

CHAPTER - XI SOCIO-ECONOMIC ISSUES

11.0 Introduction

The state of Orissa in its present form is located between 17⁰ 50' and 20⁰ 34' of the north latitude and between 81⁰ 24' and 87⁰ 29' east of Greenwich having a land area of 1,55,707 sq.km.

The modern Orissa came into existence with a peculiar set up where there was neither economic integration nor socio-cultural cohesion. The economy languished for long under different regimes prior to independence leading eventually to extreme backwardness with abject poverty.

11.1 Driving Force

11.1.1 Socio-Economic Aspects

The State comprises of 4.74 per cent of India's landmass and 36.81 million people (2001 census). The State's population account for 3.57 per cent of the population of the country. Nearly 85 per cent of Orissa's population live in rural areas. The decennial growth rate of population was 15.94 per cent as against 20.06 per cent in the previous decade. The significant decline in population growth rate would have been due to rise in literacy rate and increased use of family planning measures and to certain extent due to high infant mortality rate (IMR).

Sex - ratio as per 2001 census is 972 females per 1000 males. This ratio is higher than national average and has marginally increased in comparison to 1991 census (where it was 971 females against 1000 males).

The density of population is 236 per sq. km. in 2001 as against 203 per sq. km. in 1991. Orissa has achieved impressive results in literacy rates, which as per 2001 census is 63.08 percent as against the literacy rate of 49.09 per cent in 1991. The male female literacy ratio was 63.1 per cent and 34.7 per cent respectively in 1991, which has increased to 75.95 per cent and 50.97 per cent respectively.

As per 1991 census the Scheduled Castes (SC) and Scheduled Tribes (ST) population comprised 16.20 and 22.21 per cent of the total population of the state. There has not been any perceptible change in their size in 2001 census. The respective share of SC and ST in total population has remained at 16.53 and 22.13 (Economic Survey, 20003-04, Govt. of Orissa). About 45 per cent of the geographical area of the State has been declared scheduled area.

One region comprising of three old undivided districts, ie, Koraput, Bolangir and Kalahandi, has caught global attention for its very low level of living and poverty. These three districts are now divided into 8 districts, inhabited mostly by scheduled castes and scheduled tribes, have the highest poverty. Out of 80 Community Development (CD) blocks as many as 53 blocks (66.25%) are considered most backward blocks of Orissa as per the Report of the Committee on the Constitution of Separate Development Board in Orissa, P & C Department, Govt. of Orissa, Bhubaneswar, 1994). The Committee, popularly known as Ghadei Committee, have taken most of the human development indicators like density of population, per cent of agricultural workers to main workers, net sown area per agricultural workers, per cent of net irrigated area to net sown area, cropping intensity, per cent of literacy, number of primary schools per 1,00,000 population, per cent villages with all weather road, per cent villages electrified, number of villages etc. with safe drinking water and number of medical institutions per 1,00,000 population into consideration for deciding level of backwardness.

There are few other districts like Phulbani, Boudh, Gajapati and even Sundargarh which have equally large concentration of STs and SCs with very low level of human development. These districts, however, have not been included in the special KBK plan with 100 per cent central assistance. Presence of large number of scheduled caste and scheduled tribe with extremely poor income levels have pulled the state average per capita income so low that Orissa has the dubious distinction of being the poorest state in the country.

The State had a very high death rate per 1000 population. While it was as high as 21.6 in 1951 it come down to 9.8 in 2002. The Infant Mortality Rate in the State is still one of the highest in the country. In 1999 it was as high as 97 per 1000 live births, which, however, has, been reduced to 87 in 2002.

The National Human Development Report of 2001 has worked out the human development indices for major states of India for the year 1981,1991, and 2001 (Presented in table given below. Orissa's position has not changed being 11th among list of 15 major States). (*Table-11.1*)

TABLE: 11.1
Human Development Index for Major States of India

| States / UTs | 1981 | 1991 | 2001 |
|----------------|------------|------------|------------|
| Andhra Pradesh | 0.298 (9) | 0.377 (9) | 0.416 (10) |
| Assam | 0.272 (10) | 0.348 (10) | 0.386 (14) |
| Bihar | 0.237 (15) | 0.308 (15) | 0.367 (15) |

