Chapter-VII

Summary and Conclusion

7.1 Introduction:

Orissa is one of the poorest states of India, with nearly a half (47 percent) of its 37 crore population (as per 2001 Census) living below the poverty line. In terms of the Human Development Index constructed by the Planning Commission (2002), Orissa ranks 11th among 15 major states for which it was constructed. The state's relative rank between 1981 and 2001 remained unchanged.

By now, it is universally recognized that there is a strong correlation between literacy and education on the one hand and socio-economic development of a nation or an area on the other. The significant impact of education on reduction of poverty, improvement in income distribution, health and nutritional status and overall quality of life of the population have been documented, especially in relation to larger entities, such as states and nations. Economists including Nobel laureate Amartya Sen have been continuously focusing on the significance of education in the socio-economic development of countries.

It was felt that examining the validity of the proposition in the context of specific areas and groups of people would be worthwhile. Like other states of India, Orissa has also been giving...
priority to education, especially literacy and primary education, in its development plans. Government of Orissa consider education as an important strategy of human resource development and lay special emphasis on elementary education and intend to cover three major aspects in this context: (a) universal access and enrolment, (b) universal retention of children up to 14 years of age, and (c) substantial improvement in the quality of education to enable all children to achieve essential levels of learning.

Public expenditure on education in Orissa has increased from Rs 43 million in 1960-61 to Rs 19,545 million in 2000-01. However, the level of expenditure on education is relatively low compared to the state's population. For example, at current prices, the state spent Rs 416 per capita on education, while at the national level, the corresponding figure was Rs 620 in 1999-2000. As a proportion of State Domestic Product (SDP), Orissa spends nearly six per cent, which is the national goal.
Table-7.1

Investment on Education in Orissa

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure on Education (Rs in crores)</th>
<th>% of SDP</th>
<th>% of Total Budget</th>
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<tr>
<td></td>
<td>In current prices</td>
<td>in 1993-94 prices</td>
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<td>1990-91</td>
<td>530 9</td>
<td>721 0</td>
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<td>643 9</td>
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<td>1060 8</td>
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<td>1999-2000RE</td>
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<td>6 06</td>
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<tr>
<td>2000-2001BE</td>
<td>1954 5</td>
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RE Revised Estimate, BE Budget Estimate
Ministry of Finance, Government of India, and Analysis of
Budget Expenditure on Education, MHRD, Government of India

Scheduled Tribes constitute about 22% of the population of the state. The tribal population can be found in almost all the areas of the state, but is mostly concentrated in the scheduled areas. The development indicators, especially human development indicators for the scheduled areas remain poor. There is considerable difference between the all India HDI and that for Scheduled Tribes. The difference of about 30 percent put the Scheduled Tribes in a different category in international comparisons. They would be in the low human development category, including Sub-Saharan Africa, as against middle human development status of all India. The STs of Orissa, already a state with low human development in India, would fall at the bottom of the HDIs of Sub-Saharan Africa (Sarkar et al, 2006). Therefore,
the overall development and progress critically depend upon the
development of the tribal areas and the population belonging to
Scheduled Tribes

Over the years, educational development has been given
priority in the programmes of tribal development as education is
considered a potent agent not only for social and psychological
changes, but also in influencing productivity and economic
development. The Annual Report of the ST&SC Development
Department, Government of Orissa for 2006-07 reveals that the
department put special emphasis on the development of education
among the tribals. Government normally gives priority to the
promotion of literacy among STs. It also lays emphasis on
secondary and higher education for the tribal students. Besides
setting up special institutions and residential facilities for tribal
students, scholarships are also given to students to pursue
education in different institutions.

Though education for the ST students has received attention,
no in-depth analysis of the utility and impact of education on the
human development scenario of tribals and tribal areas has been
attempted. For example, different levels of education could have
differential impacts on the life of tribals. Similarly, the same level
of education could have differential impacts on two different tribal
groups living in two different environments.
Some scholars believe that education can play a dysfunctional (negative) role if the socio-economic scenario of the larger society is in egalitarian. Indeed they argue that education actually acts as a hindrance to tribal development.

