secondary school is around 65,000, the total enrolment in Post-Matric institutions is over 90,000 (Table 7.11). The Union Territory administration has obtained seats reserved for its residents in several Engineering and Technology institutions all over the country. As seen in Table 7.11, the student-teacher ratio is 22.06 in Post-Matric institutions which is quite staisfactory to provide high quality of education. It should be noted that the range of specialization offered at the Post–Matric level is quite wide for the students to choose.

The development of all levels of education in the Union Territory has been possible mainly due to higher budgetary outlay for education made by the Union Territory Administration. In 1999–2000, the revised estimate of public expenditure on education was 14.08 per cent of total budget expenditure and 7.50 per cent of GSDP.

The development of both school education and Post–Matric education is good in terms of coverage in the Union Territory of Pondicherry. The recent phenomena of the growth of private institutions in higher education sector should help the Union Territory Administration to release larger outlay for secondary level education, where there is a sharp decline in enrolment ratio due to high drop–out rate.

Table 7.11
Post–Matric Education in the UT of Pondicherry (1999–2000)

| Type of Institution | No.of Institution | No. of Students enrolled | No. of Teachers | Students Teacher Ratio |
|-----------------------------|----------------------|--------------------------------|--------------------|------------------------------|
| Central university | 1 | 986 | 128 | 7.7 |
| • | 8 | 7320 | 484 | 1512 |
| Arts, Science & Commerce | 0 | 7320 | 404 | 1312 |
| College | 1 | 205 | 19 | 15.50 |
| Junior College | | 295 | | 15.52 |
| Higher Secondary school | 63 | 73738 | 2466 | 29.90 |
| Professional/ Technical | | | | |
| Education | | | | |
| Medical College | 1 | 986 | 128 | 7.7 |
| Engineering & Technology | 4 | 2594 | 220 | 11.79 |
| College | | | | |
| Law College | 1 | 455 | 15 | 29.67 |
| Agriculture College | 1 | 202 | 31 | 6.52 |
| Veterinary College | 1 | 187 | 55 | 3.4 |
| Teachers Training College & | 2 | 1067 | 108 | 9.88 |
| Institution | | | | |
| Vector Control Research | 1 | 10 | 29 | 0.34 |
| Centre | | | | |
| Institute of Public Health | 1 | 84 | 13 | 6.46 |
| Science | | | | |
| Music and Fine Arts College | 1 | 188 | 30 | 6.27 |
| Polytechnic Institutions | 4 | 1794 | 80 | 22.42 |
| School of Nursing | 1 | 145 | 9 | 16.11 |
| Catering institution | 1 | 67 | 3 | 22.33 |
| | ı | 90235 | 4091 | 22.06 |

Source: Government of Pondicherry, Directorate of Economics and Statistics, "Statistical Hand Book 1999-2000", 2001

The development of health attainment and also educational attainments have definitely enlarged the choices available for the people to enhance their span, to lead healthy life and of course to acquire education for skill development. It should be emphasized that the quality of education should also improve to ensure sustainable human development over the long turn. Though the presence of public sector in both health and education sectors is prominent, still the private opportunity cost of getting access to these facilities should be substantial. Therefore, the most important aspect of human development – the access to income is looked into in the next section.

Economic Attainments in the Union Territory of Pondicherry

The per capita gross domestic product (PCGDP) of an economy indicates the availability of stock of resources for the attainment of individuals in the society. Though this is a crude indicator of the means, it includes some of the valued outcomes of development process that are ends in themselves for the majority of the people.

Besides PCGDP, per capita consumption expenditure (PCCE) is used as a direct measurement of economic well being of the population. The PCCE includes certain non-monetised transactions which are outside the National Accounts framework. The PCCE is based on the direct reporting by the individuals, unlike the derived GDP, and to that extent it is more reliable measurement of economic well-being of the individuals.

The discussion of economic attainments also includes other indicators like incidence of unemployment and poverty, quality of housing, availability of sanitation facility, safe drinking water, electricity and road connectivity.

Table 7.12 shows that from 1980-81 the Union Territory of Pondicherry has been consistently maintaining the highest per capita net state domestic product among the southern states and this highest growth is achieved inspite of its fastest population growth in the southern India. As such, the Union Territory has the potential for achieving higher levels of human development, the glimpses of which we have seen in the last two sections.