| States / UTs | 1981 | 1991 | 2001 |
|----------------|------------|------------|------------|
| Gujarat | 0.360 (4) | 0.431 (6) | 0.479 (6) |
| Haryana | 0.360 (5) | 0.443 (5) | 0.509 (5) |
| Karnataka | 0.346 (6) | 0.412 (7) | 0.478 (7) |
| Kerala | 0.500 (1) | 0.591 (1) | 0.638 (1) |
| Madhya Pradesh | 0.245 (14) | 0.328 (13) | 0.394 (12) |
| Maharashtra | 0.363 (3) | 0.452 (4) | 0.523 (4) |
| Orissa | 0.267 (11) | 0.345 (12) | 0.404 (11) |
| Punjab | 0.411 (2) | 0.475 (2) | 0.537 (2) |
| Rajasthan | 0.256 (12) | 0.347 (11) | 0.424 (9) |
| Tamilnadu | 0.343 (7) | 0.466 (3) | 0.531 (3) |
| Uttar Pradesh | 0.255 (13) | 0.314 (14) | 0.388 (13) |
| West Bengal | 0.305 (8) | 0.404 (8) | 0.472 (8) |
| All India | 0.302 | 0.381 | 0.472 |
| Mean | 0.321 | 0.403 | 0.463 |
| S. D. | 0.070 | 0.074 | 0.073 |
| C. V. | 21.80 | 18.37 | 15.75 |

Note: Figures in parentheses are HDI ranks in descending order.

Source: Planning Commission, Government of India, National Human Development Report, 2001, March 2002, p. 15.

11.2 Pressure

11.2.1 Poverty

The latest estimate made by the Modified Expert Group of the Planning Commission has calculated that in the State of Orissa below-poverty-line (BPL) population of 47.15 per cent, which is the highest in the country. Orissa's poverty is far higher than the national average of 26.1 per cent. The poverty is more concentrated in rural areas. The poverty scenario of Orissa estimated at different points of time has been presented in **Table-11.2**.

TABLE: 11.2
Poverty Scenario in Orissa

| Year | Rural (%) | Urban (%) |
|-----------|-----------|-----------|
| 1973-74 | 67.3 | 56.3 |
| 1977-78 | 72.4 | 53.6 |
| 1983 | 67.5 | 50.6 |
| 1987-88 | 57.6 | 44.1 |
| 1993-94 | 49.7 | 41.6 |
| 1999-2000 | 48.0 | 42.8 |

Sources: Rural Development Statistics, 1999, NIRD, Hyderabad, Report of the Expert Group on Estimation of Proportion and Number of Poor, Planning Commission, July, 1993. Economic Survey, Govt. of Orissa, 2001-02, 2003-04.

Apart from divergence between rural and urban poverty, the former being much higher, great difference in the poverty scenario manifestos more gearingly among backward ward classes, SC/ST groups both in rural as well as urban areas. In 1983 the percentage of SC/ST poor was as high as 62 and 79 per cent in rural and urban areas respectively. The situation did not change much in 1993-94 where the percentage of rural ST poor to total poor was 38, while ST population to total population was 25 per cent in the rural sector. The incidence of poverty among SC population, however, decreased considerably in 1993-94 over the year 1983¹. There are also regional differences in poverty. The regions like southern and northern districts have high concentration of poverty. It is much higher in comparison to coastal areas. This has been mostly due to higher concentration of ST population in southern and northern regions.

There is also a wide variance in the levels of poverty amongst the poor. While below poverty line income has been estimated at Rs.11,000/- per family, the magnitude of poverty has been assessed by dividing poor into four categories, viz, destitute (with income below Rs.4,000/-), very very poor (with income between Rs.4,001 - 6,000), very poor (with income between Rs.6001 - 8500), poor (with income between Rs.8501 - 11000). In a survey conducted in 1992 for the districts is presented in *Table 11.3*.

TABLE: 11.3
District-wise Distribution of Rural Families Below Poverty Line of Rs.11,000 on the basis of Different Income Groups in Orissa as per 1992 Survey (in per cent)

