CHAPTER 7
Summary, Conclusion and Future Policy Implication
Small Scale Industries occupies an important place in the industrialization of a hill State, such as Himachal Pradesh, where due to difficult terrain and low infrastructural base, the establishment of large industrial units is very difficult. These industries not only brings about rapid industrialisation, but are also very crucial for generation of employment, particularly at the local level, effective utilization of scarce resources, reduction of regional disparities, promotion of entrepreneurship and equitable distribution of income and wealth. These industries do not require huge infrastructure and highly sophisticated technology for their operation, but are able to utilize the locally available resources, traditional skills and knowledge and raise the income levels of local populace.

Realizing the significance of these units, the Government has, from the very beginning, targeted the development of small scale sector as a part of the strategy of rapid industrialization of the country. This has been reflected in various Industrial Policy Statements enunciated by the Government from time to time. During the pre reform period, the Government has announced various Industrial Policy Resolutions/Statements in 1948, 1956, 1973, 1977 and 1980. These policy measures aimed at giving progressive role to the small scale industries in augmenting the industrial activities, cheap finance, access to the quality raw material, institution-industry linkages for providing training and skilled manpower and entrepreneurs.

The policy towards development of small scale sector in the pre reform period also aimed at protection of this sector from the competition with large units, reservation of items exclusively for the
manufacture by the small units, provision of various incentives for ensuring the overall development of these units. The pre reform policy measures also aimed at strengthening linkages of small scale industries with the large scale industries, mainly for providing inputs of production at the place of production activity. This has, however, blunted the competitive strength of small units and in a way adversely affected their operational efficiencies and economic viability. The economic reforms of 1990s opened up the economy and the policy of protectionism of small scale units have been gradually given away. The items reserved for small units have been drastically reduced. The emphasis, thus, shifted from the protectionism to the promotion. Yet, there has been the supportive mechanism in terms of easy credit facilities, development of infrastructure, tax concessions, programmes of modernization and development of entrepreneurship. Even during the post reform period, the Government has not abdicated its role in the promotion of small scale sector, which is reflected in the enactment of Micro, Small and Medium Enterprises Act, 2006 and a slew of measures have been taken for development of this sector. Nevertheless, these units have now to operative in a competitive environment, for which the operational efficiencies need to be achieved.

The main aim of the study is to find out the growth, structure and productivity of small scale sector in the State of Himachal Pradesh. The study is based on the secondary data, available from the Annual Survey of Industries, which is continuously available for the study period, which has been divided into pre reform period (1972-73 to 1990-91) and post reform period (1991-92 to 2012-13). The productivity is measured through Cobb Douglas production function, with three inputs, viz, capital, labour and material consumed.
The output has increased as a compound annual growth rate of 31.69 percent in production, processing and preservation of fruits and vegetables industrial activity during the post reform period as compared to the compound annual growth rate of 19.94 percent, whereas the capital has increased at compound annual growth rate of 41.49 percent during the post reform period as compared to 9.33 percent during the pre reform period. However, the labour has increased marginally at compound annual growth rate of 8.40 percent during the post reform period in comparison with 8.11 percent during the pre reform period. The per unit capital and total number of persons employed had declined after 1982-83 during the pre reform period. The per unit output and capital had increased, whereas total number of persons employed had decreased during the post reform period. Besides, the capital-labour ratio was also found higher during post reform period as compared to the pre reform period in the Production, Processing and Preservation of Fruits and Vegetables in the State of Himachal Pradesh which indicated the capital intensive nature of this industrial activity.

The post reform improvement in the output, capital and labour may be due to the entry of new industrial units, revision in the definition of the small scale industries to make them more competitive in the post reform period and increase in the market demand for the products of this industrial activity due to increase in the income levels. A marginal increase in the total number of persons employed indicates the tendency on the part of manpower to shift to the more mechanical activities in order to avail more opportunities in such activities due to modernization process during the post reform period.