The present study sought to examine the impact of education on some of the human development indicators in the tribal areas of Orissa. For this purpose, two blocks from the scheduled areas of Orissa were chosen, one from the northern and the other from the southern region, one with relatively higher composite development index and the other with less.

From the study of relevant literature, it was found that many researchers and economists have been able to establish a positive correlation between education, and economic growth and development. Education has been found to be a cornerstone of social development and principal means of improving the welfare of individuals. Education, it has been found, reduces inequality, improves the quality of life and helps increase income levels. The impact of education on a country's development was first captured in human capital theory, having its roots in the neo-classical school of thought. Subsequently, the role of education in economic development was brought out by tracing the correlation between educational measures and indices of development. In this approach, the contribution of education to economic development was measured as the residue unexplained quality after allowing for...
what could be explained by the labour and capital inputs in production

Studies carried out in the twentieth century revealed that education yields substantial private and social return. It was found that primary education yielded much more than higher education and general education gave better return than technical and vocational training. It was also found that returns from educational investment in the less developed countries were more than that in the developed countries. Of course, the rates of return approach based on the neo-classical framework have been critiqued on several counts. The underlying assumption of the rate of return argument is that wages are a function of productivity. However, in the real world, there could be many other factors accounting for wage differentials. There could also be biases arising out of omitted variables like ability, quality of schooling, etc.

In the 1980s, the central role of education in the growth process was highlighted with the emergence of endogenous growth and augmented Solow models. In these theories, the key idea was technology.

In the late 1990s, using a refined panel estimation method, a study for 100 countries was taken up to examine the relation between schooling and GDP growth rate. The findings showed that secondary and higher level schooling of the males aged 25 or more had very favourable impact on the growth of all countries studied.
taken together Strangely, the study did not find female education helping the growth process

In the beginning of the 21st century, empirical studies by Easterly and Pritchett found a weak correlation between education and rate of economic growth. Of course, this weak correlation between education and the rate of economic growth could be attributed to measurement errors and varying influence of other factors in different countries. Economists like Serge Coulumbe, based on their study of OECD countries found a positive and significant relation between literacy and per capita GDP growth rate. However, no casual relationship could be ascertained.

Another study based on the data for OECD countries revealed that one additional year of education raised output per capita by 6%. It was in conformity with the findings at the micro level.

In several studies, a non-linear relationship between women’s education and economic development was traced. Using Solow augmented growth model, it was also found that decrease in the gap between the educational attainment of the males and females causes faster economic development.

Sociologists like McCleland, Durkheim, etc. laid emphasis on the role of education in fostering social values and cohesion.

Barro, who had earlier found that number of years of primary education of males and females had no significant effect on
economic growth, later took up further investigation and observed that it was not the 'quantity' but the 'quality', of schooling which mattered in the case of primary education. Later studies have shown that primary education has greater impact on growth in the developing countries and the effect of higher education is more significant in the developed countries.

Studies have shown that equitable distribution of education in a country brings about faster economic growth and causes the decline of income inequality. Studies by World Bank and others show that primary education for girls is particularly significant in reducing fertility and promoting health and nutrition awareness among people.

7.2 Findings:

The present study sought to examine (i) impact of parents' education on the education of children, (ii) impact of parents' education on family income, (iii) impact of education on family health and hygiene and (iv) impact of education on the general awareness of the family.

Primary data were collected through a questionnaire designed to elicit information on the key issues from 431 households spread in eight Gram Panchayats of two blocks in two tribal-majority districts of Orissa. It is a cross-sectional study at a
particular point of time. The study has thrown up interesting results with respect to all the chosen areas.

7.2.1 Impact on Education

It is generally believed that if parents are educated, they would ensure that their children also receive education. In this context, emphasis is also laid on women's education. It is presumed that children in a family are most likely to be educated if the mother is educated. In the sample households of both the study districts, the impact of education of heads of the households on the education of the rest of the family is found to be significant. The impact is found more significant in Rayagada district than in Mayurbhanj district. Since Rayagada is a relatively backward district with low level of literacy, education of the head of the household is likely to have greater influence on the education of family members. It is probable that the first generation of educated parents would retain some of their enthusiasm for learning and education.