| Sl. No. | Name of the District | 0-4000 (Destitute) | 4001-6000 (Very Very Poor) | 6001-8500 (Very poor) | 8501-11000 (Poor) | Total | Total Rural Families |
|---------|----------------------|--------------------|----------------------------|-----------------------|-------------------|-------|----------------------|
| 1. | Angul | 32.60 | 32.02 | 14.68 | 5.04 | 84.34 | 100.00 |
| 2. | Baleswar | 24.94 | 25.67 | 10.25 | 4.10 | 64.95 | 100.00 |
| 3. | Bargarh | 21.38 | 27.84 | 13.78 | 6.95 | 69.96 | 100.00 |
| 4. | Bhadrak | 20.12 | 28.76 | 15.22 | 7.06 | 71.16 | 100.00 |
| 5. | Bolangir | 25.67 | 34.46 | 22.44 | 9.32 | 91.90 | 100.00 |
| 6. | Cuttack | 17.59 | 27.53 | 15.71 | 10.94 | 71.77 | 100.00 |
| 7. | Dhenkanal | 28.90 | 34.66 | 14.64 | 5.98 | 84.17 | 100.00 |
| 8. | Gajapati | 33.32 | 35.43 | 17.53 | 5.23 | 91.51 | 100.00 |
| 9. | Ganjam | 29.19 | 24.67 | 14.19 | 7.15 | 75.20 | 100.00 |
| 10. | Jagatsinghpur | 21.61 | 20.95 | 14.97 | 12.03 | 69.57 | 100.00 |
| 11. | Jajpur | 21.92 | 23.86 | 15.73 | 10.35 | 71.87 | 100.00 |
| 12. | Kalahandi | 27.78 | 35.51 | 16.83 | 6.65 | 86.77 | 100.00 |
| 13. | Kendrapara | 17.23 | 24.91 | 15.83 | 11.34 | 69.31 | 100.00 |
| 14. | Kendujhar | 27.62 | 29.59 | 17.60 | 8.13 | 82.95 | 100.00 |
| 15. | Khurda | 21.18 | 35.06 | 14.12 | 5.55 | 75.91 | 100.00 |

1. Mishra, S. N. and Behera M., Poverty and living Conditions, Orissa Development Report, 2002, Planning Commission, Govt. of India.



| Sl. No. | Name of the District | 0-4000 (Destitute) | 4001-6000 (Very Very Poor) | 6001-8500 (Very poor) | 8501-11000 (Poor) | Total | Total Rural Families |
|---------|----------------------|--------------------|----------------------------|-----------------------|-------------------|--------------|----------------------|
| 16. | Koraput | 24.16 | 35.92 | 18.40 | 8.10 | 86.59 | 100.00 |
| 17. | Malkangiri | 30.82 | 36.51 | 16.93 | 7.60 | 91.86 | 100.00 |
| 18. | Mayurbhanj | 34.76 | 35.65 | 15.00 | 5.36 | 90.77 | 100.00 |
| 19. | Nuapada | 24.52 | 32.56 | 20.96 | 8.28 | 86.32 | 100.00 |
| 20. | Nabarangpur | 33.56 | 33.38 | 16.89 | 6.73 | 90.56 | 100.00 |
| 21. | Nayagarh | 24.96 | 38.36 | 15.14 | 5.08 | 83.54 | 100.00 |
| 22. | Puri | 23.38 | 26.05 | 17.05 | 8.22 | 74.69 | 100.00 |
| 23. | Rayagada | 29.16 | 28.88 | 17.35 | 6.16 | 81.56 | 100.00 |
| 24. | Sonepur | 28.07 | 25.03 | 9.75 | 4.60 | 67.44 | 100.00 |
| 25. | Sundargarh | 22.58 | 31.28 | 18.34 | 8.72 | 80.93 | 100.00 |
| 26. | Phulbani | 42.22 | 34.16 | 12.59 | 4.06 | 93.03 | 100.00 |
| 27. | Boudh | 19.50 | 37.43 | 19.95 | 8.32 | 85.20 | 100.00 |
| 28. | Sambalpur | 24.21 | 24.78 | 12.15 | 4.50 | 65.63 | 100.00 |
| 29. | Deogarh | 29.66 | 30.27 | 12.27 | 6.29 | 78.49 | 100.00 |
| 30. | Jharsuguda | 15.24 | 21.90 | 12.57 | 3.96 | 53.67 | 100.00 |
| | Orissa Total | 25.89 | 30.01 | 15.55 | 7.24 | 78.70 | 100.00 |

Source: Govt. of Orissa, Rural Development Survey

From the table it may be seen that among the poor (BPL families) more than half being destitute and very very poor. The rural poor are agricultural labourers, rural artisans, marginal farmers and small farmers and together they occupy 66.37 of the rural BPL families. As per 1997 survey of Panchayati Raj Department, Govt. of Orissa, small farmers constitute 11.02 per cent, marginal farmers 20.90 per cent, agricultural labourer 24.91 per cent and rural artisans 3.24 per cent of the total rural BPL families. Thus, poverty not only is severely concentrated in rural Orissa but also more in the agrarian sector indicating very clearly that there is a need for agricultural interventions in rural Orissa so as to reduce poverty burden.