The manufacture of beverages – distilling industrial activities shows negative compound annual growth rate of (-)0.52 percent, (-) 5.66 percent and (-) 7.81 percent in output, capital and labour respectively during the pre reform period. However, the compound
The annual growth rate of this industrial activity has increased during the post reform period to 12.30 percent, 16.20 percent and 2.85 percent in respect of output, capital and labour respectively. The capital output ratio had increased during the post reform period, as compared with the pre reform period. The capita labour ratio was found to be higher during the post reform period as compared to the pre reform period. The per unit output had increased, whereas capital and total number of persons employed had decreased particularly during the last few years of the pre reform period, whereas the output and capital in manufacture of beverages (distilling) in Himachal Pradesh had increased and the total number of persons employed decreased during the post reform period. This industrial activity had, by and large, become capital intensive during the post reform period. The pre reform poor performance of manufacture of beverages – distilling industrial activity may be due to inability of the industrial units to withstand competition, use of obsolete or inappropriate technology or decrease in the productivity capacity. However, during the post reform period, this industrial activity has received a boost due to the relative easy access to the modern technical know-how, use of installed capacity, increase in the demand and entry of new units under the liberalized regime.

The compound annual growth rate of output in printing and allied activities was 11.94 percent during the pre reform period, which improved to 15.91 percent during the post reform period. However, the compound annual growth rate of capital has declined to 14.15 percent during the post reform period from 16.70 percent during the pre reform period. Similarly, the labour employed in printing and allied activities has declined from compound annual growth rate of 2.85 during the pre reform period to (-) 0.13 percent during the post reform period. The per unit output and capital had increased and total number of persons employed decreased during pre and post reform period. The capital output ratio remained low during the pre reform period. However, capital
output ratio became very high during 2004-05 to 2009-10, but declined and became very low thereafter during the post reform period in the printing and allied activities in Himachal Pradesh. Interestingly, the capital labour ratio which was relatively low during the pre reform period, but it had increased during the post reform period. This indicated that the mechanization of production process has been initiated during the post reform period in the printing and allied activities in Himachal Pradesh. A marginal increase in the growth rate of output and the decline in the capital during the post reform period may be ascribed to the use of installed capacity in order to enhance competitiveness, while having access to the cheap credit as per the policy prescription of the Government. Further, it appears that the skilled manpower has not been made available to this industrial activity which may be due to inadequate assessment of actual requirement of skilled manpower by the skill training and technical institutions. Besides, the modernization process may also have resulted in the shift of the manpower to the more remunerative ventures.

The output, capital and labour of manufacture of plastic products has shown compound annual growth rate of 14.60 percent, 23.36 percent and (-)4.84 percent respectively during the pre reform period in Himachal Pradesh, whereas compound annual growth rate has increased to 32.61 percent, 40.20 percent and 23.90 percent in respect of output, capital and labour during the post reform period. Similarly per unit output and per unit capital has increased and per unit total number of persons employed decreased during the pre reform period, whereas per unit output, capital invested and total number of persons employed showed increase during the post reform period. The capital output ratio remained low during the pre and post reform period. The capital labour ratio, which remained very low for most of the years of pre reform period, had ended up at a comparatively higher level by the end of pre reform period. The capital labour ratio was found to be very high during
the post reform period in the manufacture of plastic products in Himachal Pradesh. This implies that this industrial activity may be able to take advantage of the Government policy of cheap credit facility, preferential treatment in the purchase of its items by the Government departments, programmes of apprenticeship training to supply skilled manpower and technological upgradation.

The manufacture of non-metallic mineral products has clocked a compound annual growth rate of 33.73 percent in output during the post reform period as compared to 6.34 percent during the pre reform period. However, the compound annual growth rate of capital has deteriorated marginally to 33.04 percent during the post reform period from 35.61 percent during the pre reform period. The labour employed has witnessed a positive compound annual growth rate of 13.47 percent during the post reform period, which is a good improvement from the negative compound annual growth rate of (-)1.13 percent during the pre reform period. Similarly, the per unit output and the per unit capital increased and the per unit total number of persons employed decreased during the pre reform period. The output, capital and total number of persons employed has increased during the post reform period. Evidently, the per unit output, capital invested and total number of persons employed has increased during the post reform period. The capital output ratio was low during the pre and post-reform period. The capital labour ratio gradually increased during pre reform period but it remained very high in most of the years of post reform period, in the manufacture of non-metallic mineral products in Himachal Pradesh. During pre reform period, this industrial activity has witnessed a decline in the output, capital and labour employed from 1979-80 to 1986-87 due to lack of demand and presence of sick industrial units. The globalization of economic activity during the post reform period has benefitted the manufacture of non-metallic mineral products industrial activity due to establishment of forward linkages with the large
industries and access to modern technology of production. An increase in the demand for the products of non metallic mineral products led to establishment of new industrial units and increased requirement of capital and labour inputs.