In Mayurbhanj, tribal families having been exposed to education for a longer period might have developed a degree of cynicism towards it. Besides, other avenues of employment being available, the keenness of the parents for the education of their children might have been less.
Education of relatively higher-income group parents is found to have a positive impact on their children's education in Mayurbhanj district. In Rayagada district the picture is different.

With asset ownership, parents' education exerts a favourable influence on children's education. Both in Mayurbhanj as well as in Rayagada districts, positive effect is observed irrespective of the value of assets owned.

It is found that other factors remaining constant, family size does not matter in determining the impact of education of the head of the household on children's education. This is valid in both the districts. In Mayurbhanj, the impact increases as the family size increases, but in Rayagada district no such unidirectional trend in the impact can be traced, though the impact is still the highest for the families with more than 5 members.

If one looks at tribe-wise data, education of parents belonging to Bhumija tribe in Mayurbhanj district is found to affect children's education in a negative way. On the contrary, in case of the Santal tribe, parents' education has a positive impact on the education of children.

A person's occupation is seen to have impact on the education of children. For example, the estimates for farmers are found to be significant in both the districts.
Empirical results reveal that age is not a significant factor so far as the impact of the family head’s education on the education of family members is concerned.

The study reveals that children’s education is promoted much better when both the man and his wife are educated compared to the situation where only the man is educated.

An important finding of the study is that when it comes to the level of education, primary education on the part of parents has the maximum impact on children’s education in the study area. This finding is consistent with the findings of researchers that the private rate of return is the maximum in the case of primary education and when social return is taken into account, it works out still higher.

The impact of parental education on the education of children is found to be well pronounced, positive and significant when the mother has some education. The impact diminishes if females are illiterate irrespective of the educational level of the head of the household.

Though the effectiveness of mother’s education for that of the children is both substantial and significant amongst non-STs of Mayurbhanj district, it is not so in the case of non-STs of Rayagada. While the majority of non-ST households in the Mayurbhanj sample belong to the general castes, Scheduled Castes dominate the non-STs group of Rayagada.
### 7.2.2 Impact on Family Income:

In the present study, the head of the household’s education is found to have less impact on the income of the family, no matter whether it is the relatively more advanced Mayurbhanj district or relatively less advanced Rayagada. For the poorest of the households, the impact of education on family income is almost nil or negative. However, in the higher income brackets, education of the head of the household is found to have significant effect on the family income.

In different income groups, education and family income are observed not to be correlated.

In Mayurbhanj as well as in Rayagada districts, it is found that education has a higher impact on family income, if the family size is larger.

It is further found that in case of Santal tribe, education of the head of the household has a significant positive impact on family income. In Rayagada district, no such tribe is found to be making use of education for improving family income.

If we take occupation into consideration, in farmer households, education of the head of the family favourably affects family income in both the districts, but it is more pronounced in Mayurbhanj district. If the head of the household is relatively young, his education has a greater impact on family income in Mayurbhanj district, but not in Rayagada district.
When both man and his wife are educated, impact on family income is higher in Mayurbhanj district, less in Rayagada district. In Rayagada, education of the wife has greater impact on family income in non-ST households.

The impact of children's education on family income is significant in Mayurbhanj district but it is not so in Rayagada district. On the whole, it is found that by giving education to children, a family can raise its income.

7.2.3 Impact on Health and Hygiene:

While examining whether and how education promotes a greater sense of hygiene and health among people in tribal areas, it is found that education of the head of the household improves it in the family. The improvement is less in Mayurbhanj and more in Rayagada district. It is so because in Rayagada, the general level of hygiene and health is extremely low and education brings about noticeable improvement in these parameters.

It is further revealed that households earning higher income adopt better hygiene and health care practices. Similarly, education of the heads of the households owning assets of higher value helps maintain better hygiene and health care.

The finding is valid for different tribal groups in the two districts except in the case of the Parajas, who seem to be particularly deprived in matters of health and hygiene. It is also
found that education of the wife along with that of the head of the household has a more favourable impact on the health and hygiene of the family, more so, in Rayagada district. The wife’s education plays a more important role in families earning income less than Rs 18,000 per year. In Rayagada district, women’s education plays a greater role in the maintenance of family’s health and hygiene. In smaller families, education of women makes a greater impact on the family hygiene.