11.2.2 Natural Calamities

The incidence of natural calamities is presented in *Table-11.4*.

TABLE: 11.4
Natural Calamities in Orissa

| Year | Normal Rainfall (mm) | Actual Rainfall (mm) | Deviation from Normal Rainfall | | Natural Calamities |
|------|----------------------|----------------------|--------------------------------|-------|--------------------|
| | | | in m.m | In % | |
| 1965 | 1502.5 | 997.1 | -505.4 | -33.6 | Severe Drought |
| 1966 | 1502.5 | 1134.9 | -367.6 | -24.5 | Drought |
| 1967 | 1502.5 | 1326.7 | -175.8 | -11.7 | Cyclone, Flood |
| 1968 | 1502.5 | 1296.1 | -206.4 | -13.7 | Cyclone, Flood |
| 1969 | 1502.5 | 1802.1 | 299.6 | 19.9 | Flood |
| 1970 | 1502.5 | 1660.2 | 157.7 | 10.5 | Flood |

| Year | Normal Rainfall (mm) | Actual Rainfall (mm) | Deviation from Normal Rainfall | | Natural Calamities |
|------|----------------------|----------------------|--------------------------------|-------|------------------------------------|
| | | | in m.m | In % | |
| 1971 | 1502.5 | 1791.5 | 289.0 | 19.2 | Severe Cyclone, Flood |
| 1972 | 1502.5 | 1177.1 | -325.4 | -21.7 | Flood, Drought |
| 1973 | 1502.5 | 1360.1 | -142.4 | -9.5 | Flood |
| 1974 | 1502.5 | 951.2 | -551.3 | -36.7 | Severe Drought, Flood |
| 1975 | 1502.5 | 1325.6 | -176.9 | -11.8 | Flood |
| 1976 | 1502.5 | 1012.5 | -490.0 | -32.6 | Severe Drought, Flood |
| 1977 | 1502.5 | 1326.9 | -175.6 | -11.7 | Flood |
| 1978 | 1502.5 | 1261.3 | -241.2 | -16.1 | Hailstorm, Whirlwind, Tornado |
| 1979 | 1502.5 | 950.7 | -551.8 | -36.7 | Severe Drought |
| 1980 | 1502.5 | 1321.7 | -180.8 | -12.0 | Flood, Drought |
| 1981 | 1502.5 | 1187.4 | -315.1 | -21.0 | Whirlwind, Tornado, Flood, Drought |
| 1982 | 1502.5 | 1179.9 | -322.6 | -21.5 | Severe Flood & Drought, Cyclone |
| 1983 | 1502.5 | 1374.1 | -128.4 | -8.5 | - |
| 1984 | 1502.5 | 1302.8 | -199.7 | -13.3 | Drought |
| 1985 | 1502.5 | 1606.8 | 104.3 | 6.9 | Flood |
| 1986 | 1502.5 | 1566.1 | 63.6 | 4.2 | - |
| 1987 | 1502.5 | 1040.8 | -461.7 | -30.7 | Severe Drought |
| 1988 | 1502.5 | 1270.5 | -232.0 | -15.4 | - |
| 1989 | 1502.5 | 1283.9 | -218.6 | -14.5 | - |
| 1990 | 1502.5 | 1865.8 | 363.3 | 24.2 | Flood |
| 1991 | 1502.5 | 1465.7 | -36.8 | -2.4 | - |
| 1992 | 1502.5 | 1344.1 | -158.4 | -10.5 | Flood & Drought |
| 1993 | 1502.5 | 1421.6 | -80.9 | -5.4 | - |
| 1994 | 1502.5 | 1700.2 | 197.7 | 13.2 | Flood |
| 1995 | 1502.5 | 1739.3 | 236.8 | 15.8 | Flood |
| 1996 | 1502.5 | 1042.4 | -460.1 | -30.6 | Drought |
| 1997 | 1502.5 | 1493 | -9.5 | -0.6 | - |
| 1998 | 1502.5 | 1277.5 | -225.0 | -15.0 | - |
| 1999 | 1502.5 | 1440.0 | -62.5 | -4.2 | Super Cyclone, Flood |
| 2000 | 1502.5 | 1040.0 | -462.5 | -30.8 | - |

Source: Orissa Development Report, Planning Commission, Govt. of India, 2002.

It may be seen from the table (**Table 11.4**) that out of 41 years as many as 29 years were marked by natural calamities like flood, drought and cyclone. Recurrence of natural calamities not only severely affect the people, but also has serious repercussion on State exchequer and administration.

