CHAPTER 8

CONCLUSIONS AND POLICY IMPLICATIONS

The purpose of this chapter is to review the findings related to the role of education in economic development of the state of Himachal Pradesh which has been analysed in the previous chapters. The relationship between education and economic development has been analysed at different disaggregated units, like the state and district levels. Education is an essential component of society to be manifested in several observable behaviours, developed through training in different fields of life for better living in the society. In this sense, education is the means, and an index of development, as has been seen in the present study. In short, all the conscious and deliberate attempts made, to provide experiences to people for individual and community betterment in an organized way can be called education. The present study has been with such a broad perspective of education. Accordingly, the data collected include a variety of factual and impressionistic information obtained from several sources. Data analysis reveals several points with reference to the operations of education and economic development in the state. The same are discussed under the quantitative and qualitative indicators of education. The conclusions drawn from the study, undertaken within the given constraints, are presented here in order to bring out certain relevant policy implication.

8.1 Conclusions

The analysis started with a premise that public expenditure on education play crucial role in determining the relationship between education and economic development with the help of secondary data. Public expenditure on education by the Department of
Education and by All Departments and for different levels of education has been worked out at current prices and also at constant prices using suitable deflators. Comparable figures of per capita net domestic product at constant prices for the state have been calculated on the basis of the figures published by the Government of Himachal Pradesh, Net State Domestic Product, new series, 1993-94 by Directorate of Economics and Statistics, Shimla. In order to have a clear picture of the development of education, besides analysing a number of variables indicative of educational development, composite indices of quantitative, qualitative and over-all educational development have been worked out on the basis of first principal component. The relationship between the relevant variables have been examined not only by working out the coefficients of correlation and testing their significance but also by means of the Granger Test of Causality in order to have a clear idea of the direction of causation for the state as a whole. Analysis of educational development and its relationship with economic development have been carried out also at the district level for the state have been analysed with the help of usually accepted statistical measures of Variability like Standard Deviation, Coefficient of Variation and District Relatives, the extent of regional disparities and the manner of changes in it over time. The study examined the following Hypotheses:

1. There is a positive relationship between the levels of public expenditure on education and economic development.

2. There exists a significant and positive relationship between education and economic development.

8.1.1. Growth of Public Expenditure on Education in Himachal Pradesh

From the foregoing discussion, it can be concluded that the public good nature of education warrants that the state should play a more active role in the financing of education. Further, educational
growth pattern in any state crucially depends on the volume of the funds available with the government for educational sector and the distribution of the same across different sub sectors of education. Analysis in the preceding chapters clearly indicates that some impressive achievements have been made in education in the state of Himachal Pradesh during the period of study. We notice, that the government of Himachal Pradesh has given substantial support for the advancement of education by increasing the pace of public expenditure on education. At current prices, we get an impressive picture, while in real terms it is some what less so. In other words, the expenditure is growing at a faster rate in the case of current prices than at constant prices. The same is the case with per capita expenditure. In real terms the growth is much lower. However, public expenditure on education as a percentage of NSDP in the state of Himachal Pradesh has achieved the goal of 6 per cent as recommended by the Education Commission (1966). Further, as visualized by Jallade (1973), this percentage seems to be on the increase with the ongoing development of the economy. The expenditure on education per student enrolled has gone up, in real terms. From the analysis it is obvious that elementary level, the most worthy contender has received the major share compared to the other levels of education. Allocation to technical education forms only a small proportion of the total expenditure.

Most importantly, on every count Himachal shows up much better than its neighbouring states highlighting the way it is prioritizing education. Many argue that Himachal Pradesh is able to do this because of generous subsidies from the central government. It is true that a sizeable proportion of the total revenue of the state comes from these subsidies but in the final analysis spending priorities are determined by the state government.

As regards public expenditure on education in Himachal Pradesh is concerned, the pattern of educational expenditure in Himachal Pradesh has been similar to those followed in many states
and at all India level. We find heavy reliance on public especially
government funds, accompanied with adhoc criterion of financing.