Table 7.12
Per Capita Net State Domestic Product
(Figures in Rupees at 1980–81 prices)

| States/UT | 1980-81 | 1990-91 | 1997-98 |
|-------------------|---------|---------|---------|
| UT of Pondicherry | 2862 | 2889 | 3208 |
| Tamil Nadu | 1570 | 2303 | 3141 |
| Kerala | 1502 | 1876 | 2490 |
| Andhra Pradesh | 1525 | 2099 | 2550 |
| All India | 1671 | 2213 | 2840 |

Source: National Human Development Report2001, Planning Commission, Government of India, New Delhi, March 2002.

The National Sample Statistics Organisation collects the consumption expenditure data once in five years. The per capita consumption expenditure for 1993–94 and 1999–2000 (vide Table 7.13) shows that the per capita consumption expenditures in urban

area in the Union Territory of Pondicherry have been lower than the national averages, whereas the per capita consumption expenditures in the rural area have been higher than the national averages, thus making the overall average figures also higher than the national averages. This is not a peculiar experience of the Union Territory of Pondicherry, as some other states like Tamil Nadu and Kerala also show a similar trend.

Table 7.13
Per Capita Consumption Expenditure

(Figures in Rs. per month)

| States/UT | 1993–94 | | | 1999–2000 | | | |
|----------------------|---------|--------|----------|-----------|--------|----------|--|
| | Rural | Urban | Combined | Rural | Urban | Combined | |
| UT of Pondicherry | 347.96 | 419.34 | 396.53 | 597.63 | 784.28 | 731.90 | |
| Tamil Nadu | 293.60 | 438.30 | 344.31 | 513.97 | 971.61 | 681.37 | |
| Kerala | 390.40 | 493.80 | 419.08 | 765.70 | 932.61 | 816.76 | |
| Andhra Pradesh | 288.70 | 408.60 | 322.28 | 453.61 | 773.52 | 550.53 | |
| All India | 281.40 | 458.00 | 328.18 | 486.08 | 854.96 | 590.98 | |

Source: National Human Development Report, 2001, Planning Commission, Government of India, New Delhi, March, 2002.

The fact that needs further exploration is that the quantum of per capita consumption expenditure is not commensurate with the high PCGDP of the Union Territory of Pondicherry. For instance Kerala, which has 77.6 per cent of PCGDP of Union Territory of Pondicherry in 1997–98 but has 111.59 per cent of per capita consumption expenditure of the Union Territory in 1999-2000. One plausible explanation to this can be the high rate of savings among the households in the Union Territory of Pondicherry.

The growth in employment is a valued outcome of development process, and capture the economic attainments and hence the level of well-being of the people. The growth of employment in the Union Territory of Pondicherry has been consistently higher than in the three southern states and that of All India. (Vide Table 7.14).

Table 7.14 Growth in Employment

(in percent per annum)

| States/UT | 1983 to 1993- 94 | | | 1993-94 to 1999-2000 | | | |
|----------------|------------------|--------|---------|----------------------|--------|---------|--|
| | Male | Female | Persons | Male | Female | Persons | |
| UT of | 3.4 | 1.4 | 2.8 | 3.5 | 3.0 | 3.4 | |
| Pondicherry | | | | | | | |
| Tamil Nadu | 1.6 | 2.0 | 1.8 | 1.4 | -0.3 | 0.8 | |
| Kerala | 2.0 | -1.2 | 0.9 | 1.6 | 1.4 | 1.6 | |
| Andhra Pradesh | 2.1 | 2.7 | 2.4 | 1.6 | 0.3 | 1.1 | |
| All India | 2.2 | 1.7 | 2.1 | 1.9 | 0.9 | 1.6 | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

The growth of employment during 1993-94 to 1999-2000 has been twice that of Kerala and All India, thrice that of Andhra Pradesh and more than quadruple that of Tamil Nadu. This higher growth of employment opportunities has not reduced the incidence of unemployment in the Union Territory. On the contrary, the incidence of unemployment has grown at 4.1 per cent during 1993-94 to 1999-2000 (Vide Table 7.15). This is a little less than 50 per cent of incidence of unemployment in Kerala, a little less than twice that of Tamil Nadu, and thrice that of Andhra Pradesh.

