CHAPTER - IX

SOCIAL SECTOR DEVELOPMENT

Development is a holistic process. Economic development in terms of total growth as well as per capita income of a nation/region is meaningless, if it does not take care of improvement in 'quality of life' of people belonging to different strata of society. The Ninth Five Year Plan document of India rightly mentions that human development and improvement of quality of life are the ultimate objectives of all planning (Government of India 1997:70). Country's experience of economic development in the post independence period clearly shows that notwithstanding the state centred planning the benefits of economic progress have reached different segments of the population through different channels at different rates. Needless to say, in a caste ridden, hierarchical and unequal society like India, our constitutional goal to achieve an egalitarian social order under the democratic framework by generating the current of universal achievement oriented norm on the basis of merit and efficiency, has almost failed to cross the barrier of particularistic ascriptive norms of age old Hindu Society. Poverty, which is a bane of Indian society, continues to prevail among the downtrodden and depressed sections of people. Despite the process of regulated planned development under active state intervention and predominance of public investment, socio-economic inequalities between place and people have sharpened over the years. In a scenario of rising population, India is now passing through the second stage of demographic transition, where the rate of fall in birth rate exceeds the fall in death rates. As a result, even after more than 50 years of planning, the absolute number of poor population living below the poverty line has far exceeded the figure that existed in the early 1950s.

More so, in this backdrop in order to overcome the problem of low economic growth, increasing external debt burden and balance of payment crisis, the Government of India has taken recourse to structural adjustment programme (SAP), economic liberalization and globalization measures since early 1990s. The measures popularly known as NEP (New Economic Policy) put emphasis on the primacy of the market in regulating the economy and the role of the state in shaping the economy and society are progressively curtailed. However,

market mechanism may not improve access to available facilities or fully meet the essential needs of the population living below the poverty line. Hence, realizing the limitations of the market economy and its unintended effects on the living of the poor, the Government of India in its Ninth Five Year Plan put emphasis on social sector planning with appropriate policy and programme initiatives, so that the poorer and vulnerable segments of the population could get access to essential commodities, facilities and services based on their need but not having ability to pay.

The social sector planning broadly envisages expansion and improvement of the social infrastructure such as health care, education, housing, water supply and sanitation. Needless to say, social sector development should aim at improvement of quality of life of the poor and weaker sections of population in particular and the people of the country in general. To achieve the goal there is a need to make adequate investments for: (i) essential necessities such as food, shelter and clothing; (ii) essential prerequisites for human development such as education, employment and health care; and (iii) optimal utilization of the available human resources for economic and social development. Right from the First Plan period, the country put thrust on social sector planning with a view to providing integrated essential services to the poor and vulnerable segment. Further, in an attempt to provide greater focus and ensure achievement of objective through careful monitoring, the Minimum Needs Programme (MNP) was formulated in the Fifth Plan. Since then the government has been making continuous efforts and allocating adequate fund under the MNP to establish a network of facilities and services for social consumption according to national norms throughout the country. Notwithstanding this, in all sectors of social development, be it health, education, housing, water supply and sanitation our performance is far from satisfactory. After five decades of planned development, roughly 260 million people of the country are reported to be living below the poverty line. There are still many among the Indian citizenry, who often go to their bed hungry, remain alive or die of malnutrition, die of many contaminating but easily curable diseases, have little or no access to modern medical amenities, have no means to afford an adequate shelter or stable jobs to ensure a reasonable standard of living. In this scenario, the status of development of social sector in a poor and backward state like Orissa may not be expected to be of satisfactory national norm. So, in order to find out the development gap and access to the existing basic services across space and people, the present chapter makes an attempt to analyze the development status of social sector in Orissa.

DEVELOPMENT SCENARIO: ORISSA VIS-A-VIS INDIA AND OTHER MAJOR STATES

After more than a decade of economic reforms and SAP under the predominance of the market economy, the country has undoubtedly registered high economic growth and increase in per capita income at the national level. It is found that in the post liberalization years between 1991-92 to 1997-98, the per capita income/Net National Product (NNP) of the country at 1980-81 prices has increased from Rs.2178 in 1991-92 to Rs.2814 in 1997-98, registering thus a total growth rate of 29.20 per cent and a simple linear average growth rate of 4.75 per cent per annum during the period. However, when simple linear average growth rate of NSDP of 15 major states of India is computed at 1980-81 prices, it is found that the so-called developed states such as Gujarat (7.32%), Maharashtra (6.00%), Tamil Nadu (5.01%), West Bengal (5.33%), Karnataka (3.27%), Kerala (4.64%)\ have registered higher economic growth than the backward states like Assam (1.23%), Bihar (-0.27%), Orissa (1.26%), Uttar Pradesh (1.47%), etc. Among the backward states only Andhra Pradesh (6.7%) and Madhya Pradesh (4.05%) have registered higher economic growth at par with the national level. Honestly speaking economic liberalization has led to increase in per capita level of income inequality at the inter-state level and rise in development disparity across space and different segments of population. It is found that during the period 1991-92 to 1997-98 the co-efficient value of disparity in NSDP at the interstate level showed a consistently upward trend and increased from 37.04 per cent in 1991-92 to 42.06 per cent in 1997-98 (Meher 2001). In such a scenario, it is least expected from a poor and backward state like Orissa to have shown a commendable performance in its development of the social sector vis-à-vis all-India level average progress or progress made by the other advanced states in the post liberalization years, so as to bridge the development gap. It is found that in the year 1987-88 the percentage of BPL population in Orissa was highest (44.7) in the country as against 29.9 at the all India level. Further, according to 1993-94 estimates of the Modified Expert Group of Planning Commission, while the BPL population at the all-India level stood at 35.9 per cent, in the case of Orissa this was 48.6 per cent, the second highest in the country. According to this estimate Bihar with a BPL population of 54.6 per cent was the most poverty stricken state followed by Orissa (48.6%), Madhya Pradesh (42.5%) and Assam (40.3%) in the descending order (Government of Orissa 1991:240; 2000:ANX72). However, according to the latest estimates of the Planning Commission based on the sample survey data of consumer expenditure compiled by the National Sample Survey Organization (NSSO) during 1999-2000, Orissa has now become the most poverty stricken state of India with 47.15 per cent BPL population as against 26.10 per

cent at the all-India level (**The Times of India**, 24 February 2001). It is because of high incidence of poverty and higher vulnerability to natural calamities, the development status of the social sector is pitiably lower than the national level and its management is equally in a mess.

Health

The poor health infrastructure and less effectiveness of the existing facilities vis-a-vis many other states of India may be assessed from the comparative analysis of different health indicators. In the year 1993, Orissa had one health centre for every 19050 persons as against 13143 persons at the all-India level. Although the number of people served per health centre of the state was found to be relatively much higher than the national average, the picture in the neighbouring states like Andhra Pradesh (19029), Bihar (27763), Madhya Pradesh (33233) and West Bengal (26436) were either almost equal or much higher than Orissa. Similarly, the number of persons served per bed in the different medical institutions of these states was in no way better than the all-India level (1362) except West Bengal (1243). The number of persons served per bed in Orissa was 2167 as against 2466 in Andhra Pradesh, 2960 in Bihar and 3649 in Madhya Pradesh. At the all India level the percentage of total expenditure incurred on medical and public health services including water supply and sanitation in 1991-92 was 7.25 per cent of the total government expenditure. This was 6.85 per cent in Orissa, 6.49 per cent in Andhra Pradesh, 7.25 per cent in Bihar, 7.44 per cent in Madhya Pradesh and 7.95 per cent in West Bengal. Also the per capita health related expenditure in 1991-92 was Rs.35.01 at the all-India level as compared to Rs.29.17 in Orissa, Rs.24.47 in Andhra Pradesh, Rs.21.84 in Bihar, Rs.28.36 in Madhya Pradesh, and Rs.31.13 in West Bengal. This shows that the provision of health infrastructure in Orissa was almost at par with its four neighbouring states, although it was lower than the all-India level. However, the infant mortality rate in 1993 was 74 at the all-India level, 64 in Andhra Pradesh, 70 in Bihar, 106 in Madhya Pradesh and 110 in the case of Orissa, the highest among major states of the country. The death rate per 1000 population was 10.1 at the all-India level in 1992 as against 11.7 in the case of Orissa, 9.2 in Andhra Pradesh, 10.9 in Bihar, 12.9 in Madhya Pradesh and 8.4 in west Bengal. The prevalence of major diseases like malaria (20592), tuberculosis (555), leprosy (96) and blindness (3161) per lakh population was equally higher than the all-India level, such as malaria (13296); tuberculosis (467); leprosy (120); and blindness (3001). In the neighbouring states such as Andhra Pradesh the incidence of these four diseases per lakh population was

7776 for malaria, 407 for tuberculosis, 118 for leprosy and 5984 for blindness. The respective figures for Bihar were: 5712, 595, 123 and 2749; for Madhya Pradesh, those were: 18912, 435, 136 and 3831; and for West Bengal those were: 2712, 357, 47 and 914 only (Narayana 2001: 28-32 and 37-40). This shows that in the early 1990s effectiveness and performance of the existing public health infrastructure and services in controlling certain deadly diseases and preventing higher infant mortality rate in a poor and backward state like Orissa was relatively poorer than the other neighbouring states like Andhra Pradesh, Bihar, Madhya Pradesh and West Bengal having almost same level of health infrastructure and per capita health services expenditure.

