

District Human Development Report

Shimla



		<p>Planning Department Himachal Pradesh</p> 
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Foreword

The first Human Development Report of Shimla district of Himachal Pradesh is the third in the series of district level Human Development Reports brought out by the Planning Department with the assistance from the Planning Commission and the United Nations Development Programme under the project – ‘Strengthening State Plans for Human Development’. The findings of the report will not only serve as the baseline information but also as a guide in mapping the development strategy for Shimla district with an objective to achieve the goal of ‘inclusive growth’. The document will prove to be an important tool for planners and social scientists engaged in planning and policy analysis at the grass root level.

I express my gratitude to the Planning Commission, Government of India and the United Nations Development Programme for providing all important support to the State Government in furthering the cause of human development in the State. I also appreciate the efforts made by the Planning Department and the Department of Economics, Himachal Pradesh University, Shimla in finalizing the report.

Ajay Tyagi
Principal Secretary (Planning)
To the Government of Himachal Pradesh

Preface

Last three decades of development have witnessed an increasing emphasis on the human development both at national and international levels. The development debate assumed the human development as the central point in the development strategies forwarded by contributions made by Mahbub ul-Haq and Amratya Sen, both from the South Asian region. Late Mahbub ul-Haq advocated that development is about 'human well being' and not just about incomes and went a step further cautioning against the 'jobless, rootless and ruthless' income oriented growth.

Himachal Pradesh has prepared with the first ever Human Development Report in the year 2003 with the assistance from the Planning Commission and the United Nations development Programme. As a follow up to the recommendations made in various Human Development Reports brought out at the national and sub national levels, the Planning Commission, Government of India and the United Nations Development Programme decided to support the efforts of the partner States to prepare the Human Development Reports for the selected districts across the country on pilot basis. Shimla district was one of the three districts of Himachal Pradesh selected for the purpose. The Department Economics, Himachal Pradesh University, Shimla was assigned the task to prepare the first Human Development report of Shimla district. A mechanism was evolved for preparing the report with involvement of local administration and elected representatives through periodic interaction at the local level and at the State level. The Planning Department provided technical and other inputs to coordinate the efforts made by the agencies involved in bringing out the document.

The report analyzes the information pertaining to demographic and other socio-economic indicators for each of the development blocks of Shimla district based on the analysis. The study could not work out Human Development Indices at the block level due to non-availability of consistent and reliable data.

The inter Development Block comparisons based on available data on various socio-economic indicators has been attempted in the report. Information pertaining to the Development Block Nankhari, which was created in August, 2009, could not be incorporated due to its non-availability and, hence, Nankhari Development Block is missing from the lists of inter Development block Comparison in the report. Qualitative analysis has also been made in the areas where it is not possible to quantify the information pertaining to development indicators. The draft report was presented and discussed in the District Level Planning, Development and Twenty Point Programme Review Committee which has representation from the district administration, elected representatives and the civil society. The report has been finalized after incorporating the comments and suggestions that came up during discussions with the public representatives from different sections of the society.

I put on record my appreciation for the hard work done by the officers and the officials of the Planning Department in bringing out this report. This report will surely be a guiding tool in determining the development strategy for Shimla district in future.

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CHAPTER – I

SOCIO-ECONOMIC PROFILE OF DISTRICT SHIMLA

1.1 History of Shimla Hill States

The Shimla Hill States, twenty-eight in number, occupied an area of about 4,800 square miles. On the South they were bounded by the Pinjore tehsil of Patiala state, Sirmour state (till 1890 included politically among the Simla hill states), and the Ambala district; on the west by the Hoshiarpur and Kangra district; on the North by Mandi, Suket states and Kullu; and on the east the main Himalayan range divided Bashahr from Tibet and Garhwal.

Balsan, Bhaggi, Bashahr, Derkoti, Delath, Dhami, Dhadi, Ghuma, Jubbal, Keonthal, Koti, Kumarsain, Madhan, Rawingarh, Ratesh-Sanghi, Throach and Theog, were different hill states, which merged with Himachal Pradesh in the year 1948 and constituted part of the then Mahasu district.

Bashahr was the largest of the Shimla hill state, and was situated between North latitude $31^{\circ} 6'$ and $32^{\circ} 4'$ and east longitudes $77^{\circ} 33'$ and $79^{\circ} 2'$. It was bounded on the North by Spiti, on the East by Chinese Tibet, on the South by Tehri Garhwal and Rajengarh pargana of Keonthal, and on the West by Jubbal, Kotkhai, Kumarsain, Kotgarh and Kullu. The state was about 84 miles long, with a greatest breadth of 12 miles on the western side. It's total area was 3820 square miles. It's population in 1881 stood at 64,422 and rose to 75,727 in the year 1891 and further rose to 80,572 in the year 1901.¹

Bashahr had two tributaries, Khaneti and Delath. Khaneti was a small state consisting of two portions Sadhoch and Suraj which were on

¹ *Gazetteer of Simla Hill State(1910). Punjab State Gazetteer, Vol. VIII, Indus Publication Company, New Delhi, p. 21.*

either side of the ridge between Baghi and Narkanda. This was the transverse range mentioned in the general description given in the Shimla district Gazetteer as starting from the Central Himalayas and running South-West, throughout the length of the Shimla Hill State. It formed the water shed between Sutlej and the Jamna. The population of this state was 2575 in the 1901 and average yearly income Rs. 7000/-.