The Super Cyclone of October 1999 devastated 14 out of 31 districts with a wind speed of 220 to 300 km. per hour and with a rainfall of 400 m. m. to 867 m. m. The official figure of human death was 9885. The Cyclone affected a many as 12.57 million people, 1.73 million hectares of agricultural land and damaged 1.65 million houses, fully or partially.² In

² Source: Orissa Development Report, Planning Commission, 2002, Govt. of India, Table 14.1

the White Paper (December 1999) on Super Cyclone Revenue Department of Government of Orissa reported that as many as 9 million trees were uprooted. One can imagine the stress on ecology that would be left due to such huge loss of trees.

Recurrence of natural calamities, whose intensity in terms of damages to life and property is on the rise (considerably due to man-made causes) has one of the factors contributing the State in perpetual poverty thwarting considerably the efforts to reduce it through plan interventions and poverty eradication programmes. The food security of the poor, in particular, is constantly under threat bringing in starvation, malnutrition and diseases that keep the administration constantly on toes. Poverty, - more so, abysmal poverty, therefore, has remained at the highest level, sometimes marking the developmental investment a zero-sum game activity. Extreme dependence on subsistence agriculture has become the major cause of poverty and puts pressure on state's economy. (*Table 3.11*).

11.2.3 Soil types of the State

An examination of the soil types would reveal an interesting phenomena. Broad classification of soil types of Orissa is presented in *Table-11.5*.

TABLE: 11.5
Broad Classification of Soil Types of Orissa

| Sl. No. | Types of Soil | Approximate Area ('000 Ha) | Percentage Distribution |
|------------|--------------------------------|----------------------------|-------------------------|
| 1. | Red loam and red sandy soils | 7050 | 45.54 |
| 2. | Mixed red and yellow soils | 5440 | 35.14 |
| 3. | <u>Black soils</u> | 960 | 6.20 |
| 4. | Laterite and lateritic soils | 700 | 4.52 |
| 5. | Deltaic alluvial soils | 670 | 4.33 |
| 6. | Coastal saline and sandy soils | 390 | 2.52 |
| 7. | Brown forest soils | 170 | 1.10 |
| 8. | Mixed red and black soils | 100 | 0.65 |
| Total Area | | 15480 | 100.00 |

Source: Agriculture in Orissa; Directorate of Agriculture and Food Production, Orissa, Bhubaneswar.

The soil condition of Orissa is typical, consisting primarily of red loam and red sandy soil (45.54 per cent of the total) and mixed red and yellow soil (35.14 per cent of the total) that hardly has any moisture retaining capacity. Further in view of the light texture such land are easily erodable. The soils require huge amount of manure/fertilizer, cost intensive.

11.3 State

11.3.1 Sources of Livelihood

As much as 73 per cent of the total main workers are engaged in agriculture, out of which 44.3 per cent are cultivators and 28.3 per cent are agricultural labourers. Although contribution of agriculture to Net State Domestic Product (NSDP) has declined from 67 per cent in 1951 to about 30 per cent by turn of last century there has been no change in the workforce engaged in agriculture.

The distribution of agricultural holdings are not only skewed but also adverse in terms of average holding size. The following is the picture of distribution of operational holdings and area operated by farmers of different size groups (*Table 11.6*).

TABLE: 11.6
Distribution of Operational holdings and Percentage of Area Operated
by Different Categories of Land Holders

| Size Class of Operational Holding (in ha.) | Percent of Operational Holdings | | Percent of Operated Area | |
|--|---------------------------------|-----------|--------------------------|-----------|
| | 1981 - 82 | 1991 - 92 | 1981 - 82 | 1991 - 92 |
| Less than 1.01 | 54.45 | 59.99 | 17.02 | 22.09 |
| 1.01 - 2.00 | 26.11 | 24.34 | 26.48 | 30.16 |
| 2.01 - 4.00 | 14.08 | 12.02 | 26.16 | 27.87 |
| 4.01 - 10.00 | 4.63 | 3.36 | 17.84 | 16.20 |
| Above 10 | 0.73 | 0.29 | 12.50 | 3.68 |
| All sizes | 100 | 100 | 100 | 100 |

Source: NSS Report, 37th Round, 1981-82 and NSS Report, 48th Round, 1991-92.

The table clearly indicates that marginal farmers having less land of 1 hectare or less comprise 60 per cent of the total holdings. Small farmers comprise 24.34 per cent. Small and marginal farmers together account for about 84 per cent of the total operational holdings. The percentage of area operated by the small and marginal farmers is about half of the total operated area.