The share of elementary education in NSDP remained
relatively higher than secondary and higher levels of education over
the period. The per capita expenditure on education and the
expenditure on education per student enrolled has gone up, in real
terms. From the analysis it is obvious that public expenditure on
education as a percentage of NSDP in the state of Himachal Pradesh
has achieved the goal of 6 percent by the Education Commission
(1966).

8.1.2 Educational Development in Himachal Pradesh

The foregoing detailed analysis of educational development in
Himachal Pradesh clearly attributes the expansion and popularisation
of the education system in its present form in the state mainly to the
good governance and the positive power of political will sustained
over a long period. It is clear from the present analysis that some
impressive achievements have been made in educational
development in the state of Himachal Pradesh during the period of
study, especially in literacy rates, enrolment, number of educational
institutions, etc.

The analysis further reveals that the inter-state, and inter-
district variations in educational development in the state of
Himachal Pradesh. From the point of view of literacy, Himachal
Pradesh is far ahead of India as a whole and many other states of
India. It is evident from the analysis the overall female literacy in
Himachal Pradesh and in India is lower than that of male literacy.

There is evidence of considerable growth of educational
institutions since 1971-72. Among the number of institutions,
schools form a large number. Analysis of schools by type of
management shows that while majority of schools are under
government sector, there has been some growth of the private sector
too. Regarding enrolment also, growth seems to have taken place since 1971-72. As regards higher education the number of universities has gone up from 1 in 1971-1972 to 4 in 2004-2005. The number of colleges has also gone up. Regarding the type of management of the colleges a large share is still with the government sector. In professional education, the number of students is far less than general education. The structure at higher education is more tilted in favour of general education in arts, science and commerce than the professional courses of study.

However, while Himachal Pradesh is well ahead of India in educational development in terms of literacy, this development is neither equally pronounced between the two sexes, nor is it regionally balanced or spread out also among the less privileged groups like SCs and STs. Regarding education among the weaker sections of the society namely, SCs and STs, considerable progress has taken place. However, we can notice disparities among male and female and between SCs and STs and between different districts in the state. In the matter of girls education, there has been considerable progress in the state. The gap of disparities among boys and girls enrolment in schools and all institutions has been steadily diminishing over the years.

Statistics in this regard indicate that Himachal Pradesh has been attacking and closing the gap between regions and peoples less well served by the education system. Disadvantaged section of the community have shown a remarkable rise in literacy rates. Achievements in the difficult tribal areas has been found to be fairly respectable. Access to school, both primary and specially secondary is a serious problem in Himachal Pradesh. The rugged terrain and the remote scattered settlement pattern only add to its problem. There are larger inter-district higher variations in terms of literacy rates, Chamba has lower literacy rate than that of other districts of the state. At the same time as male literacy rates are peaking, the male-female differential is also narrowing down.
The analysis here based on nine variables indicative of quantitative development of education and seven of qualitative development has covered the period 1971-72 to 2004-05. It has thrown up sufficient evidence to prove that the period has not been one of continuous educational development of the state, if we consider the qualitative aspect or take on overall view. On the other hand, with regard to the qualitative aspect, the picture is slightly different. There is evidence of more or less continuous improvements in percentage of number of institutions in total number of institutions, enrolment ratio, etc. If we consider over-all development in terms of both the quantitative and qualitative aspects taken together, there are indications of decline, with continuous year-to-year declines. It has of course, to be remembered that the analysis is here limited by the fact that it takes into account only these 16 variables considered and the composite index is constructed on the basis of the first principal component based on time series data for these variables.

Some impressive achievements have been made in educational development, especially in literacy rates, number of students enrolled, number of educational institutions, etc., in the state of Himachal Pradesh at all levels of education through the period. At the same time disparities are also found across different district of the state with regard to the above-mentioned educational indicators.

As regards educational development in Himachal Pradesh is concerned, the period gives a mixed picture. There has been an increase in the enrolment ratios and number of educational institutions in the state at all levels of education throughout the period.