Table 7.15 Incidence of Unemployment

(As percentage of Labour force)

| States/UT | | 1983 | | 1993-94 | | | 1999-2000 | | |
|-------------|------|--------|---------|---------|--------|----------|-----------|--------|----------|
| | Male | Female | Persons | Male | Female | Combined | Male | Female | Combined |
| UT of | 6.2 | 4.6 | 5.7 | 5 | 5.6 | 5.1 | 3.7 | 4.9 | 4.1 |
| Pondicherry | | | | | | | | | |
| Tamil Nadu | 3.7 | 2.1 | 3.1 | 2.6 | 2.0 | 2.4 | 2.9 | 1.9 | 2.6 |
| Kerala | 7.5 | 8.6 | 7.9 | 5.8 | 12.1 | 7.7 | 5.6 | 15.1 | 8.6 |
| Andhra | 1.8 | 0.5 | 1.3 | 1.3 | 0.6 | 1.1 | 1.8 | 0.9 | 1.4 |
| Pradesh | | | | | | | | | |
| All India | 2.3 | 1.3 | 2.0 | 2.1 | 1.7 | 2.0 | 2.5 | 1.8 | 2.3 |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

One of the causes for the growing unemployment may be the large in-migration that has been taking place in the Union Territory over the last four decades given the small and land-locked area of the Union Territory, its positive off shoot of the

development process, namely growing employment opportunities can be easily seized of by the in-migrants.

An important aspect of the employment scenario in the Union Territory of Pondicherry is the growth of casualisation of labour during the nineties. The employment in organised sector has come down from 53,200 jobs in 1991 to 45,900 jobs in 2000. Whereas, the annual growth rate of employment in the Union Territory of Pondicherry from 2.8 per cent in the period 1983 increased to 1993-94 to 3.4 per cent in the period 1993-94 to 1999-2000. Moreover, the percentages of casual labour in both rural and urban areas have increased between 1993-94 and 1999-2000. As per the 54th and 55th rounds of NSS data, casual labour increased from 27.5 per cent to 29.9 per cent in urban areas and from 46.7 per cent to 61.8 per cent in rural areas. Thus, much of the increase in jobs during the nineties should have been in the unorganised sector where there are the twin evils of job insecurity and inadequate wage rate. This trend should be reversed to improve the human development of the region.

Poverty ratio is another important indicator of human development, particularly with regard to the economic attainments of the people in the region. As per the NSSO's 55th round, the proportion of population living below poverty line is 21.67 per cent in the Union Territory of Pondicherry, which is less than the All India average of 26.10 per cent. Yet the poverty ratio in the Union Territory of Pondicherry is higher than those of other southern states. The Union Territory of Pondicherry, historically, has had a very high poverty ratio, which stood at 50 per cent in 1983 (Table 7.16).

Reduction of poverty ratio from 50 per cent in 1983 to 21.67 per cent in 1999-2000 (though these two ratios are not strictly comparable due to differences in the methodology of data collection and calculation) itself shows considerable progress, inspite of continuing in-migration. Still the poverty ratio is high, and needs to be addressed squarely by reducing the casualisation of labour and improving the effectiveness of poverty alleviation programmes.

Table 7.16
Percentage of Population below Poverty Line – 1983 and 1999-2000

| States/UT | 1983 | | | 1999-2000 | | | |
|-------------|-------|-------|-------|-----------|-------|-------|--|
| | Rural | Urban | Total | Rural | Urban | Total | |
| U.T. of | 53.48 | 46.96 | 50.06 | 20.55 | 22.11 | 21.67 | |
| Pondicherry | | | | | | | |
| Tamil Nadu | 53.99 | 46.96 | 51.66 | 20.55 | 22.11 | 21.12 | |
| Kerala | 39.03 | 45.68 | 40.22 | 9.38 | 20.27 | 12.72 | |
| Andhra | 26.53 | 36.3 | 28.91 | 11.05 | 26.63 | 15.77 | |
| pradesh | | | | | | | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

There are several public utilities which should be provided efficiently by the public sector, not only for attaining distributional objectives, but also, because many of these utilities are needed for economic and human development. They facilitate access to economic resources for the people. Provision of electricity, safe drinking water, toilet facilities and road connectivities are the important public utilities expected from any State. The data relating to these public utilities are given in the Table 7.17, 7.18, 7.19, 7.20 and 7.21.

