The purpose of this chapter is to review the findings relating to different relationships which have been observed in the last three chapters. The present study investigated the triangular relationship among education, basic needs, and economic development. But each of the previous chapters attempted to study the two-way interaction between any two of the above three variables. Therefore, there is a need to interweave the observations in order to establish the triangular relationship. This effort may also provide an empirical basis of sorts to develop a coherent framework on policy issues. It may also be mentioned that the theoretical assumptions underlying the various relationships require no more elaboration, as they have been dealt in detail in the respective chapters.

One of the most important objectives of development is the welfare of the people which gets reflected in the qualitative and quantitative improvements in the social, cultural and economic spheres of life. These improvements imply the attainment of a decent standard of living, which in more concrete terms requires the achievement of adequate levels of basic needs satisfaction in food and nutrition, water supply and sanitation, education, health, and housing.
Education plays a decisive role in carrying out, sustaining and dispersing the processes of development through its profound impact on socio-economic, cultural and political traditions of a nation. It directly contributes to the economy through its effects on the determinants of economic development, viz. productivity, earnings, job mobility, entrepreneurial skills, and technological innovations. Similarly, economic development also governs certain basic determinants of education, viz. educational infrastructure, allocation of resources for education, and economic base of the households to support education of their children. Education is one of the most important basic needs and, therefore, a priority area for intervention. It also helps in the satisfaction of other basic needs through creation of awareness on necessities of personal hygiene, household sanitation, clean water, nutritional requirements and primary health care. There emerges a mutual dependence among education, basic needs, and development.

Although the triangular relationship between education, basic needs and economic development has been established in many country studies, a firm position on cause-effect dynamics is not available. The nature of relationship among these variables is yet to be observed in case of India in an integrated framework. In view of this lacuna, the study has attempted the following:

i. analyse the variations in basic needs fulfilment in relation to overall economic development;

ii. identify the role of education in influencing levels of basic needs satisfaction;
iii. explore the relationship between levels of education and economic development; and

iv. show how disparities (male-female and rural-urban) in the primary, middle, and secondary levels of education are affecting the levels of basic needs satisfaction and economic development in India and, in turn, are being affected by them.

The study has thus investigated the following hypotheses:

i. There is a positive relationship between the levels of education and that of basic needs satisfaction.

ii. There is a positive relationship between the levels of basic needs satisfaction and that of economic development.

iii. There is a positive relationship between the levels of education and economic development.

iv. There is a negative relationship between the levels of disparities in education and that of economic development.

v. The male-female disparity is more pronounced than rural-urban disparity in the levels of education in explaining the variations in the levels of economic development.

vi. The disparities at the primary level of education may have stronger relation with economic development than middle and secondary levels of education.

A brief effort may be made to make an overview of the results and their implications. As per the objectives stated in the beginning, the variations in the levels of both basic needs satisfaction and economic development across the states were examined. Further, the nature of relationship between basic needs and economic development was also assessed. While analysing the variations in the basic needs indicators, it is marked that the
fulfilment of basic needs of the population is not even among the states. There is widespread disparity so far as the distribution of basic services is concerned. Of course, there is no uniformity pertaining to the level of variations in different basic needs parameters. By studying the coefficients of variation of all the indicators, it may be concluded that the population served per village health worker shows highest variation (85 per cent) and the life expectancy the least (9 per cent). In terms of twenty basic needs indicators, excluding infant mortality rate, crude death rate, and life expectancy, Kerala (on the one hand), and Bihar and Orissa (on the other) represent two extreme poles in basic needs fulfilment; Kerala occupies the top slot whereas Bihar and Orissa are placed in the bottom. But in terms of overall levels of fulfilment expressed by IMRATE, CDRATE and LIFEXP, Kerala and Uttar Pradesh respectively secure the highest and lowest ranks.