The skewness in the agricultural land holding and overwhelming dependence on agriculture has been the major cause of poverty of Orissa (Chapter-III). Other sources of livelihood i.e. Livestock, Fisheries etc. are discussed in Chapter-III (*Table-3.10 and 3.11*)

11.3.2 Culture and Natural Heritage

The forests of south and northern Orissa, sandy beaches of coastal Orissa, tropical forest of Similipal - a national park in north, the biggest salt

water lagoon, Chilika lake with migratory birds coming all the way from Siberia during winter months, the water falls of Keonjhar district and the hot-water springs of Khurdha and Ganjam are the tourist spots of Orissa. The rich religious - cultural heritage of Buddhist Tri-ratna triangle - Laleet Giri, Ratna Giri, and Udaya Giri, the Jain caves of Khandagiri, the Golden Triangle comprising of Lingaraj, Konark and Puri temples. Up in the West and North, famous temples of Harishankar in slopes of Gandhamardan hills, the sixty-four yogini temple in Ranipur-Jharial and, above all, the annual car festival of lord Jagannath of Puri, the Dhanu Festival of Bargarh are places and occasions that leaves the visitors spell bound.

Properly harnessed and planned with provisions of infrastructural support, these places and occasions can be greatest tourist attractions - a virtual money-spinner with very high income propensity benefiting all classes of people.

The rich cultural heritage of the state finds exquisite expression in the dance form called Odissi, - which is a unique classical dance form of India. The handicrafts like bell metal, appliqué works, terracotta, pattachitra (palm leaf painting), stone carving works, silver filigree etc. have no parallel. The silk fabrics with double 'ayakut' (giving same look from both sides) are designers choice. Unfortunately, however, the handicraft sector with its vast potential, is yet to be harnesses by the investors. The need of the time is to create the proper investment climate that would encourage the entrepreneurs from far and wide to come to Orissa as their investment destination benefiting immensely from the ventures and generating adequate income among the otherwise poor craftsmen.

11.4 Impact

11.4.1 Financial Aspects

The State's finance is not quite encouraging. A glance at the State's own revenue and the incidence of debt burden gives a disturbing picture of the magnitude of the fiscal problems. In the year 2000-2001 State's own total revenue was Rs.2869.50 crore. Its debt servicing liabilities only worked out to Rs.2286.88 crores. Debt servicing, interest payment, repayment obligations to all agencies including central government worked out to Rs.3030.30 crores. Due to precarious financial position of the State, the Government of Orissa had to enter into a memorandum of understanding (mou) with the Government of India to implement a series of reforms in the state finance by radically cutting unnecessary and avoidable expenditure by way of downsizing bureaucracy and abolishing

most of the existing vacant posts not only at the base level but also at senior levels. The loss making PSUs were either shutdown by giving the existing employees voluntary retirement (VR) or by selling off there to private sectors.

As per the later figures published in the Government of Orissa Socioeconomic Survey 2005-06, states own revenue stood at Rs.3833.01 crores in 2002-03. This is substantially higher than that of 2000-01. In the year 2002-03. total debt servicing including payment of interest was to the tune of Rs.2935.65 crores. Although there has been a marginal reduction in debt liabilities, and the trend of increasing liabilities has been reversed, still the debt liability is very high in comparison to its own resources and other states. The process of financial reforms has its own toll in terms of virtually no employment in the Government sector, particularly at the lower levels and unusual delays in settling payments. The State is in a debt trap having a debt repayment obligation amounting to 77 per cent of its own revenue. Thus, it is clear that the State hardly has any resources of its own for capital investment and other developmental activities including social welfare measures. Central assistance, being the only hope, has not been adequate enough. The state is now in a stationary low-level equilibrium trap.

11.4.2 Environmental Aspects

In mining and mineral-based industrialisation, environment becomes the greatest casualty. Unless the environmental norms are fully compiled with the use of proper technology and equipments, the ecology and environment may be damaged beyond the carrying capacity of nature. Discharge of untreated industrial effluent will pollute water bodies and ground water causing immense health hazards. Air would also be equally polluted. Mining activities may pollute ground water, water bodies, rivers and streams causing health hazards of human, animal and fauna stock. Fluoride content in water in many areas has crossed the permissible limit. The situation has improved during the last decade due to enforcement of environmental laws and supervision by the regulating agency.