Apparently, Orissa is a poor and backward state having fairly higher concentration of depressed category (scheduled castes 17% and scheduled tribes 22%) population and higher incidence of rural poverty. The state has also many less accessible pockets resided by the tribal population and floundering in acute poverty. In such a scenario for better accessibility of the poor in the interior and less accessible areas, there is a need for better public health package by intensifying spread of health infrastructure and services in a more liberal norm vis-à-vis other states of the country. However, it is unfortunate to note that during the years of state regulated planning and initial period of the economic liberalization, the infrastructure and service status of public health facilities in Orissa was much lower than the average picture of health sector development at the all-India level. As a result, in the post liberalization years although much thrust has been put on the social security measures to reduce the vulnerability of the poor under the capitalist market economy frame by increasing social sector spending by the government, the health status of the poor in Orissa and the state's population in general has not shown any marked improvement.

Table-9.1

Sensitive Health Indicators, 1999

Sl. No.	Indicators	Orissa	India
1	2	3	4
1.	Maternal mortality rate per lakh life births, 1997 SRS	361	408
2.	Crude birth rate per 1000 population – 1999 SRS	24.1	26.1
3.	Crude death rate per 1000 population – 1999 SRS	10.6	8.7
4.	Life expectancy at birth (in years)	61..64	63..50
5.	Child mortality rate per 1000 children	25..5	29..3
6.	Perinatal mortality rate per lakh life birth – 1998 SRS	61.4	42..5
7.	Infant mortality rate –1994-98, (NFHS-2, 1998-99)	97.0 (81.0)	70.0 (67.6)
8.	Total fertility rate – NFHS-2	2.5	3.2

Source: Government of Orissa, Health & Family Welfare Department, Bhubaneswar.

According to the latest sensitive health indicators of 1999, the average health status of people in Orissa is not so encouraging as compared to the average health status of people at the all-India level. It is found that although Orissa has made relatively better progress in reducing crude birth rate, child death rate, maternal mortality rate and total fertility rate than the all-India level, its progress in reducing crude birth rate, infant mortality rate, perinatal mortality rate, and increasing life expectancy rate is worse than the country average (Table 9.1). This is possibly due to higher level of rural poverty and malnutrition. The body mass index (BMI), which is worked out to assess the nutritional status of population by relating weight with height is found to be low for women in Orissa. According to National Family Health Survey 1998-99 (NFHS-2), the average or mean BMI of women in Orissa is 19.2. Chronic energy deficiency is usually indicated by a BMI below 18.5. On this basis, when the nutritional status of women in Orissa is assessed according to the NFHS-2 data, almost half (48%) of women in the state have a BMI below 18.5, indicating a high prevalence of nutritional deficiency. The survey reveals that nutritional problems are particularly serious for younger women, rural women, illiterate women, and women from scheduled castes and scheduled tribes (NFHS-2 Orissa: 153). Similarly, according to NFHS-2 findings more than half of children (54%) below three years of age in Orissa are underweight (weight-for-age), and 44 per cent are stunted (height-for-age). Among

them, 21 per cent are severely undernourished according to weight-for-age and 18 per cent according to height-for-age. The proportion of wasting (weight-for-height) among the children of this age is also quite evident affecting about one-fourth of the total. Interestingly, the proportions of children who are underweight, stunted, or wasted have more or less remained constant between NFHS-1 (1993) and NFHS-2, although severely underweight and severely stunted categories have decreased between NFHS-1 and NFHS-2, from 23 to 21 per cent and from 25 to 18 per cent (NFHS-2 Orissa: 166). Added to this it is found that prevalence of anaemia among the women and children in Orissa is found to be very high. According to NFHS-2 findings nearly three-fourth (72%) of the children below three years of age and 63 per cent of the women in 15-49 years age group have some degree of anaemia. While the percentages of women with moderate and severe anaemia respectively are16.2 and 1.5, in the case of children below three years of age those are found to be 43.2 and 2.9 respectively (NFHS-2:156 & 169).

Needless to say, anaemia and malnutrition of such magnitude among the small children and the women in the reproductive age group are a matter of serious concern as they cause increasing morbidity and reduce life expectancy rate of population. It may be observed from the data shown in Table 9.1 that Orissa has been successful in reducing crude birth rate, total fertility rate, maternal mortality rate and child mortality rate as compared to the all-India average figures. However, due to under-nutrition and anaemic problems of women and children, infant mortality rate and perinatal mortality rate in the state is fairly higher than the all-India level. Hence, this calls for intensification of awareness generation and sensitization of the rural mass through IEC (Information education and communication) activities and for this formulation of an appropriate and effective health policy to cater to the needs of disadvantageous category of population should get top priority for the social sector development planning in Orissa.

In this scenario, it is found that according to the latest available data of the Health and Family Welfare Department, Government of Orissa, the state has at present one medical institution/health centre for every 21580 persons and one medical bed for every 2662 persons. The doctor population ratio is 1:7560; nurse population ratio is 1:16500; and nurse doctor ratio is 1:2, whereas the suggested national norms worked out by the Mudaliar Commission in 1960 was one doctor for every 3500 persons and one nurse for every 500 persons (Mohanty

2001:6). The CSO (Central Statistical Organization) data, however, show that in the year 1992 at the all-India level there was one doctor for every 2083 population and in 1995 there was one nurse for every 1639 population. Similarly, in the year 1995 at the all-India level there was one public health centre for every 42812 persons and according to CMIE data there was one medical bed for every 1059 persons. This implies that existing public health infrastructure and amenities both in the country and the state is far from satisfactory and particularly for a backward and poverty stricken state like Orissa having higher proportions of disadvantageous categories of population strengthening of public health care measures is more crucial.

On the contrary, it is however, noticed that government spending on the health care measures in real terms are progressively being curtailed, particularly after economic liberalization measures and privatization of the state undertakings in the wake of India's resort to structural adjustment programme (SAP) for faster development. Under this new economic measure the poor and the backward states of India have become the worst sufferers, although economic growth of the advance states under the capitalist production system has been much faster (Meher 2001). In the backward and poorer states the state governments are finding it difficult to strengthen social security measures for the poor and vulnerable population. Their revenue generation capability has been weakened due to accentuation of economic disparities under free market economy. It is found that in the year 1990-91, the per capita health expenditure of Orissa (Rs.56.7) was almost equivalent to the average expenditure incurred at the all-India level (Rs.57.1). However, in the year 1999-2000, while the per capita health expenditure of Orissa was reported to be Rs.136.3, it was Rs.158.2 at the all-India level (Government of Orissa 1992:242; 2001:ANX71). It is possibly due to falling health expenditure the overall prevalence rate of diseases like malaria and tuberculosis in Orissa has taken an upward trend in the recent years. Although the data relating to prevalence rate of malaria and tuberculosis collected during NFHS-1 and NFHS-2 in Orissa may not be comparable very closely due to methodological variation in the collection procedure of the data, it is found that while the prevalence rates of malaria and tuberculosis per lakh population were respectively 5200 persons and 600 persons during NFHS-1 (1993), those increased to respectively 7414 persons and 833 persons per lakh population during NFHS-2 (1998-99).

Education

Needless to say, since Independence the country as a whole has made commendable progress in the field of education and spread of literacy across space and people. However, it is a paradox that although India has the second largest technically qualified manpower in the world, at the same time it has the largest number of illiterate persons. The National Policy on Education, 1986 provides a broad policy framework for total eradication of illiteracy and a commitment to make primary education free and compulsory upto Vth standard. However, it seems that the country will take quite sometime to achieve cent per cent literacy level of the population and in a state like Orissa having fairly higher percentage of depressed (40%) category population, it will take much longer time to achieve the goal. It is found from the census data that the literacy gap of population in Orissa (15.80%) and at the all-India level (18.33%) during 1951 was only around 2.5 per cent. The gap, however, widened between Orissa and all-India during 1951 to 1981. In 1981, the literacy level of population in Orissa stood at 33.62 per cent as against 43.56 per cent at the all-India level. However, since 1991 census the gap has shown a reducing trend and by 2011 census, the state has a potential to bridge the national level literacy gap of its population. In 1991 the average literacy level of population in Orissa was 49.09 per cent as against 52.11 per cent at the all-India level. The respective literacy level of male and female population in 1991 was 63.09 per cent and 34.68 per cent for Orissa and 63.86 per cent and 39.42 per cent for the country as a whole. This, however, increased to 65.38 per cent at the all-India level during 2001 census –73.85 per cent for the males and 54.16 per cent for the females. In the case of Orissa while the total literacy level of state's population increased not only to 63.61 per cent in 2001 from 49.09 per cent in1991, but also the male literacy rate increased from 63.09 per cent to 75.95 per cent surpassing the male literacy level of 73.85 per cent at the all-India level. However, with a literacy level of 50.97 per cent for the females, the state's performance in the front of women literacy is not so encouraging. This means in order to bridge the national level gap in the literacy, the state has to promote spread of education among the female population more intensively than among the males.