From the point of view of literacy at the time of independence with only 7.98 per cent of literacy rate, Himachal Pradesh had the lowest literacy level in India. But the state has made a significant progress in literacy in the last few decades and improved its ranking from ninth in 1971 to third in 2001 among 17 major states. The
literacy rates of the districts of Himachal Pradesh are higher than the literacy rates of India as a whole except the district of Chamba.

The net result of all this is the noticeable improvement in the composite index, indicative of the quantity of education.

If we take all the variables indicative of both quantitative and qualitative together and work out a summary picture in terms of an over-all composite index of educational development, it appears that Himachal Pradesh has experienced a slight decline in terms of educational development over the period. There are indications also of variations in the level of development of education between the males and females and between the Scheduled Castes and Scheduled Tribes and the rest of population. Education at the higher level has undergone, noticeable expansion particularly in the private sector, though there is a tilt in favour of general education at this level.

8.1.3 Inter-District Analysis of Education and Economic Development in Himachal Pradesh

The present study primarily aims at making a preliminary investigation into the relationship between education and economic development at the district level in the state of Himachal Pradesh with the help of principle component analysis, and correlation coefficients at two points of time 1976-77 and 1983-84, termed sub-period one and 1998-99 and 2004-05, termed sub-period two.

Comparable time-series of variables pertaining to educational development and per capita NSDP at the district level do not exist in a published form for the period considered in the study. The analysis in this study had to be confined mostly to chosen point of time. There are indications of considerable educational development in the less economically developed districts and vice-versa.

To sum up, both the Tables 6.7 and 6.8 show that there is no big change in the relative positions of the districts in terms of overall educational development at four points of time. It essentially states that the districts of tribal belt have lagged in their educational
standards despite the government's efforts at the development of education in the backward areas of the state.

The study of variables related to educational development gives no clear indications of regional convergence. An attempt to work out the educational distance of each district from Himachal Pradesh and the changes in such distances also reveals no tendencies towards inter-district convergence in educational development between the two sub-periods under study. A comparison between educational development in terms of composite index of educational development and economic development as shown by per capita NSDP suggests that there does not exist a positive and significant relationship between education and economic development in the districts of Himachal Pradesh.

Himachal Pradesh is often quoted as a clear example of a state where educational development has preceded economic development. So, a positive and significant relationship between education and economic development does exist in the state of Himachal Pradesh, lending support to the hypothesis laid out in an earlier section (8.1).

8.1.4 Relationship between Education and Economic Development in Himachal Pradesh

The inter-temporal comparison here between economic development in terms of per capita NSDP and educational development of Himachal Pradesh has revealed a number of important facts.

One unmistakeable conclusion from the present study is that in Himachal Pradesh, economy grew rapidly, educational development came before and simultaneous with rapid economic growth, generating a virtuous cycle of growth and social development.

It is apparent that during the period considered here, overall and quantitative educational development and economic development have gone hand in hand in the state, with the former exceeding the latter as is clear from their respective growth rates. This also gets
reflected if we consider the quantitative aspect of educational development in terms of enrolment ratios and number of institutions per lakh of population. This is possibly due to increased demand for education in the state which led to an increase in quantitative educational variables. On the other hand, the results of the present study reveals that economic development in the state, is not accompanied by a corresponding qualitative development of education and this has been reflected by the values and signs of the concerned correlation coefficients. The next major finding of this study is that income causes per capita expenditure on education, which is substantiated by the positive and significant coefficients of correlation of per capita NSDP and with per capita expenditure on education.

Finally, it can be summed up from the results of Granger Causality Tests that Overall Quantitative Educational Index is not just strongly correlated with economic development, but it has a strong causal impact on growth as well. It is apparent from the causal impact on growth from both the quantitative index and qualitative index of educational development.

According to the results of the Granger Causality Test, while educational development indices continue to show a causal impact on economic growth, it is not the case with the variables related to public expenditure on education.