All the villages in the Union Territory of Pondicherry are connected by road. The region has the highest length of road per sq.km area which is 485.86 km/100 sq.km. As such the basic infrastructure for mobility of men and materials is adequately available. But the conditions of the roads are far from satisfactory. (Vide Table 7.17).

Table 7.17 Length of Roads – 1997

| States / UT | Road length in kilometers per 100 |
|-------------------|-----------------------------------|
| | sq.kilometer area |
| UT of Pondicherry | 485.86 |
| Tamil Nadu | 158.78 |
| Kerala | 374.92 |
| | 64.72 |
| Andhra Pradesh | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.)

In 1991, 63.58 per cent of households had electricity connection (Table7.18); 88.75 per cent of households had access to safe drinking water (Table7.19);

and only 34.88 per cent of households had toilet facilities (Table 7.20). The percentage of households that had all these three facilities in 1991 was only 28.8 (Table 7.21). Over the seven years period from 1991 to 1997, the percentage of households with access to toilet facility has more than doubled to 76.95. Therefore, the provision of basic public utilities in the Union Territory is satisfactory.

Access to shelter is another important aspect of economic attainment and human development. Strangely, the Union Territory of Pondicherry has fared quite badly in this respect when compared to other Southern states and with the All India figures. Table 3.22 reveals that the percentage of households with pucca or semi-pucca households has been less than in other southern states and All India average from 1981 to 1993-94. The growing population and increasing population density has aggravated the problem of shelter in the Union Territory. This is an important area where the Union Territory administration has to initiate programmes for provision of houses at subsidized prices, particularly to the poor.

All told, the economic attainments of the people of the Union Territory of Pondicherry have been satisfactory. The per capita income is high, percentage of households having access to public utilities is also high. The low per capita consumption expenditure and a little over 21 per cent of people living below poverty line, the growing unemployment in spite of rising employment opportunities, presence of large number of households with shelter are areas of concerns which should be addressed immediately.

Table 7.18
Households With Electricity Connection

(in Percentage)

| States/UT | 1991 | | | | |
|-------------------|-------|-------|----------|--|--|
| | Rural | Urban | Combined | | |
| UT of Pondicherry | 51.20 | 71.71 | 63.58 | | |
| Tamil Nadu | 44.90 | 76,80 | 54.74 | | |
| Kerala | 41.95 | 67.95 | 48.43 | | |
| Andhra Pradesh | 37.50 | 73.31 | 46.30 | | |
| All India | 30.54 | 75.78 | 42.37 | | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

Table 7.19 Households with Safe Drinking Water – 1991

(in percentage)

| States/UT | | 1991 | | | | | | |
|-------------------|-------|-------|----------|--|--|--|--|--|
| | Rural | Urban | Combined | | | | | |
| UT of Pondicherry | 92.86 | 86.05 | 88.75 | | | | | |
| Tamil Nadu | 64.28 | 74.17 | 67.42 | | | | | |
| Kerala | 12.22 | 38.68 | 18.89 | | | | | |
| Andhra Pradesh | 48.88 | 73.82 | 55.08 | | | | | |
| All India | 55.54 | 81.38 | 62.30 | | | | | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

Table 7.20 Households with Access to Toilet Facility

(in percentage)

| | | | | (r |
|-------------------|-------|-------|----------|----------|
| States/UT | | 1997 | | |
| | Rural | Ubran | Combined | Combined |
| UT of Pondicherry | 11.85 | 50.02 | 34.88 | 76.05 |
| Tamil Nadu | 7.17 | 57.47 | 23.13 | 37.13 |
| Kerala | 44.07 | 72.66 | 51.28 | 73.05 |
| Andhra Pradesh | 6.62 | 54.06 | 18.40 | 35.06 |
| All India | 9.48 | 63.85 | 23.70 | 49.32 |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

Table 7.21 Households with access to Electricity, Safe Drinking Water and Toilet Facilities– 1991

(in percentage)

| States/UT | | 1991 | | | | | |
|-------------------|-------|-------|-------|--|--|--|--|
| | Rural | Urban | Total | | | | |
| UT of Pondicherry | 9 | 41.9 | 28.8 | | | | |
| Tamil Nadu | 4 | 40.5 | 15.6 | | | | |
| Kerala | 3.4 | 25.5 | 9.0 | | | | |
| Andhra Pradesh | 3.3 | 39.3 | 12.3 | | | | |
| All India | 3.9 | 50.5 | 16.1 | | | | |

Source: National Human Development Report 2001, Planning Commission, Government of India, New Delhi, March 2002.