11.5 Response

11.5.1 Irrigation Potential

Orissa is in a comfortable position with regard to rich water resources with a total ultimate irrigation potential of 8.8 million hectares. In per capita terms it is only next to Madhya Pradesh (undivided), while Madhya Pradesh has 0.30 hectare per capita ultimate irrigation potential, it is 0.24 for Orissa. According to an estimate “in the case of Orissa if the

ultimate potential is fully utilised, it can irrigate about 90 per cent of total cultivable area”³.

The net irrigation potential created by the end of 2002-03 from all sources was 26.03 lakh hectare, ie, 44.12 per cent of the total irrigable area of the State. Out of this about 46.91 per cent of the area, ie, 12.21 lakh hectare land are irrigated through major and medium irrigation projects. About 4.65 lakh hectares received irrigation minor (flow), 3.47 lakh from minor (lift) and 5.70 lakh from other sources which include private tanks, ponds, dug-wells, water harvesting structures etc⁴. Unless supply of assured irrigation are stepped up on a war footing, Orissa’s agriculture cannot be insulated against the vagaries of monsoon nor her massive poverty can ever be eradicated.

11.5.2 Contribution of Industry

The contribution of secondary sector comprising of manufacturing, construction, electricity, gas and water supply to the state’s domestic production has remained quite marginal. Quick estimates made for the year 2002-03 puts it at 17.57 per cent of the NSDP.⁵ The State is one of the least industrially developed States in India contributing about 2 per cent of the country’s total industrial output⁶. At present three agencies, viz, Industrial Promotion and Investment Corporation Limited (IPICOL), Industrial Development Corporation Ltd. (IDCOL) and Orissa State Electronics Development Corporation (OSED) are engaged in the promotion of large and medium industries. By the end of 2002-03 Orissa had 358 large and medium industries with an investment of Rs.3,584.71 crores employing 85,777 persons. During the same year as many as 74,133 small scale industries with an investment of Rs.1,869.57 crores existed in the State. This sector has provided employment to nearly 4.68 lakh persons. Many large scale industries and a sizeable number of small scale industries are sick or have been closed down. Half of the state public enterprises (i.e. 29 out of 67) are sick. The health of the other units save a few are also not very bright. The new Industrial Policy of the state tries to meet this challenge. In recent years a large number of mineral based industries are coming up in the state particularly in Iron and Steel and Aluminium sectors. One of the country’s biggest MoU has been signed with the Korean based steel giant POSCO. Similarly a few units of Alumina/Aluminium industries are being set in the southern and western

³. Planning Commission, Govt. of India, Orissa Development Report, 2002, pp - 18.

⁴. Economic Survey, 2003-04, Govt. of Orissa, pp - 1/6.

⁵. Govt. of Orissa, economic Survey, 2003-04, Annex. - 1.4.

⁶. Govt. of Orissa, Annual Survey of Industries: Factory Sector, 1997-98.

part of Orissa. The oil refinery project and the petrochemical complex is coming up in a big way at Paradeep after the State Government accepting some of their conditions regarding tax liabilities.

Industrialization is urgently necessary for the development of state. Major minerals like, Iron Ore, Bauxite, and Coal are richly available in the state, which, after the virtual scrapping of the Industrial Licensing Policy, have attracted many giant private investors. These industries will not only boost the economy but also help creating large number of employment opportunities directly and indirectly.

Land acquisition however has created problems. Rehabilitation and resettlements of those who are losing land are disgruntled and have been agitating for proper justice. Unless these problems are adequately and satisfactorily solved, many industries may look for alternative states and the state may lose the opportunity to develop.

11.5.3 Manpower and Employment

Out of the total workers of 142.73 lakhs as reported in 2001 census, 29.7 per cent were cultivators, 35 per cent were agricultural labourers, 4.8 per cent were engaged in household industries and 30.5 per cent were other workers (the details of other workers have not been worked out).

There are about 7.62 lakh job seekers who have registered their names in employment exchanges in the year 2002. The number is much less than the actual as job opportunities in the organised sector has considerably shrunk. In the year 2002 as many as 6.18 lakh educated (matriculation and above) job seekers existed in the live registers of the employment exchanges. As reported in Economic Survey of Govt. of Orissa, 2003-04, there were as many as 5030 professionals belonging to the category of engineers, medical, agricultural and pharmacy graduates who search jobs through employment exchanges. Together with post-graduates in these disciplines the number stood at 5372 in the year 2002.