The compound annual growth rate of output, capital and labour in Basic metals and alloys – iron and steel – semi finished products was found 17.94 percent, 18.21 percent and (-) 7.20 percent respectively in the pre reform period, which rose to 35.75 percent, 26.64 percent and 17.48 percent during the post reform period. The per unit output and capital had increased and per unit total number of persons employed declined during the pre and post reform periods. During the post reform period, the output, capital invested and total number of persons employed had increased. The capital output ratio, after being relatively high during 1983-84 to 1986-87, had decreased during the pre reform period, and it has further declined during the post reform period. The capital labour ratio which was very low in the initial years rose by the end of the pre reform period and again it ended at a very higher level by the end of post reform period in the manufacture of basic metals and alloys – iron and steel – semi finished products in Himachal Pradesh. Basic metals and alloys – iron and steel – semi finished products industrial activity has picked up since 1987-88 due to the availability of subsidized capital, measures such as tax rebates and tax holidays, emphasis on creation of infrastructure in order to boost industrialization of the State. This industrial activity has gained momentum during the post reform period, particularly after the enactment of Micro, Small and Medium Enterprises Act in 2006, which raised the investment limits and thus enlarged the scope of small and medium enterprises engaged in such activities. Besides, the emphasis on industrialization, increase in demand and availability of modern technology for the production process may be accounted for the growth of Basic metals and alloys – iron and steel – semi finished products industrial activities.
The output, capital and total number of persons employed had decreased, whereas the per unit output and per unit capital invested had increased and per unit total number of persons employed had decreased during the pre reform period in the manufacture of special purpose machinery in Himachal Pradesh. On the contrary, the output, capital and total number of persons employed as well as per unit output, per unit capital and the per unit total number of persons employed had increased during the post reform period. The capital output ratio had remained very low during the pre and post reform period. The manufacture of special purpose machinery had shown improvement during the post reform period as compared to the pre reform period, mainly due to spurt in the industrial activities, increase in the investment limits, provision of credit and automation of productive activities.

The output and labour in manufacture of watches and clocks has witnessed the compound annual growth rate of 34.99 percent in output and 16.19 percent in labour during the pre reform period, which decreased to 17.56 percent in output and (-)0.61 percent in labor during the post reform period. The compound annual growth rate of capital has remained almost stagnant at 17.81 percent in pre reform period and 17.85 percent in post reform period. During the post reform period, the output and capital invested had increased though at a comparatively lower rate than that in the pre reform period. The total number of persons employed had, in fact, declined during the post reform period as compared to the pre reform period. The capital labour was very high towards the end of pre and post reform periods. The capital output ratio was relatively high during the pre reform period, but it declined during the post reform period in the manufacture of watches and clocks in Himachal Pradesh. It appears that the surplus capital was abundantly available with this activity due to the policy of providing cheap capital to the small scale industries. These units had been using capital intensive techniques of production even in the pre reform period. Further, during
the post reform period, the manufacture of watches and clocks had become more specialized activity due to access to the modern technological knowledge, requiring less labour in the production process.

The output and total number of persons employed had declined and the capital had remained more or less stagnant during the pre reform period, whereas the output, capital invested and total number of persons employed had increased during the post reform period in the manufacture of furniture and fixtures in Himachal Pradesh. The capital labour ratio was found to be very low during the pre reform period, but rose during the later period of post reform period. The capital output ratio, which remained at a relatively high level during the pre reform period, had become low during the post reform period. The post reform performance of manufacture of furniture and fixtures was found to be encouraging as compared to that of the pre reform period. This industrial activity was not able to utilize its installed capacity mainly due to the creation of capacity over and above its installed capacity as a result of cheap capital and other incentives provided by the Government. However, the manufacture of furniture and fixtures industrial activity has picked up during the post reform period due to the increase in the demand for the products and policy incentives for easy finance, apprenticeship training programme for skilled labour and unhindered supply of quality raw material.