The variations in the economic indicators across the states indicate that there is high degree of disparity in the levels of economic development among the regions. But the degree of variation varies from indicator to indicator. From the respective coefficients of variation, it is observed that the degree of variation is the highest (87 per cent) in case of per capita production of food grains (FOODGR), while the lowest variation (28 per cent) is found in the percentage of villages electrified (ELECTR). In fact, the disparity among the states in the levels of economic development is much higher and serious than in case
of basic needs fulfilment. In case of most of the indicators, Orissa and Bihar settle at the bottom of the table with Punjab at the top. Therefore, on the basis of the composite index, Punjab emerges as the most developed state and Orissa as the least developed one.

However, it may not be correct to contend that economic backwardness of the region comprising Bihar and Orissa is the reason for their lower levels of basic needs satisfaction. This is because Punjab, being the most developed state economically, is nowhere near Kerala in the levels of basic needs satisfaction although Kerala is an economically less developed state. This indicates that the role of the state becomes crucial in making the difference. Also, one may take into account the role of educational development in the correspondence between basic needs and economic development. The study suggests that while the state role has been negligible in keeping the levels of basic needs fulfilment and economic development together, education has played a vital role in bridging the gap between the two.

Correlation analysis shows that the indicator of POPSLE has a significant relationship with as many as eleven out of fifteen other basic needs indicators. The indicators having insignificant correlation with POPSLE are those of RURWAT, PCEXHL and PHCPOP. Besides, there are two common indicators which show negligible relation with all the other indicators. These two indicators are PCEXHL and PHCPOP.
Along with the percentage of urban population having access to sanitation (URBSAN), only two indicators of medical infrastructure are significantly associated with the health status measured in terms of infant mortality rate, crude death rate, and life expectancy. These two parameters are population served per doctor, and hospital and dispensary beds per lakh population. An important observation made here is that all the four educational indicators, which are supposed to have only indirect impact on the IMRATE, CDRATE and LIFEXP, have highly significant association with the same. Hence, the educational indicators emerge as more important than the indicators such as POPNRS, POPVHW, PCEXHL and PHCPOP which should have obviously significant correlation with IMRATE, CDRATE and LIFEXP. This is because, they have a direct influence on the death rates and therefore on the life expectancy.

Moreover, both the indicators of RURWAT and URBWAT do not have significant relationship with either of the three indicators of health status, viz. IMRATE, CDRATE and LIFEXP. Similar is the relationship of POPNRS, POPVHW, PCEXHL and PHCPOP with IMRATE, CDRATE and LIFEXP.

So far as the strength of the relationship between the indicators of economic development and basic needs fulfillment is concerned, the percentage of population having attained the secondary level of education (POPSLE) and the teacher-pupil ratio at middle level of education (TPRMLE) have respectively the highest and lowest observed relationship with CINDEX. Besides,
only thirteen basic needs indicators, out of twenty two, are observed to be having significant association with the levels of economic development. The basic needs indicators which have insignificant correlation with CINDEX are those of URBWAT, PCEXHL, PHCPOP, POPMLE, MLSPOP, SLSPOP, TPRPLE, TPRMLE and TPRSLE. The correlation coefficients provide some interesting observations. First, the coefficient involving URBSAN is highly significant but in case of URBWAT it is negligible. Secondly, the strength of the relation of the LITPOP and POPMLE is lower than that of POPPLE. In fact, POPMLE shows negligible relationship with CINDEX, while the correlation of POPSLE with CINDEX is highly significant.

The basic needs affect development through the population of a region. There is a close and circular relationship between population and development. Population affects development through its consumption and production behaviours. So it is the difference between the consumption and production effects of a population which determines the rate of development. Therefore, there is the necessity of raising the productive capacity over and above the consuming capacity of a population so that it may make positive contribution to economic development. And, the productive capacity of a population depends mainly on the levels of its basic needs satisfaction. Therefore, an improvement in basic needs fulfilment in India may go a long way in sustaining the levels of economic development.
There may be a trade-off between basic needs and growth. But growth without fulfilment of basic needs of the population is certainly not development. It may not be also desirable to consider growth as more important than the measures for improving the living conditions of the poor, especially in a country like India with around 250 million people surviving below the poverty line. However, it has been observed that because of the less progressive pricing structure adopted for the publicly provided services, a large portion of the subsidized facility has been consumed by the higher income population. This has resulted in wastage and non-priority use of the public services. Therefore, it is high time that basic needs of the poor be given proper attention.