Happily for the state, educational infrastructure is found to be better in terms of number of primary schools per lakh population as well as the gross enrolment ratio of primary school children. In the second half of 1990s according to the CMIE data the number of primary

schools per lakh population in Orissa was 119.17, whereas this was only 64.94 at the national level. Similarly, the gross enrolment ratio for primary school children at the all-India level was 92.14 per cent as against 94.91 per cent at the all-Orissa level in 1998-99. However, probably due to worsening drop out scenario the gross enrolment of children in the case of Orissa at the upper primary level (VI-VII) was only 51.31 per cent as compared to 57.58 per cent at the all-India level. Further, it is found that in the case of Orissa, enrolment of girl children both at primary and upper primary level is lower than the all-India figures. It is found that at the primary level (I-V) the enrolment of girl children at the all Orissa and all-India level was respectively 79.82 per cent and 82.85 per cent and for the upper primary level, this was respectively 51.31 per cent and 57.58 per cent (Government of India 2001:197).

No doubt in terms of educational infrastructure the state's performance comparatively looks better than the national level. However, this does not ensure the quality because of the lower per capita government expenditure made on education sector of the state. It is found that the per capita government expenditure on education, sports, arts and culture was Rs.165.4 in Orissa during 1990-91, whereas this was as high as Rs.260.2 in Punjab, Rs.242.7 in Kerala, Rs.239.2 in West Bengal, Rs.223.4 in Gujarat and RS.181.0 at the all India level. This in the current prices during 1999-2000 reached to Rs 438.9 in the case of Orissa, whereas in the case of Punjab, this was Rs.690.8; Rs.646.7 in West Bengal; Rs.869.3 in Kerala; Rs.645.4 in Gujarat; and Rs.548.7 at the all-India level (Government of Orissa 1992:242; 2001: ANX-71)

Housing

The three most essential and basic needs of human population are food, clothing and housing. However, thanks to unequal development and unequal distribution of resources across space and people not only the urban poor live in slums and squatters, but also the housing condition and living environment of rural poor are equally deplorable. Like the urban squatters, the poor people in rural areas live in *Kutcha* sheds, human beings and cattle live side by side, huddle together in the same shed- the shed having no light, air and sanitation facilities. According to 1991 census, the shortage of housing in rural India was as high as 13.72 million. Out of that 3.41 million households were totally houseless and the rest 10.321 million lived in unserviceable *kutcha* houses. In such a situation, it was further estimated that another 10.75 million houses would be needed to cover the population growth during 1991-2002 at the rate of an annual growth of 0.89 million houseless ness. Thus, there is a need to construct a total of

24.47 million houses for the poor and houseless population in India by the end of 2002 A.D. (Government of India, 1998:44). As against this, the housing situation in Orissa is found to be very grim and alarming. According to 1991 census, the state had all total 5,983,250 households and the total number of residential houses including shop-cum-residence was 5,300,570. This means the shortage of houses at the state level to accommodate all the households in separate shelter was 6,82,680 (11.41%) and for rural Orissa it was found to be 6,33,200 (12.25%). Interestingly, the shortage of houses for the rural population of Orissa constituted 18.57 per cent of the estimated total at the all-India level, although the state as a whole shared only 3.7 per cent of the country's total population in 1991 (Meher 2000:18). In this situation, it is needless to mention that the state has to go a long way in the housing sector so as to bridge the gap between Orissa vis-à-vis India and other neighbouring states.

In the post independence period unlike many other states of India, Orissa has become a continuous victim of recurring floods and cyclones. As a result, the housing problem of rural population in the so-called developed coastal districts of the state is equally precarious like the backward tribal districts of the highland region. In October 1999, the super cyclone in the state led to the destruction of around 1.65 million houses in the coastal districts (Government of Orissa 1999:7). Added to this, the recent floods in July 2001 have led to destruction of more than one lakh houses in different parts of the state. Hence, in this situation there is a felt need for separate housing policy in addition to the National Housing and Habitat Policy 1998 to bridge the expanding gap.

Water Supply and Sanitation

As a part of social sector development programme the country has put emphasis on improvement of drinking water supply and sanitation facilities in both rural and urban areas, particularly after the introduction of MNP in the Fifth Five Year Plan. According to the Government statistics the performance of Orissa in the front of potable water supply in both rural and urban areas is commendable. Also, in the arena of rural and urban sanitation programme the progress made by the state is almost at par with the national level. It is found that at the national level by the end of March 1999, 98.00 per cent of the populations in rural areas were covered under safe drinking water supply and for the urban population the coverage by the end of March 1998 was 90.2 per cent. Similarly, 9.00 per cent of the country's rural populations by the end of March 1998 were provided with sanitation facilities to prevent

water pollution and communicable waterborne diseases (Government of India 2001:208). At the all-Orissa level by the end of March 2000, 99.6 per cent of the identified rural habitations have been fully covered under drinking water supply of the government. Precisely, according to the government statistics 1,12,190 rural habitations of the state have been provided with 1,82,828 tube wells and 5,052 sanitary wells. Further, in order to make adequate provision of drinking water in the water scarce KBK region and other hilly districts of the state the Government is taking steps to implement a relax norm of one spot source for every 150 population where the existing norm of one spot source for 250 population has already been achieved. Like this in the urban centres of the state out of a total of 42.35 lakh persons as per the 1991 census, 30.8 lakh persons (72.73%) had been covered under piped water supply scheme by the end of 1999-2000. Added to this, around 14000 public stand posts and 11,400 hand pumps/tube wells have been erected in urban areas to cater to the water demand during non-supply hours and in areas uncovered by piped water supply system.

Under sanitation programme the state government has been encouraging the construction of sanitary latrines at the individual household level of both rural and urban areas. It has also associated the Sulabh International Social Services Organization (SISSO) to construct community and public toilets, water sealed latrines and conversion of dry latrines into water sealed latrines (Government of Orissa 2001:15/10-12).

Social Welfare

Apart from all these, as a part of social sector development programme both the central and state governments have been spending a lot on focused target group under different beneficiary oriented social welfare schemes to alleviate poverty, prevent unemployment, increase social security and nutrition among the weaker sections of society. It is found that during the last decade the Government of India had almost spent 1.1 to 1.2 per cent of the GDP on major schemes of social sector development as a part of plan expenditure of the Centre. These included welfare schemes like old age pension, subsidized supply of cereals under the PDS to the BPL population, development of small children and nursing and expectant mothers under ICDS (Integrated Child Development Schemes) and the like.

Needless to say, these welfare programmes are more crucial for the backward and poverty stricken state like Orissa. Besides centrally sponsored schemes the state government has

taken up many other new and innovative schemes as development of the social sector infrastructure is more essential for a poor state like Orissa. However, as development status of different social sector infrastructures widely varies across space and people and mere provisions do not ensure their access and utility for the weaker sections we make an attempt in the next section to focus and analyze the status of development and supply scenario of social infrastructures and services at the inter-district level in more detail.

DISTRICT LEVEL DEVELOPMENT SCENARIO

In a poor and backward state like Orissa emphasis on development of the social sector under the initiative of the state to improve the quality of life of the poor cannot be overlooked. Our analysis of the important social infrastructures like health, education, housing, water and sanitation etc and their comparison with the all-India level amenities as well as with some other major states clearly reveal that the state does not lag behind on some of the important social infrastructures. However, as the state on the whole is considered backward with high incidence of poverty and uneven nature of development of districts, norms for development of social infrastructures should be relaxed in the case of backward regions and people to facilitate their better access to the downtrodden sections. There is also a need for better monitoring of services and maintenance of the existing infrastructures. As it is not possible to get a clear and detailed picture of the services and utilities accruing to different segments of human population across space from the macro level state data on social infrastructures, in this section we make an attempt to analyze their provisions, status of development and access at the inter-district level.

Health

According to the latest available data of the Government of Orissa, Directorate of Health Services by the end of March 2000, the state had 1703 public health centres including district hospitals, etc in allopathic medicine and surgery. Excluding 25 doctors posted in the administrative grades in the state headquarters existing staff position of doctors in all these health centres of the state was 4894. Thus the average number of population covered per health centre according to 1999-2000 projected population at the state level is 21289 and average coverage of population per doctor is 7408. When we work out the location quotient figures of one health centre and one doctor on the basis of geographical area, these are found to be respectively 91.43 sq. km and 31.82 sq. km. at the state level. However, when we look at

the existing health infrastructure status at the district level by constructing CDI (Composite Development Index) it is found that out of 30 districts only 13 districts are developed and the C.V. value of disparity in health infrastructure among them is as high as 34.98 per cent. The developed districts in the descending rank order are Cuttack (1), Khurda (2), Sambalpur (3), Jagatshinghpur (4), Ganjam (5), Baleswar (6), Puri (7), Bhadrak (8), Jajpur (9), Kandhamal (10), Kendrapara (11), Nayagarh (12) and Malkangiri (13). It may be noted that except Sambalpur, Kandhamal and Malkangiri, the rest others are coastal districts and they all constitute parts of the old, undivided four coastal districts such as, Baleswar, Cuttack, Ganjam and Puri. Among the 17 backward districts Boudh (30) is found to be most underdeveloped followed by Deogarh (29), Angul (28), Nuapada (27), Bargarh (26), etc in the descending order. These five are the most underdeveloped or chronically backward districts with a CDI value of less than 80 (Table 9.2).