The total Annual Survey of Industries sector in Himachal Pradesh has shown deterioration in the compound annual growth rate of capital (from 21.16 percent to 15.50 percent) and labour (6.40 percent to 5.87 percent) employed during the post reform period as compared to the pre reform period, whereas compound annual growth rate of output (19.65 percent to 21.43 percent) has shown a marginal increase. The per unit output and per unit capital invested had increased, whereas per
unit total number of persons employed had decreased during the pre and post reform periods. The capital labour ratio was comparatively higher in the post reform period as compared to that in the pre reform period. The capital output ratio had decreased during the post reform period as compared to the pre reform period in the total Annual Survey of Industries sector in the State of Himachal Pradesh. The post reform increase in the output, capital and labour may be explained by the enactment of Micro, Small and Medium Enterprise Act 2006, whereby the scope of these industries have been considerably expanded by raising the investment limits of different categories of industries.

The capital coefficient has declined during post reform period in comparison with pre reform period in manufacture of plastic products [from 0.312 to 0.044], manufacture of non-metallic mineral products [from (-)0.134 to 0.015], manufacture of special purpose machinery [from 0.684 to 0.630], manufacture of watches and clocks [1.229 to 0.029] and total Annual Survey of Industries [1.404 to 0.188] mainly due to the availability and under-utilization of excess capital as well as their inability to utilize the credit and other Government measures in an efficient manner. Further, there may be lack of demand for the product and unfavourable cost and market conditions which may have resulted in the deficient the use of capital. The capital coefficient has increased in the production, processing and preservation of fruits and vegetables [from (-) 0.019 to 0.0724], manufacture of beverages – distilling [from (-) 0.054 to 0.138], printing and allied activities [from (-)0.052 to 1.137], Basic metals and alloys – iron and steel – semi finished products [from 0.487 to 0.254] and manufacture of furniture and fixtures [(1) 0.179 to 0.133] during post reform period as compared to the pre reform period. There appears to have been relatively better use of capital by these industrial activities due to demand for the products and better techniques of production during the post reform period. Yet, considering the low capital coefficient, there is presence of over-capitalization or
unutilized/excess capacity in these industries even during the post reform period.

The labour coefficient has increased in production, processing and preservation of fruits and vegetables [from 0.680 to 1.032] and manufacture of watches and clocks [from (-)0.039 to 0.054]. The labour coefficient has declined in manufacture of beverages – distilling [from 0.818 to (-) 0.158], printing and allied activities [from 2.093 to (-)0.117], manufacture of plastic products [from 0.137 to 0.024], manufacture of non-metallic mineral products [from 0.958 to 0.515], Basic metals and alloys – iron and steel – semi-finished products [from 0.694 to 0.479], manufacture of special purpose machinery [0.027 to (-)0.453], manufacture of furniture and fixtures [0.978 to (-)0.024] and total Annual Survey of Industries [from 2.727 to (-)0.007] mainly due to non-availability of skilled and trained manpower in adequate quantity as well as weak linkages between the actual industrial requirement and technical training institutions. The small scale industries have been seen as an instrument of generating large scale employment at local level at relatively low cost, yet there has been inadequate mechanism to train the locally available manpower in the modern production process.

The industrial activities, such as, production, processing and preservation of fruits and vegetables [from 0.306 to 0.197], printing and allied activities [0.070 to (-)0.649], Basic metals and alloys – iron and steel – semi-finished products [from 0.85 to 0.427] and manufacture of furniture and fixtures [from 0.531 to 0.406] had witnessed deterioration in the productivity of raw material during the post reform period as compared to the pre reform period due to low quality of raw material, lack of timely supply of raw material, inadequate linkages between the source of input and the industrial unit and cost constraints due to high transportation cost etc. However, the coefficient of raw material has improved in manufacture of beverages – distilling [from 0.522 to 0.870],
manufacture of plastic products [from 0.216 to 0.792], manufacture of non-metallic mineral products [from 0.381 to 1.064], manufacture of special purpose machinery [0.145 to 0.487], manufacture of watches and clocks [from 0.537 to 0.806] and total Annual Survey of Industries sector [(-)0.314 to 0.261] in the post reform period in comparison with the pre reform period mainly due to timely supply of quality raw material and diversification and ancillarization of industrial activities for supply of various raw material inputs.