11.5.4 Minerals and Mineral Development

Great potential exist in mineral sector for faster development of the economy. The state is endowed with many vital mineral resources which properly harnessed, can bring about phenomenal development. The state has reserves of major minerals like chromite, nickel, bauxite, iron ore and coal. The mineral reserves of Orissa and that of India estimated in 2002-03 is presented in *Table 11.7*.

TABLE: 11.7
Mineral Reserves in Orissa and India, 2002-03
 (in million tonne)

| Sl. No. | Name of the Mineral / Ore | Reserve in Orissa | Reserve in India | Percentage to All India Reserve |
|---------|---------------------------|-------------------|------------------|---------------------------------|
| 1. | Iron ore | 3567 (4177) | 13460 (12317) | 26.50 (33.91) |
| 2. | Chromite | 183 (110) | 186 (114) | 98.39 (96.49) |
| 3. | Coal | 51571 (60987) | 211594 (245692) | 24.37 (24.82) |
| 4. | Bauxite | 1733 (1529) | 2462 (3075) | 70.39 (49.72) |
| 5. | Lime stone | 1032 (2224) | 75679 (169941) | 1.36 (1.30) |
| 6. | Dolomite | 434 (882) | 4387 (7349) | 9.89 (12.00) |
| 7. | Fire clay | 108 | 518 | 20.85 |
| 8. | China clay | 157 (314) | 986 (2353) | 15.92 (13.35) |
| 9. | Nickel ore | 175 (174) | 184 (188) | 95.11 (92.55) |
| 10. | Vanadiferous magnetite | 2.5 | 11.5 | 21.74 |
| 11. | Manganese | 50 (116) | 167 (406) | 29.94 (28.57) |
| 12. | Mineral sand | 82 (47) | 266 (366) | 32.33 (12.84) |
| 13. | Graphite | 2.0 (4.6) | 4.58 (16) | 43.38 (28.75) |
| 14. | Pyrophyllite | 8.6 | 9.9 | 86.87 |
| 15. | Lead ore | 1.8 | 176 | 1.02 |
| 16. | Talc - Soap stone | 0.1 | 213.7 | 0.05 |

Source: Directorate of Geology, Orissa, Bhubaneswar, quoted from Economic Survey, Govt. of Orissa, 2003-04.

** Note: Figures in bracket refer to data of the Indian Bureau of Mines as given in Chapter- 7.

The State has a near monopoly in chromites, nickel and half of country's bauxite. The State is rich in iron ore and coal having one third and one fourth of country's total deposits.

The rate of exploitation of minerals, however, has not been very significant both in physical quantity and in value terms. Production and value of minerals production has been presented in **Table 11.8**.

TABLE: 11.8
Production and Value of Minerals / Ores in Orissa

| Sl. No. | Year | Production (in lakh tonne) | Value (Rs. in crore) |
|---------|-------------|----------------------------|----------------------|
| 1. | 1998-99 | 634.30 | 2365.56 |
| 2. | 1999-00 | 644.87 | 2605.05 |
| 3. | 2000-01 | 689.24 | 2776.15 |
| 4. | 2001-02 | 749.81 | 2910.47 |
| 5. | 2002-03 | 873.62 | 3694.16 |
| 6. | 2003-04 | 1080.00 | 3877.75 |
| 7. | 2004-05 (P) | 1270.48 | 6148.61 |

P: Provisional Source: Directorate of Mines, Orissa, Bhubaneswar, quoted from Economic Survey, Govt. of Orissa, 2003-04.

Orissa has become a victim of the national industrial policies and industrial licensing policies pursued till the launch of the new economic policy and the policy of globalisation in 1990s. The theory of localisation of industries (leading to production efficiency and least cost production) was sacrificed in the name of regional balance and political prudence.

Had there not been such an industrial policy all the major mineral-based industries such as iron and steel, aluminium etc. would have been located in Orissa which would have made Orissa as one of the most developed State's of the country. Government of India has realised its follies and as a consequence large number of mineral based industries are either have started erection of the plant or have signed memorandum of understanding (MOU) with the State government. Many multinational corporations have shown their interest to set up their units in the state, particularly in power sector because of the huge coal deposits. Many thermal power stations are in the process of being set up.

11.6 Concluding Remarks

Orissa is rich in both natural and socio-cultural resources. Long period of neglect, mismanagement, lack of proper vision and long-term plan based on resource endowments have given the State the dubious distinction of the poorest State. The dead-lock needs to be broken with an urge, based on the spirit of adventure and determination so that the State emerges as a vibrant State with an equally vibrant economy without, of course, compromising the environmental norms. The development then becomes sustainable.