Table-9.2
District-wise Development Scenario of Health Sector in Orissa during 1999-2000

Sl. No.	Districts	Total projected pop. 2000	Total no. of health centres	Total no. of doctors	Avg. coverage per health centres		Avg. coverage per doctor		CDI Value	Rank
					Pop.	Sq. km. area	Pop.	Sq. km. area		
1	2	3	4	5	6	7	8	9	10	11
1.	Angul	1121530	43	114	26082	148.26	9838	55.92	68.87	28
2.	Baleswar	1990431	86	185	23145	44.26	10759	20.57	130.52	6
3.	Bargarh	1331788	61	114	21833	95.69	11682	51.20	79.66	26
4.	Bhadrak	1309562	60	96	21826	41.75	13641	26.09	123.20	8
5.	Bolangir	1325351	60	163	22089	109.58	8131	40.33	87.46	19
6.	Boudh	367505	16	37	22969	193.63	9933	83.73	63.12	30
7.	Cuttack	2303863	81	597	28443	48.54	3859	6.59	234.51	1
8.	Deogarh	270119	12	33	22510	245.00	8185	89.09	64.53	29
9.	Dhenkanal	1054164	48	137	21962	92.75	7695	32.50	97.43	15
10.	Gajapati	512083	30	67	17069	144.17	7643	64.55	83.59	23
11.	Ganjam	3093683	121	523	25568	67.82	5915	15.69	136.68	5
12.	Jagatsinghpur	1198449	46	87	26053	36.26	13775	19.17	138.41	4
13.	Jajpur	1599260	69	112	23178	42.01	14279	25.88	121.08	9
14.	Jharsuguda	502812	22	51	22855	94.59	9859	40.80	85.74	20
15.	Kalahandi	1314008	62	165	21194	127.74	7964	48.00	82.83	24
16.	Kandhamal	637728	56	148	11388	143.23	4309	54.20	120.35	10
17.	Kendrapara	1286579	55	105	23392	48.07	12253	25.18	117.01	11
18.	Kendujhar	1539064	84	196	18322	98.85	7852	42.36	94.54	16
19.	Khurda	1837128	81	231	22681	34.73	7953	12.18	177.88	2
20.	Koraput	1122685	66	159	17010	133.44	7061	55.39	89.01	18
21.	Malkangiri	474395	39	84	12164	148.49	5648	68.94	103.48	13
22.	Mayurbhanj	2188016	115	277	19026	90.59	7899	37.61	97.80	14
23.	Nabarangpur	1001039	49	98	20429	107.98	10215	53.99	80.08	25
24.	Nayagarh	855832	50	103	17117	77.80	8309	37.77	103.83	12
25.	Nuapada	524411	23	61	22800	167.48	8597	63.15	71.13	27
26.	Puri	1479240	65	164	22758	53.52	9820	21.21	124.13	7
27.	Rayagada	812107	50	103	16242	141.46	7885	68.67	84.01	22
28.	Sambalpur	916924	45	402	20376	147.93	2281	16.56	170.80	3
29.	Sonepur	534276	26	62	20549	89.88	8617	37.69	93.93	17
30.	Sundargarh	1803900	82	220	21999	118.44	8200	44.15	84.09	21
Orissa		36255780	1703	4894	21289	91.43	7408	31.82	100.00	
C. V. (in %)		--	--	--	17.98	49.06	32.12	50.41	34.98	

Source: (i) Government of Orissa (2000). **Economic Survey,** 2000-2001, Planning and Coordination Department, Bhubaneswar, ANX-55.

(ii) Government of Orissa, Directorate of Health Services, Bhubaneswar.

This, however, does not mean that health infrastructure in the other backward districts of the highland region is relatively well developed. It is found that there exists a wide gap in the official data and the actual status of development of health infrastructure in the KBK districts and other tribal districts of the region. It has been observed at the time of village survey conducted by the author for the present study and also for other poverty alleviation and

development related studies in different parts of the Orissa at various points of time that the primary health centres and sub-centres in many remote rural areas of the tribal and highland districts during most part of the year run with a skeleton medical staff. Particularly in the health sub-centres including ayurvedic and homeopathic dispensaries, the doctors and pharmacists posted in the village run the health centre like their private clinics and that too without maintaining any regular time table. At the time of village survey conducted for the present study it was revealed from our focus group discussion held with the villagers in different parts of the state that the dispensaries and health sub-centres headed by a doctor and a pharmacist and part-time/temporary attendant often function like primary schools located in the rural remote and interior areas. The doctor and the pharmacist usually stay in the nearby town or the semi-urban type block headquarters and they alternately make their presence felt in the rural centre for an hour or so on every working day of the week. Sometimes both of them remain unauthorisedly absent for weeks together at a stretch. It was further revealed from the people that whenever the doctor in an allopathic, ayurvedic, or homeopathic heath sub-centre/dispensary of a village makes his/her presence felt and examines a patient, he/she usually expects some cash or gift in kind for the services rendered to the patient. It was also found that in many health sub-centres/ dispensaries of the tribal and highland districts of the state, the doctors and paramedical staff hailing from the coastal region hardly prefer to stay there even for a fortnight at a stretch. Whenever they are transferred to such areas they go on extending their leave under one pretext or another. This becomes evidently clearer when someone peruses the occasional reports made in the leading Oriya newspapers such as **The Samaja, Sambad, Dharitri, Prajatantra,** etc relating to the health care system in the KBK region and other tribal districts of Orissa. It is found that in the undivided districts like Koraput, Phulbani, Kalahandi, Sundargarh, Kendujhar and Mayurbhanj malaria is an endemic disease, so also the tuberculosis due to malnutrition and drinking habits of country liquor by the tribals and scheduled castes people. Deaths of many young people in malaria and brain fever in all such districts and vacancies of doctors in the health centres are frequently reported in the local press and media **(Box-9.1)**

Box 9.1: **Health System in Total Disarray in the Tribal Region of Orissa**
On 7th August 2001, the leading Oriya Daily **The Samaja** reported that in the undivided Koraput district of KBK region comprising the present Koraput, Malkangiri, Nabarangpur and Rayagada districts as many as 136 positions of doctors in different grades were lying vacant. Added to this, there were 356 vacancies of staff nurses, laboratory technicians, compounders and other class IV paramedical staff in the health centres including district headquarters hospitals of the region. Similarly, it is reported by the same newspaper on 23rd September 2001 that 59 posts of doctors in Kendujhar district were lying vacant as on date. Also due to poor functioning of the ICDS programme to protect the expectant and nursing mothers as well as the small children, out of 1802 child births as high as 171 infant deaths and seven delivery deaths occurred during the month of August 2001. The daily reports that the ICDS workers as well as the other health workers including the ANMs instead of visiting their field areas keep on sitting at home and they are well protected by their husbands and other close relatives, who happen to be local political leaders of the region.

It is interesting to note that in a backward state like Orissa development disparity has not only taken a regional form at the district level, but also intra-district level disparity among the blocks/Panchayat Samitis of the same district is more conspicuous. In his paper entitling, "Regional Disparity in Orissa: the Diseases and its Diagnosis" in Oriya language, the eminent economist Professor Nilakantha Rath mentions that when he was a non-official member of the Orissa State Planning Board in the early 1990s, had given suggestion to the state government to put emphasis on the development of four basic infrastructure and services such as road, potable water, primary health care and primary education on priority basis in the most backward blocks of different districts to bridge the development gap. According to him, location of a health centre within a radius of 12 km. of human settlement is an ideal norm for Orissa to develop primary health care facilities and make them accessible across space and different segments of population. According to that parameter around 62 per cent of the villages in the state in 1985 had that facility. However, out of 314 blocks in the state, 131 (41.72%) blocks were found deficient in that facility. Interestingly, out of these 131 blocks only 14 were from the coastal region and the rest others were from the backward highland districts of undivided Koraput, Kalahandi, Phulbani, Sambalpur and the present Gajapati district comprising the hilly tract of undivided Ganjam (Rath 1997:2).

Our construction of the CDI on the basis of sensitive health indicators shown in Table 9.2 clearly reflects that even after the completion of the second millennium the status of health infrastructure and services in the backward and tribal districts of the state has changed a little. No doubt under health sector reforms many progressive and people-friendly health care

measures have been adopted and implemented by the state government such as reform of drug procurement and distribution system, **Panchabyadhi Chikitsa** for five most commonly occurring diseases such as malaria, leprosy, diarrhoea, acute respiratory infection, and scabies. For these diseases provision has been made by the government to distribute the medicines to patients free of cost. It is revealed from the village survey held for the present study that the system has started generating some positive effects in the remote rural areas, where the Anganbadi workers of ICDS and the ANMs are entrusted with the distribution of such medicines particularly to the leprosy and the tuberculosis patients. However, relating to the distribution of medicines for the other three categories of diseases people complain of corruption and selective distribution to the rural vocal section only. It seems due to social stigma very few people ask for leprosy and TB medicines and since there are very few takers of such drugs at the village level distribution of such medicines does not lead to any corruption.