The return to the scale had deteriorated in ‘manufacture of beverages (distilling) [from 1.286 to 0.85]’, ‘Basic Metals and Alloys – Iron & Steel – semi finished products’ [2.031 to 1.16], ‘Manufacture of special purpose machinery’ [0.856 to 0.664], ‘Manufacture of watches and clocks’ [1.727 to 0.889], ‘Manufacture of furniture and fixtures’ [1.33 to 0.515] and ‘Total Annual Survey of Industries Sector’ [3.817 to 0.442] during the post reform period in comparison to the pre reform period, mainly due to decline in the constituents coefficients in these industrial activities and inherent bottlenecks in the production process.

The total factor productivity as measured through Cobb Douglas production function has improved marginally in ‘Production, processing and preservation of fruits and vegetables’[0.085 to 0.104], ‘Printing and allied activities [0.211 to 0.029]’, ‘Basic Metals and Alloys – Iron & Steel – semi finished products’ [0.63 to 0.073], ‘Manufacture of `special purpose machinery’[(-) 0.030 to 0.005], ‘Manufacture of watches and clocks’ [(-) 0.058 to 0.042], ‘Manufacture of furniture and fixtures [0.061 to 0.227], and total Annual of Survey Industries Sector [(-)0.256 to 0.101]. However, the total factor productivity has declined in ‘Manufacture of beverages – distilling’ [0.061 to (-) 0.010], ‘manufacture of plastic products’ [0.046 to 0.041] and ‘Manufacture of non-metallic mineral products’ [0.073 to (-) 0.055] during post reform period as compared to the pre reform period. During the pre reform period the productivity was
relatively low due to the policy of protectionism pursued by the Government with regard to the small scale sector. As a result of reservation of items exclusively for the production by the small scale industries and various incentives in terms of cheap financial assistance, land on concessional rates, tax rebates and tax holidays, the competitiveness and adequate technological interface of these industries had not progressed in the desired manner. Easy and cheap credit has led to installation of capacity in excess of the actual requirement. There was tendency on the part of industrial units to obtain, as much as possible, the incentives given by the Government, but they are not able to make appropriate use of such incentives. The lack of viable entrepreneurial development programmes may also have led to the inability of these units to put the economic resources to the optimum productive use. Besides, various educational and technical institutions have not been able to supply adequate skilled manpower as per the requirements of the modern industrial activities. During the post reform period, the opening up of economy and removal of protective shield encouraged small scale industries to modernize their production process. Their access to the modern techniques of production and latest industrial know-how has increased, which resulted in marginal increase of productivity. Optimum utilization of modern techniques of production necessitates the availability of skilled and trained manpower. It is observed that the small scale industries are still deficient of skilled and trained manpower even during the post reform period and there is a need to ensure better linkages between the industrial requirement of skilled manpower and the technical training institutions. While a positive rate of total factor productivity growth entails efficient use of existing technology, paving way for augmentation of the productive capacity and consequent higher output growth, the changes in the total factor productivity in different industries in Himachal Pradesh, though somewhat encouraging, are not sufficient and the specific policy
formulation and vigorous implementation are needed. Further, the optimization of the allocation of various factors of production has not taken place during the post reform period, which may be due to the lack of entrepreneurial skills to make the best use of productive resources available with the various industrial activities.

It is found that the industrial sector in Himachal Pradesh had been operating under the Directorate of Industries at the State level and District Industries Centres at the District levels. The current administrative set up had been looking after the industrial sector as a whole, i.e., large industrial sector as well as small and medium industrial sector. In such a scenario the policy perspective, policy direction as well as policy implementation became unwittingly skewed and non-specific insofar as the development of small scale industries are concerned. Being a distinct topographical entity and scant resource-base, the State is best suited for small scale sector, which is corroborated by the fact that most of industrial activities in the state are being undertaken in this category. As such, it would be more advantageous if a separate administrative set up, such as Directorate of Small and Medium Industries, is created at the State level, which could further be regressed to the local levels, so that more focused approach is affected in the State insofar as the development of small scale industries are concerned. With liberalization of the economy, the attitude and perception towards small scale sector has changed. Though this sector continues to get some attention from the Government, yet the policy of protectionism has almost evaporated now. Still, it is a fact that this sector could not appropriately be expected to grow from the standpoint of industrial sector as a whole and that a specific policy approach needs to be formulated in order to address vital and specific issues relating to this sector.
The policy formulation and implementation depends upon the availability, adequacy and reliability of data. It was found that the State of Himachal Pradesh does not have the proper data set which could pave the way for more specific intervention in the small scale sector. It is, therefore, necessary that the State Government should take necessary steps for collection, maintenance and analysis of the data on various aspects relating to small scale sector.