The high level of educational development in Himachal Pradesh is often attributed to the relatively higher value of public expenditure on education as a percentage of NSDP in the state. The position seems to remain as over time as the per capita expenditure on education at constant prices seems to experience an annual rate of growth of per cent during the period rising from 6.48 per cent in 1980-81 to 9.16 per cent in 2004-05 of NSDP. Our analysis further reveals that an increase in per capita NSDP causes an increase in per capita public expenditure on education in the case of Himachal Pradesh. Thus economic development in terms of per capita net domestic product seems to lead to an even further increase in the per
capita expenditure on education in Himachal Pradesh. Since variables indicative of the quantity of education are positively and significantly related to per capita expenditure on education, with economic development the quality of education improved tremendously during the period.

8.2 Policy Implications

As already noted during the discussion in Chapter 4 that the pure public and merit good nature of school education justifies government financing of school education. Thus it becomes imperative that the state continues to take a major responsibility of financing education. Himachal Pradesh has shown that reaching the goal of 6 per cent of GSDP is a difficult but not an impossible task, if there is political will.

The relatively better performance of Himachal Pradesh in the educational sector, underlines the importance of government policies for development at the district level. If this policy thrust is enhanced, the resulting high levels of all-round human development could possibly initiate an alternative path of economic development in Himachal Pradesh.

All efforts must be directed towards expanding and strengthening of the educational base and structure. While going for the expansion of different levels and types of education, the social demand and requirements of an economy for a particular level/type of education must be taken into consideration. Otherwise social benefits to a given level/type of education may fall due to the excess supply and the problem of educated unemployment may continue. If this sort of problem can be tackled efficiently, then increased investment in education can be beneficial both at the individual and societal levels.

Basically, there is a need to change the approach to funding education, it has to be recognised that education is a public good, a
merit good, a basic human right and an important instrument of socio-economic equity, besides being an important investment in human development as a whole, with intrinsic value of its own. In this context, there is a basic need to redefine the approach for assessing the need for public spending on education. There is a need to search for methods of mobilization of governmental and non-governmental sources of funds for education. Allocation to education can be increased reallocating resources from other sectors and by raising more resources by the government for the common pool or specifically for the education sector.

While enrolment figures have significantly increased, has the number of teachers increased proportionately? The number of teachers have not kept pace with increase in enrolment, because of which quality of education suffers. This is a pre-requisite for an efficient education system. Again it shows up the urgency of adequate number of teachers in proportion to students enrolled and proper training of teachers. The state is slowly trying to address itself to the task of qualitative improvement. What is needed is a thorough assessment of the ongoing programmes and a follow-up plan of action for improving the internal efficiency of the school system and with respect to teacher education, an elaborated action is needed, both in terms of institutions of teachers training and of regulatory mechanisms for quality improvement.

Abject poverty forces parents to employ children in activities other than studying, which has implications for enrolment and attendance. In such a situation, setting up more schools and increasing the number of teachers alone cannot succeed in making primary education available for all. This needs proper implementation of the present incentive schemes and the introduction of some new policies.

The implementation of the mid-day meal scheme, the cash incentive scheme for attendance, distribution of free textbooks, distribution of free uniforms to girl children and scholarships for SC and ST children are also important for improving enrolment,
attendance and mitigating drop-out rates. Mid-day meals also have other benefits such as the breaking down of caste barriers, inculcation of a sense of community and so on. Proper implementation of these schemes is a must for the poverty-stricken and socially disadvantaged children.

Low levels of literacy in tribal areas adversely affect the possibility of achieving universal elementary education as envisaged in the government educational policy. Female literacy can have a positive impact on children's education in future, and a case can be made for initiating a special drive for female education in Himachal Pradesh.

Himachal Pradesh demonstrates that it is possible for poorer states at an early stage of development to invest in the education of their population. That the poorest economies may not have to wait until they become rich to make that improvement. That is because cost-effective provision of primary education, instead of higher education at higher cost per pupil, is not extremely resource-intensive. It suggests that social development may be necessary but not a sufficient condition of economic growth.

It is equally clear that unless government maintains amount of expenditure, its capacity to sustain quality improvement in the educational system remains sharply limited.