Nonetheless it is observed that the state has to strengthen health care delivery system particularly to the vulnerable and disadvantageous category of population in the tribal and highland districts of Orissa. As these people are mostly unaware about the diseases and their causes and they seek diagnosis of such diseases through traditional medicine man and healers through black magic and spirit worship, the health status of population particularly the newborns and the mothers often becomes more precarious. The disparity in the availability of health infrastructure and access to health services across space and different segments of population needs to be bridged further by strengthening the public health care delivery system in the rural areas through rigorous monitoring and result oriented incentives to the public health servants posted in difficult localities.

Education

Next to health education is an essential factor to improve the quality of life and to develop the human capital. It is found that despite economic backwardness the development gap of the literacy rate of population in Orissa is not so high when it is compared with the average literacy rate of population at the national level. However, at the inter-district level it is noticed that the backward tribal and highland districts have comparatively lower level literacy achievement of population (Table 9.3)

Table-9.3
District-wise Literacy Rate of Population of Orissa during 1991-2001

Sl. No.	Districts	% of Literacy	
		1991	2001
1	2	3	4
1.	Angul	51.53	69.40
2.	Baleswar	57.64	70.94
3.	Bargarh	47.65	64.13
4.	Bhadrak	60.54	74.64
5.	Bolangir	38.63	54.93
6.	Boudh	40.98	58.43
7.	Cuttack	65.44	76.13
8.	Deogarh	44.45	60.78
9.	Dhenkanal	54.91	70.11
10.	Gajapati	29.37	41.73
11.	Ganjam	46.72	62.94
12.	Jagatsinghpur	65.78	79.61
13.	Jajpur	58.00	72.19
14.	Jharsuguda	52.64	71.47
15.	Kalahandi	31.08	46.20
16.	Kandhamal	37.23	52.95
17.	Kendrapara	63.61	77.33
18.	Kendujhar	44.73	59.75
19.	Khurda	67.72	80.19
20.	Koraput	24.64	36.20
21.	Malkangiri	20.04	31.26
22.	Mayurbhanj	37.88	52.43
23.	Nabarangpur	18.62	34.26
24.	Nayagarh	57.20	71.02
25.	Nuapada	27.52	42.29
26.	Puri	63.30	78.40
27.	Rayagada	26.01	35.61
28.	Sambalpur	51.56	67.01
29.	Sonepur	42.62	64.07
30.	Sundargarh	52.97	65.22
Orissa		49.09	63.61
C. V. (in %)		31.41	24.36

Source: Census of India (1991-2000), Directorate of Census, Orissa, Bhubaneswar.

It is found that in terms of educational infrastructure 11 districts of the state are backward as compared to the state average. These are Sambalpur, Angul, Malkangiri, Nayagarh, Kendujhar, Nuapada, Bargarh, Dhenkanal, Sundargarh, Nabrangpur and Deogarh in the descending order. Interestingly the most developed district in terms of educational infrastructure is Mayurbhanj followed by Jagatsinghpur, Kendrapara, Cuttack, Khurda. Koraput, Jajpur, Baleswar, Puri, Kandhamal, Bolangir, Ganjam Rayagada, Sonepur, Boudh, Jharsuguda, Gajapati and Kalahandi in the descending order. The C.V. value of the composite development index of education infrastructure formed for the purpose reveals that at the inter-

district level the existing disparity is 23.34 per cent. Further, the CDI values of the districts of the state show that some of the highland and tribal districts of the state are equally well developed in their educational infrastructure like the developed coastal districts. So, we cannot say that educational underdevelopment of the backward tribal and highland districts is due to poor educational infrastructure alone (Table 9.4).

It may be observed from Table 9.3 that in between 1991 and 2001 census periods the C.V. value of disparity in the literacy level of 30 districts of Orissa has come down from 31.41 per cent in 1991 to 24.36 per cent in 2001. This is probably due to development of educational infrastructure in the backward tribal and highland districts of the state in recent years. However, as it is likely to take more number of years for the backward and tribal districts to catch up with the educationally developed districts, there is a need to put more emphasis on increase in enrolment of children in primary and middle schools level of tribal and other highland districts of the state. Also, there is a need for increase in female literacy level and eradication of illiteracy among the adult population.

Needless to say, in the tribal districts of the state the quality of teaching and provision of physical infrastructure are observed to be very poor. Mere existence of a primary school in official record neither ensures increase in enrolment of children in 6-14 years age group nor the prevention of large-scale dropouts among the poor children in tribal areas. It is observed from the enrolment scenario of students in the different districts of Orissa that the intra-district level disparity at the primary level is not so high. But this increases at the middle level and shows a remarkable fall at the secondary level school enrolment (Table 9.5). This implies that large-scale dropouts occur at primary and middle school levels enrolment of students mainly in the backward tribal districts of the state. It is observed from Table 9.5 that tribal and high land districts like Gajapati, Kalahandi, Kandhamal, Kendujhar, Koraput, Malkangiri, Mayurbhanj, Nabrangpur, Nayagardh, Nuapada and Rayagada have more problems of dropouts of children at the primary level. Also, the enrolment ratio of children per 1000 population in some of these districts is found to be quite low at the primary level than the state average. Of course, the Khurda district covering the capital city, Bhubaneswar has much lower level of enrolment of children both at primary and middle school levels as compared to the state average, whereas Khurda is found to be educationally most advance districts in Orissa with the highest literacy level of 80.19 per cent in 2001 and 67.72 per cent in 1991 (Table 9.3). This mismatch is

probably due to exclusion of children studying in English medium private schools in Bhubaneswar city. And interestingly as per our observation, they constitute a significantly sizable portion of children enrolled at primary, middle and secondary levels.

Table-9.4
District-wise Development Scenario of Primary Education in Orissa during 1998-99

Sl. No.	Districts	No. of Schools	No. of Teachers	Average Coverage per School		Average Coverage per Teacher		CDI value	Rank
				Student	Sq. km. area	Student	Sq. km. area		
1	2	3	4	5	6	7	8	9	10
1.	Angul	1235	3407	113.36	5.16	41.09	1.87	86.34	29
2.	Baleswar	1815	5384	195.59	2.10	65.94	0.71	123.80	8
3.	Bargarh	1429	4031	123.86	4.08	43.91	1.45	92.91	24
4.	Bhadrak	1239	3061	183.21	2.02	74.16	0.82	118.02	11
5.	Bolangir	1933	4935	92.08	3.40	36.07	1.33	112.40	15
6.	Boudh	591	1522	74.45	5.24	28.91	2.04	107.74	18
7.	Cuttack	2177	5753	119.89	1.81	45.37	0.68	149.03	4
8.	Deogarh	421	990	71.26	6.98	30.30	2.97	97.86	20
9.	Dhenkanal	1115	3117	122.87	3.99	43.95	1.43	93.92	23
10.	Gajapati	937	2091	70.44	4.62	31.56	2.07	108.90	17
11.	Ganjam	2936	9074	132.15	2.79	42.76	0.90	117.62	12
12.	Jagatsinghpur	1179	3024	115.35	1.41	44.97	0.55	176.97	2
13.	Jajpur	1516	4148	181.40	1.91	66.30	0.70	129.90	7
14.	Jharsuguda	611	1628	96.56	3.41	36.24	1.28	111.86	16
15.	Kalahandi	1705	4486	90.32	4.65	34.23	1.77	100.51	19
16.	Kandhamal	1519	3558	60.57	5.28	25.86	2.25	118.61	10
17.	Kendrapara	1430	3678	104.90	1.85	40.78	0.72	150.86	3
18.	Kendujhar	1807	4895	114.55	4.59	42.29	1.70	89.49	26
19.	Khurda	1262	4048	137.08	2.23	42.74	0.69	137.22	5
20.	Koraput	1853	4381	54.51	4.75	23.05	2.01	132.37	6
21.	Malkangiri	898	1962	80.18	6.45	36.70	2.95	88.77	28
22.	Mayurbhanj	2941	7480	90.79	1.32	35.70	0.52	197.58	1
23.	Nabarangpur	1229	2590	86.25	4.31	40.93	2.04	94.68	21
24.	Nayagarh	826	2292	116.22	4.71	41.88	1.70	88.88	27
25.	Nuapada	731	1802	90.29	5.27	36.63	2.14	92.86	25
26.	Puri	1432	4051	128.49	2.43	45.42	0.86	123.52	9
27.	Rayagada	1482	3073	60.73	4.77	29.29	2.30	115.29	13
28.	Sambalpur	1006	2474	90.46	6.62	36.78	2.69	85.65	30
29.	Sonepur	761	1759	91.98	3.07	39.80	1.33	112.65	14
30.	Sundargarh	2068	4754	89.94	4.70	39.12	2.04	94.04	22
Orissa		42104	109448	108.73	3.70	41.83	1.42	100.00	
C. V. (in %)		--	--	33.21	41.50	27.56	46.97	23.34	

Source: Government of Orissa, Directorate of Elementary Education, Bhubaneswar.