Table 7.22 Households with Pucca/Semi-Pucca Houses

(in percentage)

| | 1981 Census | | | 1991 Census | | | 1993-94 (NSSO) | |
|-------------|-------------|-------|----------|-------------|-------|----------|----------------|-------|
| States/UT | Rural | Urban | Combined | Rural | Urban | Combined | Rural | Urban |
| UT of | 34.89 | 58.16 | 46.73 | 42.02 | 66.92 | 57.04 | 44.00 | 76.70 |
| Pondicherry | | | | | | | | |
| Tamil Nadu | 44.70 | 76.78 | 54.77 | 54.23 | 83.65 | 63.57 | 60.80 | 83.90 |
| Kerala | 56.00 | 73.64 | 59.13 | 72.11 | 83.99 | 75.10 | 81.60 | 87.30 |
| Andhra | 44.48 | 70.91 | 50.40 | 55.01 | 79.36 | 60.99 | 70.70 | 86.00 |
| Pradesh | | | | | | | | |
| All India | 59.46 | 86.50 | 65.96 | 66.24 | 90.44 | 72.56 | 67.30 | 90.20 |

Source: National Human Development Report 2001, Planning Commission, Government of India, March 2002, New Delhi.

Conclusion

The Union Territory of Pondicherry is one of the few top achievers of human development in the country today. This high level of human development has been made possible by the prominent presence of the public sector in the provision of health, education and public utilities. Moreover, this success of human development has taken place inspite of its high population growth caused mainly by in-migration.

Health and reasonable life span are important notions of personal well-being. The Union Territory of Pondicherry exhibits the best of statistics such as infant mortality rate, total fertility rate, death rate and the spread of immunisation. Ante-natal care programmes are also wide and effective. The Union Territory Administration spends a considerable portion of its budget on health care. The future programmes of the Union Territory should include sustenance of public health care systems and creation of super speciality departments in the major hospitals. Family Planning programmes should be made more widespread.

Education is the single most important input for improving one's well-being as well as social welfare. The Union Territory of Pondicherry stands next to Kerala in all the types of literacy rates. The enrolment ratios at all levels of schooling are high. The quantitative expansion of Post-Matric education offering wide range of specialization is commendable. Once again, the public sector involvement in promotion and provision of education is significant and should be sustained.

An area which needs immediate attention is the problem of high drop-out rates at the secondary school level. The Union Territory Administration should attend to this problem immediately.

The quality of education at school level should be improved. Now the students at secondary and higher secondary levels take the exams conducted by neighbouring state governments. The Union Territory Administration can initiate steps to create its own boards of examination and make the school education locally relevant and qualitatively high. Further, the quality of education at Post-Matric education level can be made better by subjecting the higher educational institutions for accreditation by the National Assessment and Accreditation Council.

The economic well-being of the people of the Union Territory are judged by the indicators such as per capita income, per capita consumption expenditure, accessibility to shelter and public utility. Except per capita consumption expenditure and shelter, all other indicators indicate that the economic inputs for human development in the Union Territory are at satisfactory levels. The low level of per capita consumption expenditure in this region could be attributed to high savings rate. The lack of access to shelter, and the existence of 21 per cent of people below poverty line should be immediately addressed. Apart from this, the growth of unemployment and casualisation of labour should also be taken into consideration while formulating future economic policies. The following policy goals are worth mentioning here:

- ➤ Improve educational and health care services to international standards in the next 20 years
- ➤ Provision of Shelter for All by 2020 should be given high priority.
- ➤ Implementation of poverty eradication programmes should be made effective to reduce proportion of population living below poverty line to zero by 2020.
- Facilitate increase in employment opportunities in private sector.
- ➤ Casualisation of labour should be reduced through implementation of social security network and providing retraining facilities for labour.