Small industries are also sometime reluctant to take loan from the bank, either because they are unaware of the provisions or the banks are not very forthcoming in granting loans to the small entrepreneurs due to the credibility-deficit about credit worthiness of small sector. The banks seem to be reluctant to lend to the small scale sector due to high risk, lack of collateral and asymmetric information about the activities being undertaken by the firms in the small sector. The intervention of Districts Industries Centres may play a positive and facilitative role in this regard. The State Government should create a mechanism through which the credit needs of small sector could be articulated and managed on easy terms without much hassles. The small sector functionaries may be facilitated and trained in sound financial management practices, including risk management, so that the possibilities of liquidity constraints and non-recovery or bankruptcy could be averted. The periodic review of credit ratings of small scale industrial units and the suggestions/advisory for its improvement could be useful in this regard.

The promotion of industrial activities cannot be thought of without the provisions of appropriate infrastructure, particularly, road and transportation, unhindered supply of raw material, power & electricity, and adequate marketing support. The state-of-the-art industrial areas, with all modern amenities and facilities, need to be developed. The possibilities of development of industrial activity-specific industrial area,
depending upon the comparative advantage of the region, with reference to proximity to the raw material, skilled manpower, marketability of the products, etc., must be explored. The area-specific approach, wherever feasible, in terms of promotion of industrial activities on the basis of their comparative advantage specific to some areas must be delineated within the broad policy framework. The policy framework should be flexible enough to address the diverse needs of specific areas as well as particular industrial activity. This would promote the advantageous use of scarce resources for development of industrial activities in the topographical divergent State of Himachal Pradesh.

Labour market rigidity has become a barrier to the growth of this industrial sector, which has traditionally been well known for its labour intensiveness. Health, safety and welfare of labour working in diverse industrial activities should be taken care of in a very comprehensive manner. However, the approach should be facilitative and constructive rather than restrictive. The small scale enterprises should have access to the skilled manpower for which training at regular intervals may be imparted in industrial training centres established at the various locations in the State. The industry-institute linkages should be established and strengthened, which may be useful in bridging the gap between demand and supply of labour.

The information technology and internet-enabled technological support would facilitate the fast dissemination of information to the small sector, reduce cost, increase collaborative activities and give a fillip to their decision-making abilities. The small sector could use modern information technologies to promote their business/products and enhance their customer base. Besides, a proper accounting and stock management system could be developed with the help of modern software for improving the efficiency in the small scale sector.
Sound corporate governance is the key to the productivity and profitability of any industrial activity, and the small scale sector is no exception in this regard. A good entrepreneur brings efficiency to the enterprise and guides it to achieve its various goals and targets as well as cull out ways and means of further improvement and growth. It is, therefore, necessary that the entrepreneurship is developed and cultivated insofar as small scale sector is concerned. Thus, a good policy framework should promote entrepreneurship and devise methods for its promotion as well as periodic reinforcement in terms of current requirements of the industry, in particular and the economy, in general. The district level administrative organization, viz., District Industries Centre, should take care of this vital aspect and organize periodic training workshops either at district headquarters or at the industrial estates for development of entrepreneurship and enable them to acquire knowledge and skills to create, identify and seize business opportunities. In order to attract entrepreneurs to the periodic development programmes, such initiatives could be linked to the incentive schemes, such as preferential treatment in grant of credit.

Research and Development, either in the techniques of production, or growth of innovative technology or enhancement of existing products or development of new product and services is the key to the industrial development in future. The most of the small scale industrial units in the State, due to their low resource, financial as well as human, ill-afforded research and development activities, resulting in use of obsolete techniques of production, low level of productivity, declined efficiency and blunted competitiveness. It is, therefore, necessary that the State should strive to bring in and disseminate the modern technology available anywhere in the country to the small scale sector. Further, the industry-research institution inter-linkages are established and strengthened in the State. Besides, there must be scheme of incentives for the units which spare some of their resources for research and development activities.