The study also attempted to examine the influence of education on the levels of basic needs satisfaction. To establish the relationship between education and basic needs satisfaction, both correlation and regression methods were used. In case of regression, as all the four explanatory variables of education, viz. LITPOP, POPPLE, POPMLE and POPSLE are related with each other, there was bound to be a multicollinearity problem. This has been clearly reflected in the results. The conclusions have thus been based on the analysis limited to only six basic needs indicators, viz. URBSAN, PHCPOP, HDBPOP, IMRATE, CDRATE and LIFEXP.
Out of the twelve dependent variables selected from the basic needs sector, IMRATE, CDRATE and LIFEXP can be considered as dependent on the other nine indicators. Similarly, LIFEXP can be considered as the result of IMRATE, and CDRATE and with the same logic CDRATE may be accepted as the result of IMRATE. All the twelve dependent variables thus form different layers of the level of basic needs satisfaction. But while choosing them for the final analysis, no difference has been made in their respective layers. This is because the analysis depends on the commonness of the dependent variables for the obvious reason of finding a relation with four common explanatory variables of LITPOP, POPPLE, POPMLE and POPSLE at each step so that interstep comparison could be possible.

The four educational indicators of LITPOP, POPPLE, POPMLE and POPSLE have been observed to be having a weak relationship with the nine input indicators of basic needs, with a few exceptions. But these four educational indicators indicate significant association with overall levels of basic needs satisfaction measured in terms of IMRATE, CDRATE and LIFEXP. Hence, the levels of education may be said to have a significant influence on the levels of basic needs satisfaction. This is because education may be helping people not only to perceive their basic needs but also to use the available basic needs products and services in a judicious manner. Therefore, a region with more educated people is likely to extract a higher level of basic needs satisfaction out of the available facilities.
The percentage of population having attained the middle level of education (POPMLE) finally emerges as the most important explanatory variable in explaining the variations in the levels of basic needs satisfaction. The other variables of LITPOP, POPSLE and POPPLE came next in that order. On the other hand, these four educational indicators have significant influence on only six indicators of basic needs fulfilment. These basic needs indicators are URBSAN, PHCPOP, HDBPOP, IMRATE, CDRATE and LIFEXP.

The disparities in education were analysed at the district level. The highest male-female disparities are observed to be concentrated in Kalahandi, while the lowest are Ernakulam and Kottayam. In the case of individual states examined separately, the highest and lowest degrees of disparities are concentrated respectively in Jind and Ambala in Haryana, Palghat and Ernakulam in Kerala, Parbhani and Greater Bombay in Maharashtra, Kalahandi and Cuttack in Orissa, and in Bathinda and Ludhiana in Punjab.

The highest and lowest degrees of rural-urban disparity are concentrated in Koraput in Orissa and Quilon in Kerala respectively. When the same exercise is conducted for each of the states separately, the emerging districts where the highest and lowest magnitudes of rural-urban disparity are concentrated are found to be respectively Sirsa, and Mahendragarh, Rohtak and Sonipat in Haryana, Palghat and Quilon in Kerala, Nanded and Jalgaon in Maharashtra, Koraput and Baleshwar in Orissa, Bathinda and Jalandhar in Punjab. However, in Orissa, in case of all the seven indices of rural-urban disparity, Koraput and Baleshwar are
observed to be the highest and lowest disparity districts respectively. Similarly, in Punjab, Bathinda is the highest disparity district in terms of all the seven disparity indices.