Whatever the case may be, it needs to be recognized that the backward tribal districts require special attention to bridge the educational gap between different segments of state population. There is a felt need to improve the quality of education infrastructure in the backward districts (Box 9.2). There is also a felt need to develop separate educational materials for the tribal

children in order to retain their interests in learning. Where it is possible to design new scripts for the common dialect spoken by the tribals, instruction to the tribal children at the primary level may be imparted in their own mother tongue (Box 9.3).

Table-9.5

District-wise Enrolment Scenario of Students in Primary, Middle and Secondary Schools of Orissa during 1998-99

Sl. No.	Districts	Projected population 1998-99	Students enrolled per 1000 population			Average % of literacy (1991)
			Primary	Middle	Secondary	
1	2	3	4	5	6	7
1.	Angul	1103655	126.85	33.52	17.22	51.53
2.	Baleswar	1957721	181.33	38.82	13.28	57.64
3.	Bargarh	1317942	134.30	31.87	12.90	47.65
4.	Bhadrak	1286925	176.39	30.30	13.21	60.54
5.	Bolangir	1314839	135.38	26.62	14.45	38.63
6.	Boudh	361962	121.56	30.39	22.10	40.98
7.	Cuttack	2267072	115.13	25.14	15.44	65.44
8.	Deogarh	266132	112.73	41.33	18.79	44.45
9.	Dhenkanal	1042354	131.43	24.94	13.43	54.91
10.	Gajapati	505708	130.51	11.86	11.86	29.37
11.	Ganjam	3051407	127.15	18.35	10.49	46.72
12.	Jagatsinghpur	1048077	129.76	37.21	18.13	65.78
13.	Jajpur	1575584	174.54	54.58	17.14	58.00
14.	Jharsuguda	496581	118.81	36.25	18.12	52.64
15.	Kalahandi	1293663	119.04	23.96	10.05	31.08
16.	Kandhamal	627568	146.60	27.09	14.34	37.23
17.	Kendrapara	1271348	117.98	32.25	18.09	63.61
18.	Kendujhar	1516615	136.49	26.37	13.19	44.73
19.	Khurda	1799893	96.12	27.22	17.22	67.72
20.	Koraput	1148393	87.95	11.32	7.84	24.64
21.	Malkangiri	468564	153.66	19.21	8.54	20.04
22.	Mayurbhanj	2154301	123.94	20.89	14.39	37.88
23.	Nabarangpur	987949	107.29	15.18	8.10	18.62
24.	Nayagarh	847701	113.25	23.59	18.87	57.20
25.	Nuapada	474177	139.19	27.42	12.65	27.52
26.	Puri	1459920	126.03	26.03	20.55	63.30
27.	Rayagada	801204	112.33	14.98	9.98	26.01
28.	Sambalpur	904934	100.56	37.57	15.47	51.56
29.	Sonepur	481583	145.35	39.45	20.76	42.62
30.	Sundargarh	1778313	104.59	33.74	16.87	52.97
Orissa		35745108	128.07	27.84	14.41	49.09
C. V. (in %)		--	17.45	33.77	26.15	31.41

Source: Government of Orissa, Directorate of Elementary Education, Bhubaneswar.

Box 9.2: **Poor Infrastructure and Poor Teaching in Primary School**

It is observed that in the backward districts like Bolangir, Malkangiri, Mayurbhanj etc, the State Government thinks least about the development of primary education. During village survey for the present study it was observed that the primary school buildings were found in dilapidated condition, although the earlier situation like functioning of the primary schools in open air/ thatched roof kutcha houses in the remote backward villages of Orissa exists no longer. Thanks to MNP now almost cent per cent of the primary school buildings are converted to either pucca or semi pucca structures. However everywhere the quality of construction of such buildings is invariably poor. In many cases roofs are blown up and those are left unrepaired for years together. It becomes difficult for the children to sit inside the rooms during rainy season even in the concrete roof structures due to poor quality of construction. The teachers do not come to school in time and almost every day the schools are found closed almost two hours before the school time, usually after serving the mid-day meal to the children.

In one of the remote tribal villagse Khaisbahali of Bolangir Sadar block it was found at the time of survey that the primary school was closed on a working day in the month of June 2001. The villagers, who are mostly poor and illiterate tribals told that closure of the schools on the working days is a usual phenomenon in that village. They said that the two teachers posted in the school were from Bolangir town and they cared little about the villagers' complaint about their negligence in teaching or unauthorized absence leading to virtual closure of the schools almost 10 to 15 days in a month. Similarly, in Dhumamara, a roadside suburban village of Bolangir the style of functioning of the primary school was reported to be no different from the other village. In the villages of Mayurbhanj, Malkangiri , Sundergarh and Phulbani and also in some of the remote villages of Puri district, the status of primary school buildings, effective teaching hours in the school and its day to day operation are observed to be almost of similar nature.

Box 9.3: **Tribals of Mayurbhanj Demand Teaching and Course Materials in their Own Santhali Script**

It is needless to mention that Mayurbhanj is a predominantly tribal district and **Santhals** are the dominant tribe. In some of the villages the tribals do not understand Oriya, the mainstream language of the state As a result in the primary schools of the district when teaching is imparted to them in Oriya language, the tribal children find it difficult to understand. It is reported by the teachers that because of the communication gap, majority of the tribal children in remote areas do not take any interest in learning. Despite much persuasion they do not like to attend the schools. The similar situation prevails among the **Koyas** of Malkangiri and the **Khonds** of Kandhamal districts.

On 7th August 2001, the leading Oriya daily **The Samaja** reported that a **'Bandh'** was observed in Mayurbhanj district by the tribal students to introduce **'alichiki'** script of **Santhals** at the primary school level. Their demand was to publish primary school books in a **'alichiki'** script and to give appointment to teachers familiar with the tribal script of the region.

Vocational Education

In the previous section, analysis of the state's literacy level of population and the status of development of elementary education shows that despite poverty and economic backwardness Orissa's performance in the front of literacy and educational achievement of population is almost at par with the national level. Although there exists gender-based, ethnic-based, and inter-district level disparity of a higher order in the literacy and educational achievement level of population, the state has been able to bridge the infrastructural gap in education to a considerable extent. Also, the spread of education among the weaker sections of population and in the backward tribal districts of the state is gradually picking up to bridge the disparity gap. Further, to cope with the problem of mounting educated unemployment and to make people self-employed in gainful occupations the state has taken necessary steps for vocationalisation of higher secondary education (Plus-Two level) as suggested in the National Policy of Education, 1986. When the Government of India launched the scheme for vocational education at the higher secondary level in February 1988, Orissa adopted this as a centrally sponsored scheme initially in 1988-89. Subsequently, the scheme was transferred to state plan and now it is running in all the 30 districts of the state. The main objectives of the scheme are : (i) to provide diversification of educational opportunities so as to enhance individual employability ; (ii) to reduce the mismatch between demand for and supply of skilled manpower ; and (iii) to provide an alternative for those pursuing higher education.

At present, the state has 231 higher secondary vocational schools, out of which only 85 schools are in actual functioning stage; 64 schools were functional for some years; and 82 schools have remained purely non-functional since their inception. This shows that the state has failed to utilize the full potential of its created infrastructure relating to spread of vocational education. It is found that in 1998 the number of students enrolled in the vocational schools of Orissa was only 1454, i.e. only 17 students per school. (Kar *et al* 2002). In those schools of the state till 1998-99 academic year, 17 vocational trades were taught to the students. However, since 1999-2000 academic year, trades on crèche and pre-school management, and commercial garment designing and making have been discontinued. Also, since 2001-02 admissions of students to trades like sericulture, insurance, tax assessment, and food preservation and processing have been kept suspended, and a new course on computer application has been introduced.

Very recently, a study conducted by the Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar, in all the thirty districts of the state on Vocationalisation of Higher Secondary Education reveals a number of shortcomings in the functioning of the higher secondary vocational schools in Orissa (Kar *et al*, *Op. cit*). The main findings relating to the shortcomings of the vocational schols are:

(i) The majority do not have well-equipped workshop, poor laboratory infrastructure, and instruments for practical training;
(ii) Lack of awareness, motivation and interest among the students and parents for vocational education;
(iii) Irregularity in payment of salary to the teaching and non-teaching staff;
(iv) No scope for higher study;
(v) Lack of provision for apprentice training facilities to the vocational passouts;
(vi) Delay in conducting the examinations and declaration of results; and
(vii) Non-payment of any kind of financial benefit to the principals in-charge, who are looking after the day-to day functioning of the schools in addition to their normal duties in the schools/colleges where the higher secondary vocational schools are functioning.