Education of the family members has favourable impact on the level of health care, cleanliness and hygiene in the family. The effect is more pronounced in Rayagada than in Mayurbhanj district. In Rayagada, the heads of the households being mostly illiterate, children’s education plays a significant role in this respect. Level of education does not make much difference, what matters is some education.

Children’s education is found to be making a greater impact on the health and hygiene conditions of the Bhumija families of Mayurbhanj and Kandh families of Rayagada. These are also the more settled communities in the respective districts. In Rayagada district, education of the children of daily wage labourers also produce significant effect on the health and hygiene condition of the family.

185
7.2.4 Impact on General Awareness

Education is known to improve the general awareness of a person and his capacity to face challenges in life, and help him contribute to and participate in the social and community life. The present study reveals that education of the head of the household significantly increases the general awareness of the family in Mayurbhanj district, but in Rayagada district it contributes less. It appears that the purpose of education can be defeated if the general environment of the area is not conducive.

It is also found that the level of education does not matter in raising the general awareness of people. In case of higher income households of Mayurbhanj district compared to the ones with lower income households, education of the head of the household is effective in raising the family’s general awareness. When asset ownership is taken into consideration, higher asset holding makes a difference in Mayurbhanj district, but not in Rayagada.

The size of the family matters for creating general awareness in Mayurbhanj district, but not in Rayagada. In case of Santals of Mayurbhanj and Parajas of Rayagada, education of the head of the household bears significance for the general awareness of the family, but not in case of other communities.

In case of the peasant families of Mayurbhanj, education on the part of the head of the household proves effective in raising the general awareness of their families. This is not true of
households with other occupations. In Rayagada district, the impact is significant in case of daily wage labourers.

The study reveals that irrespective of age, education appears to favourably affect general awareness of the family if the society is relatively progressive. Impact of education of the head of the household as well as of his spouse on the general awareness of the family is found to be significant for the sample households of both the districts. However, inclusion of spouse's education does not make that kind of difference in Mayurbhanj district as in Rayagada district.

A comparative study of different tribal groups in the area in question shows that the impact of women's education on the family's awareness is greater among Santals. Children's education produces greater impact for general awareness in the families in Mayurbhanj district than in Rayagada district. Though level of education does not make that much of difference, the estimate for Rayagada shows that primary education of children does matter for the family's social involvement. Paradoxical as it may appear, children with higher level of education are not effective in promoting the family's awareness. The extent of the impact of children's education on family awareness is more significant for relatively higher asset-owning families. Children's education is found to make a greater difference in case of Santals of Mayurbhanj and Kandhs of Rayagada. In the non-ST households of
the study area, children's education also has significant impact on
the general awareness of the families. In general, it can be said
that irrespective of caste and tribe, children’s education is
important for raising the family’s awareness.

7.2.5 Overall Well-being Index:

The heads of the households in Mayurbhanj district have an
average schooling of 5 years compared to 16 years of their
counterparts in Rayagada district. As the data reveal, the average
overall index of the Mayurbhanj district sample of 0.5 is more than
one and half times that of Rayagada district sample. This is
consistent with the level of development in the respective districts.

Life expectancy in Mayurbhanj district is probably higher
than that in Rayagada district as evident from their respective
average age of 44.3 years and 36.3 years for the heads of the
sample households. The average health and hygiene index is also
found to be higher in Mayurbhanj than in Rayagada. The average
general awareness index of Rayagada is found to be lower than
that of Mayurbhanj.

The hypotheses outlined in the study were tested in 431
households spread over two blocks in two tribal dominated districts
of Orissa, which are separated by a distance of more than 500
kms. The households were carefully chosen to represent different
tribes, income groups, age groups, family sizes, occupations and
the level of education. On obtaining the responses of the sample households, the hypotheses were found to be valid.

One can conclude by saying that the findings of this micro-level study in the tribal areas of Orissa are more or less consistent with observations made and inferences drawn at both national and international levels. Education, especially primary education, does make a difference to quality of life. It is true that the quality of primary education in Orissa leaves much to be desired. Yet primary education plays an important role in the lives of poor people. If quality of education improves, it is bound to have significantly positive impact on the lives of people in the lower rungs of the society, especially the tribals.