In case of all disparity (male-female and rural-urban) Koraput and Quilon represent the highest and lowest degrees of disparity respectively. When the same is observed among the districts within each state separately, the districts representing respectively the highest and lowest disparities are Jind and Ambala in Haryana, Palghat and Quilon in Kerala, Parbhani and Greater Bombay in Maharashtra, Koraput and Baleshwar in Orissa, and Bathinda and Ludhiana in Punjab. Finally, it may be observed that both Palghat and Bathinda represent highest disparity in the case of a maximum number of eleven indices, out of a total number of fourteen disparity indices analysed, within their respective states. Similarly, both Ambala and Baleshwar represent lowest disparity in case of a maximum number of seven indices, out of a total number of fourteen disparity indices studied, within their respective states. These final observations pertain to the concentration of the highest and lowest levels of disparity across all the districts.

An effort was also made to classify the districts into four levels of disparity, viz. high, medium, low and least. Secondly, the variations in the levels of economic development across the districts were examined. Finally, the impact of educational disparities on economic development and of economic development on the disparities was assessed.
First, the incidence of disparity is higher in Orissa (particularly in the tribal dominated districts), central Maharashtra and Haryana (especially in southwestern districts). This is in comparison to Kerala and Punjab. The male-female disparities reduce at a considerable rate in incidence as one moves up the levels of education in case of both enrolments and attained levels, while in the case of rural-urban disparities the incidence declines slowly. Also, the district profile of the states show that there is less male-female disparities compared to rural-urban disparities.

In terms of economic development, the districts of Punjab and Orissa represent the highest and lowest levels respectively. The districts of Haryana slowly follow those of Punjab in the process of development, while the districts of Maharashtra and Kerala come next in that order. However, the inter-district variations in the levels of development are observed to be the highest in Maharashtra and lowest in Kerala.

Thirdly, there is a significant association between the disparities in education and the levels of economic development. Besides, the relationship is observed to be a negative one. The relationship between male-female disparities and economic development is more pronounced than between rural-urban disparities and economic development. So far as the strength of the relationship is concerned, the male-female disparity in the percentage of population having attained the level of primary education (MFDIPL) has the strongest relation with levels of
economic development while the rural-urban disparity in literacy has the weakest relation. Therefore, in the light of prospective planning for development, the reduction of disparities in education may constitute an important policy intervention. And such a policy may emphasize the reduction of male-female disparities in particular with a priority consideration for attainments at the primary level.

The regression analysis furnishes some important findings as regards the impact of economic development on the various disparity indices in education. On the basis of the fourteen equations examined, only two equations with RUDIPE and RUDILT as the dependent variables being statistically irrelevant, it may safely be concluded that the levels of economic development have clearly got a significant and negative impact on the disparities in education. This implies that the efforts to raise the levels of economic development may simultaneously help to reduce the magnitude and concentration of educational disparities in a region. Secondly, it is observed that levels of economic development have got a higher influence on the male-female disparities than on the rural-urban disparities. The implication of this observation may be that an improvement in economic conditions is likely to reduce male-female disparities much more quickly than rural-urban disparities. Further, economic development seems to have the greatest influence on the male-female disparities in the percentage of population having attained the primary level of education. Therefore, the
male-female disparities in the attainments of the primary level of education may be most affected by the levels of economic development.

Finally, the analysis of inter-district variations in the indices of educational disparity and economic development suggests that regional variations in the levels of economic development have significant influence on the variations in the social indicators. This is implied by the observation that Kerala, where inter-district variations in the levels of economic development are the least, has shown least inter-district variations in the indices of educational disparity.

At the end, the overall implications of the study may be pointed out. The findings show that there is a need not only to raise the level of basic need satisfaction in India but also to bridge the gap among the regions, and between rural-urban and male-female populations. The level of basic need fulfilment in education and the disparities therein between male-female segments of the population with particular reference to education at the primary level, emerge as prominent areas of intervention for attaining overall development objectives. In other words, development policy should emphasize efforts to minimize male-female disparities at the primary level of education in order to sustain and probably to improve the overall levels of basic needs fulfilment and economic development in India.