Owing to the above shortcomings, the scheme has failed to become popular and successful in the state. In order to run the programme effectively, the component of curriculum related practical skill training either in laboratories/workshops or on-the-job training in firms/enterprises should be strengthened to equip the students better for practical works. Efforts should also be made to popularize the programme through awareness generation campaigns through the various medias, parents-teachers meetings, folk plays, etc. To this effect, there should be policy formulations for giving preference to the vocational passouts in receiving financial assistance by the funding agencies like DRDA and DIC for pursuing self-employment vocations. It would largely provide motivations to the students and their parents, and in the locality towards greater number of admission/enrolment in the vocational schools. In order to provide employment to the passouts, the linkage between education and employment sectors should be strengthened. Further, industrial/business establishments, government departments and also private professionals should be motivated to participate in the education and training programmes of vocational schools. It should also be made mandatory to provide

apprenticeship training of one year to every student passing out of the vocational trade, as it would establish the credibility of the skill acquired for getting a job easily. The examination of the vocational trades should be conducted timely and regularly. Finally, regularity has to be maintained in the payment of salary to the teaching and non-teaching staff.

Water Supply and Sanitation

According to the data furnished by the **Economic Survey 2000-2001** of the Government of Orissa 99.6 percent of the identified habitations in the state have been fully covered under drinking water supply programme by the end of March 2000. The report also mentions that of the remaining 1909 identified habitations, 1461 of them are partially covered during 2000-01 financial years, and 448 are yet to be covered. This is, in fact, a commendable achievement for a backward and poor state like Orissa and there is little need to focus on the disparity of potable water infrastructure provision and its supply at the inter-district level.

However, as shown earlier in the cases of health and education infrastructures mere creation of facility may not ensure quality and accessibility across space and people. It is a known fact that the droughts and water scarcity problem frequently affect the hilly and tribal districts of the state during summer due to low deposit of ground water in the region. Similarly, in the coastal districts due to salinity problem it is difficult to get sweet potable water from the tube well/hand pumps unless the boring is made up to a level of 400 to 600 feet deep into the ground. Apart from that in most of the villages of western Orissa including the tribal villages, un-touchability is practised in various forms against the scheduled castes people or the ex-untouchables. Their settlements are usually located at the outskirt of the village and they are usually deprived of minimum basic services unlike the caste Hindus and tribals. So, in such situations there is not only problem of quality but also the question of accessibility among different segments of population at the village level (Box 9.4).

Box 9.4: **Supply Scarcity of Potable Water and Problem of Accessibility for the Depressed and Downtrodden**

In the year 1999-2000, the western part of Orissa was affected by a severe drought. This led to virtual drying up of wells and ponds in the region. In such a situation the only source of water for the villagers was tube wells and hand pumps set up by the government. But as the demand of water for various uses including bath increased this led to fall in the water table and in many cases the tube wells/hand pumps went non-operational. In this scenario, the depressed and downtrodden section of the village population virtually became the worst hit. A war like situation developed in many villages of the region to collect drinking water.

At the time of our village survey in Bolangir district it was noticed that the ex-untouchables of the village were not allowed to take water from the tube well located in the high caste settlement area of the village. Even in some cases they are not allowed to bathe in the same river ghats/ponds used by the upper caste people.

Haradatal is a multi-caste village located at a distance of 20 km from Bolangir town on the Bolangir - Patnagarh road. This is a roadside village having more than 60 scheduled caste households particularly the **Gandas**, who are considered untouchables by the caste Hindus. These scheduled caste households are found located in two different end points of the main village. In one end point only 15 households reside in close vicinity of the caste Hindu households. There is a tube well located at the end point of caste Hindu settlements with a view to enabling the scheduled caste households to avail drinking water from the tube well. However, as the existing custom of the village forbids the scheduled castes to take water from the same tube well used by the upper castes, they are deprived of potable water of the tube well. In stead, they are forced to draw water from an abandoned open well dug up in their **Mohalla**. The water of that well is reported to be unfit for drinking and as there are only 15 households residing at present, the government authority have not bothered to provide another tube well in this scheduled caste settlement area, because this violates the stipulated norm. Like Haradatal there are several settlements and hamlets in western part of Orissa and also in the tribal districts of undivided Koraput, Mayurbhanj, Sundargarh, Kendujhar, Kalahandi, Phulbani etc., where the ex-untouchables are virtually deprived of safe drinking water, although the government record shows provision of safe drinking water facilities in more than 99 per cent of identified inhabitations in Orissa.

It is found that in many places tube wells are dug up without any proper plan and survey of ground water quality. The decisions are taken on ad hoc basis to achieve the target. As a result some of the tube wells just after their openings remain unused because of poor quality of the water (Box 9.5). Also, in some cases it has been observed that the tube well goes out of order and the wells are left non-repaired for months together. It is reported in the **Economic Survey, 2000-2001** of Orissa that as on 01.04.2000 there were only 9,274 (5.07%) defunct tube wells out of 1,82,828 tube wells installed in the different habitations of the state. However, it is observed at the time of village survey done in 30 villages of six different districts of the state that out of every five to six tube wells provided in a village having 100 to 150 households, almost one to two are either defunct or left in unused condition due to poor quality of the water.

Notwithstanding hasty decisions and without considering of the people's view at the village level, it is a fact to recognize that the state government has been able to make a remarkable progress in providing infrastructure for the supply of safe drinking water to the people in all

parts of the state in recent years. However, it is felt that given the level of investment and the number of tube wells dug up in the different habitations of the state, had there been a thoughtful and careful planned investment of the scarce resources, the achievement could have been much better. Secondly it is found that after the creation of infrastructure, like tube well at the village level they assume that their responsibility is over. They think least about the maintenance aspect of the infrastructure. Neither they impart training to the community to take care of modern infrastructure created in the village, nor does the concerned department take prompt action in attending to public grievances due to failure of the service system. Precisely, this sort of apathetic behaviour of the state's public health engineering department has caused sub-optimal utilization of the assets and wastage of scarce resources, which are supposed to generate uncountable utilities for the underprivileged sections. It is also observed that in some cases at the time of installation of the tube wells in caste sensitive localities the interest of the weaker sections is ignored under the pressure of the high castes. As a result, they remain deprived of minimum basic amenities and services provided by the state.

Like water, sanitation issue has now become more important as the nation in particular and the earth in general is surrounded with the problem of massive environmental pollution and ecological degradation due to rising pollution and wide change in style of living of man. The *sui generis* capacity of the nature to purify its resource base and protect its ecosystem is now almost lost. Day by day our precious water resources are getting polluted and becoming a cause of increasing disease burden. Realizing this the country has put vigorous emphasis on sanitation in both rural and urban areas to prevent pollution of land, air and water. However as discussed earlier the country as well as the state has miles to go to develop the sanitation system both in rural and urban areas. Because of high pressure of population on land and ruin of village industries, poverty has become a widespread phenomenon and distress migration of the rural poor to the urban areas for a livelihood in the growing informal sector economy has generated slums and squatters in the urban areas. In a poor state like Orissa the slum and squatter population constitute more than 40 per cent of the total urban population of the state. This has put pressure on the urban local bodies to make adequate provision for sanitation to reduce disease burden on cities and towns. Similarly, increase in population in the densely populated rural regions of the state has become a cause of concern in the sanitation front. Owing to non-availability of vacant land nearer to the village ponds, streams, riverbeds, etc.

people defecate and urinate in a limited space, thereby spreading filth, dirt and human excreta everywhere contaminating the water bodies of the village.

In this scenario, no doubt development of a proper sanitation system, drainage and sewerage for proper treatment of domestic and industrial wastes before releasing them to the water bodies has become a necessity for both rural and urban areas. However, it is observed that in this sector thoughtless planning and populist policy measures have failed to generate expected result. In a state like Orissa this has led to sheer wastage of scarce resources without generating any visible benefit for the people for whom the programme is intended. In many parts of Orissa rural sanitation programme has become a total failure because of thoughtless planning and wrong perception of the people's needs. It is observed that in the name of improving the living of the poor in backward tribal areas and highland districts of the state under basic minimum services programme, the State Government with assistance of the UNICEF and Ministry of Rural Development has been promoting individual sanitary latrines for the households in the villages. However, it is found that in sparsely populated tribal and hilly regions latrine is not at all a basic necessity of the rural poor. First of all due to their habit of open air defecation, people feel suffocated in using a latrine at home and fail to keep it clean and disinfected. Also, they do not possess adequate utensils to store water for the use of latrines. As a result, wherever latrine is provided as part of IAY scheme or as part of rural sanitation improvement scheme in the tribal and highland region, such facility is left unutilized by the people. Instead, where it is most needed particularly in the densely populated coastal villages, the poorest of the poor and under privileged sections fail to avail such services in larger numbers due to resource scarce position of the State Government (Box 9.5). Also, where such facility is provided to people in some of the coastal villages due to lack of adequate awareness generation measures to keep the latrine clean and hygienic, it has become more a social nuisance. Similar situation prevails in the slum pockets and squatters of urban areas where community latrines are provided for the poor without developing the associated infrastructures, their regular maintenance provisions and services.

Box 9.5: **Necessity and Uselessness of Sanitary Latrines across Space**

At the time of village survey in different parts of Orissa it has been observed that the sanitary latrines provided to the poor under the rural sanitation scheme or IAY scheme are left abandoned and unused in almost cent percent of the beneficiary households of highland and tribal districts. In Gandapadar village of Sadar block of Kandhamal district and Langalkanta village of Baripada block of Mayurbhanj district many households of the villages are covered under rural sanitation scheme and they have been provided with assistance to construct water sealed latrines in their household premises. However, it is reported by the people that nobody makes use of them. They feel suffocated to use a latrine while there is enough open space for defecation and urination in a clean natural surrounding. At the time of concurrent evaluation of IAY in Orissa it was also observed that people in the highland districts do not like installation of water sealed latrines, instead they prefer to expand the plinth area to construct an additional room within the same amount. So, in order to get full sanctioned amount of the IAY house, they just install a temporary latrine seat in their premises of the house and after the release of final installment they remove the latrine seat (Meher 2000).

In contrast to this, it is observed in the coastal villages like Kalikanuapada, Kanehi Bidyadharpur, Rebatiraman, Malatipatapur, etc of Puri sadar block of Puri district that latrine is a basic necessity of people in these villages. Due to lack of open space it is observed that people in those villages defecate and urinate on the roads. Particularly, the women folk of the village face a lot of problems to ease themselves during day and evening times. Unfortunately, in those villages the poor households are left uncovered under rural sanitation programme, because Puri is considered an advance district and the district administration lacks adequate resources to cover them under the basic services programme on its own.

Housing

As discussed earlier due to mass poverty and vulnerability of the coastal districts to frequent natural calamities like floods and cyclone, flood and cyclone resistance houses are a necessity for the poor. Needless to say, due to high incidence of poverty people in all parts of the state live in thatched-roof *kutcha* houses or make shift temporary structures by using raw earth, branches, twigs and leaves of trees in the tribal areas. In this scenario the houses built under the IAY scheme of the government have been undoubtedly able to meet the housing requirement of the poor to a considerable extent. It is found that by the end of 1999-2000 financial years, 342959 IAY houses have been built in by the state (Government of Orissa 2001:8/8). Even, after the super cyclone Orissa has been given special grants by the Centre to cover the victims under IAY housing scheme in large numbers. During 2000-01 the Centre has sanctioned to the state for construction of 1.73 lakh units of Indira Awaas in the cyclone affected districts of Orissa by releasing a grant of Rs190.37 crore (*Ibid*:8/8). However, it is observed that as the general living standard of the people in the state as such is very low and the borderline of distinction between quite a few APL households and the marginally poor households covered under the BPL is not so wide, whenever any benefit is provided to the

poor under the poverty alleviation scheme of the government that is usually grabbed by the privileged vocal households of the village irrespective of their degree of destitution and extent of deprivation. It is observed at the time of village survey that the extent of manipulation done by the dominant not-so-poor group to get IAY house benefit by getting their names recommended in the Gram Sabha or manipulating entry of names at the time of finalization of the IAY beneficiary list at the block/Panchayat Samiti level shall not be less than 20 per cent in majority of the cases. As a result, the poorest of the poor are left to reside in the same miserable type of shelter and the very purpose of IAY housing has been defeated.

Welfare Programmes

Apart from making provisions for the development of social infrastructures and services, many beneficiary oriented welfare programmes are run by the government as part of social sector development plan. The state's success in providing beneficiary oriented welfare programmes although cannot be marked as commendable, the achievement in terms of numbers cannot be belittled, however. It is felt that in the absence of all such welfare schemes the socio-economic conditions of people in Orissa would have worsened, further. For example, though health services in the remote rural areas of the state are observed to be poor, the health workers under ICDS programme notwithstanding their several shortcomings and pitfalls have been able to provide benefits to the mothers and children in the age group of 0-6 years in fairly large numbers under a package of health care services covering supplementary nutrition, immunization, pre-school education, health check-up, referral services and health education. It is found from our survey of 30 different types of villages in the six districts of different geographic regions of Orissa that more than 60 per cent of the villagers are satisfied with the emergency health services rendered by these workers. It is also found that the poor are quite happy with the supply of subsidized rice under the PDS (Public distribution system), provision of pension to the old, disabled and widow of BPL families, monetary assistance to poor women under maternity benefit scheme for the delivery of the first two children, assistance to the poor household in the case of untimely death of the principal bread winner before the age of 60 and the like.

However, as the resources released under the welfare schemes of the Government are limited for a poverty stricken state like Orissa and in a low income economy as everybody is interested to grab the benefits rendered by the state, this has led to lots of manipulation to

favour the dominant and privileged sections of rural society. From our survey of villages it is revealed that around 20 per cent of the genuinely poor households are left unenumerated at the time of BPL survey and in their place the so-called dominant rural non-poor families have somehow managed to get their names entered into the BPL list prepared by the Government. As a result, while the members of these households manage to avail of all the benefits provided under the anti-poverty programmes by virtue of their close socio-political networks at the village level, the poorest of the poor households cry in wilderness. It has been observed that some of the relatively well off old persons or widows and disabled persons in almost all the surveyed villages are covered under pension benefit scheme of either the Central or State Government. It is because of them that the destitute of the village are deprived of welfare benefits. These people complain that although their names have been recommended for the pension benefit scheme several times by the Gram Sabha probably due to non-inclusion of their names under the BPL list or for some other reasons like lack of fund they are yet be covered under such scheme. It is found that during 1999-2000,3,30,872 beneficiaries in Orissa were covered under pension benefit scheme of the Central Government and 5,29,109 beneficiaries under the State Government scheme. Thus, altogether 8,59,981 persons in the state were provided with pension benefits scheme by the state during 1999-2000. It may be noted that according to 1992 BPL survey of the Panchayati Raj Department of Government of Orissa, the state had 41.10 lakh (79.10%) BPL families. Out of them 29.20 lakh (56.19 %) were categorized as destitute (26.02%) and ultra poor or extremely poor (30.17%) having their respective annual household income upto Rs.4000 and between Rs.4001-6000 in a ceiling limit of Rs.11,000 household annual income worked out for the BPL line during Seventh Five Year Plan. On this basis when we work out the percentage of people covered under the pension benefit scheme of the government during 1999-2000, this is found to be only 29.45 if only destitute and extremely poor households are taken as denominator and 20.92 when all the poor rural households of 1992 are taken into consideration (Mallik and Meher 1999:54). So, it is needless to say that these pension benefits provided by the state at present are too less and in a resource scarce situation the degree of manipulation by the relatively better privileged and dominant group is likely to become more intensified.

CONCLUSION

Although analysis of the status of different social infrastructures and services in Orissa introduced by the government for the poor and downtrodden under social sector development programme does not show a pessimistic picture, this does not show that their implementation across space and people is satisfactory. In the health and education sectors the state has to pay more attention for the development of infrastructure and service amenities in the backward tribal and highland districts. The infant mortality rate, morbidity rate and death rate of population in Orissa are much higher and the life expectancy rate is much lower than the other major neighbouring states making almost the same level of investment on the health sector. Similarly, in education sector the state should not remain complacent by developing infrastructure base alone. It is found that the state has much lower level of female literacy and that is more acute in the tribal districts like Koraput, Rayagarda, Malkangiri, Nabrangpur, Kalahandi, Nuapada, Kandhamal, etc. It is further observed that the health workers including doctors and nurses do not remain available in the remote rural areas of backward tribal districts to render health services to the people at the time of emergency needs. The primary education programme also equally gets affected due to lack of effective monitoring and supervision. The teachers due to lack of accommodation do not stay in the village and spend major portion of their time in commuting from their place of residence to the work place. In many cases they get protection from the local political leaders and petty bureaucrats as they often serve as vote banks for them. As a result, the villagers feel helpless and due to mass illiteracy and ignorance the parents also do not realize the importance of primary education to build the future of their children. In this scenario, there is a need to keep the health and education sectors free from the political control and interference of unscrupulous politicians at the local level.

Apart from health and education, the other welfare schemes and beneficiary oriented programmes implemented in the state should pay more attention on their monitoring aspects to protect the interest of the poor and weaker sections. The authority should be vigilant of errand behaviour of the petty officials and their role in transfer of the welfare benefits to the non-poor sections of rural society at the cost of the poor and hapless. It is an undeniable fact that in a resource scarce low-income society everybody is interested to grab the social welfare services

rendered by the state for enrichment of the self. But this should not happen at the cost of mass deprivation of the poor and hapless.

The state has of course, registered remarkable progress in the development of both social and economic infrastructures in the post independence era. However, thoughtless planning, *ad hoc* policy measures and populism in many cases have failed to deliver the intended result to the actual target group. Also, in the case of development of the infrastructure, focus on target achievement in terms of quantity has affected the quality and as more emphasis is given on increasing the numbers by going for locational spread and little attention is paid on the maintenance of the existing infrastructures. As a result, the quality suffers and in course of time the so-called advance pockets may become the victims of thoughtless development due to lack of proper maintenance of the assets.

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