Delath was on the slopes above the left bank of the Sutlej to the East of Kotgarh ilaka. It was surrounded by Bashahr, except on the West where it touched Kotgarh. The area was some three or four square miles and the population was 1,489 in the year 1901. The state was a feudatory of Bashahr and paid an annual tribute of Rs. 150/- with Rs. 30 as a fee to the Wazir to Bashahr.

Keonthal had five feudatory states, i.e. Theog, Koti, Ghund, Madhan (or Kiari) and Ratesh. The first four were the original zaildars of Keonthal. Ratesh was not recognized as a separate state until some years after the Gurkha war, and its position was defined in comparatively recent times as that fifth Zaildar paying no tribute.²

The Koti state adjoined Shimla on the East. It was bounded on the North and East by Bhaggi, on the West by Patiala, Shimla and Keonthal, and on the South by Keonthal. It's area was 44 square miles and population in 1901, was 7,959. Within the boundaries of Koti were Sanjauli, the Mashobra ridge, including Naldera, Mahasu and Shimla waterworks catchment area and parts of Kufri, some of the Kasumpati bungalows and part of the convent of Jesus and Marry.

Theog estate extended over 144 square miles lying between 31° 21' and 31° 9' N. and 77° 21' and 77° 31' E. It was a fief of Keonthal and paid Rs. 500 annual tribute to that state. The population in 1901 was 5,654 and average income Rs. 15,000 per annum. The state was bounded on

² *Gazetteer of Simla Hill State (1910). Punjab State Gazetteer, Vol.VIII, Indus Publishing Company, New Delhi, p. 3.*

the north by Madhan and the Matiana pargana of Keonthal, on the East by Kumarsain and Ghund, on the South by Balsan and Keonthal and the west by Keonthal and Madhan. The Giri river formed the South-eastern boundary for some distances.

Madhan or Kiari as it is sometimes called, was located between $31^{\circ} 5'$ and $31^{\circ} 12'$ N and $77^{\circ} 21'$ and $77^{\circ} 26'$ E. It was bounded on the North by Kumarsain and Bhajji, on the East by Matiana pargana of Keonthal and Theog, on the South by the Fagu pargana and on the west by Bhajji. It was drained by a large stream, the Nautikhad, which flows into the Sutlej through Bhaggi. The state had a population of 3704 in 1901. It measured 23 square miles and its revenue was about Rs. 3,000 out of which Rs. 250/- was paid as tribute to Keonthal.

Ghund state had an area of about 13 square miles and lied between $31^{\circ} 21'$ and $31^{\circ} 61'$ North, and $77^{\circ} 27'$ and $77^{\circ} 33'$ on East, on the crest and sides of a high ridge, which separated the valley of the Giri from that of one of its tributaries. There were four villages, Band and Parali on the Northern slopes of the ridge and Deothi and Damiana on the Southern side.

Rawin was to the East, of the Northern part of Jubbal state. It consisted of two portions. Northern most comprised the parganas of Shalgawan was with six villages, and Ratahar with four. The population was 823 in 1901.

Dhadi consisted of three or four villages and about 1600 acres of valuable forests. It was bounded on the North by the Dehradun, village of Batar, on the West by Sansog village and Chachpur forest of the same district, on the South by Salna village of Rawin and on the East by pabar river and the Reingarh, pargana of Keonthal.

Kumarsain was a state of approximately 90 square miles in area. It lied between the Sutlej and the Giri, and was bounded on the North by the Sutlej, on the South by the states of Ghund and Balsan and the

British sub tehsil of Kotkhair; on the East by Bashahr and Khaneti states and British Kotgarh; and on the West by the states of Sangri, Bhajji and Keonthal. The state had an annual revenue of about Rs. 25,000 and paid Rs. 2,071 as tribute.

The Bhajji state lied between $31^{\circ} 7'$ and $31^{\circ} 17'$ North and $77^{\circ} 2'$ and $77^{\circ} 23'$ East, on the South bank of the Sutlej. The area was 96 square miles and population was 13,309 in the year 1901. It was bounded on the North by Suket, on the east by Sangri and Kumarsain on the South by Keonthal, Madhan, Koti, Patiala and Dhami, and on the West by Baghal. The Capital was Suni, which is about 24 miles from Shimla. The annual income was Rs. 20,000 and Rs. 1,440 was paid as tribute.

Mahlog was between $30^{\circ} 52'$ and $30^{\circ} 5'$ N., and $76^{\circ} 52'$ and $76^{\circ} 58'$ E., some thirty miles to the South-West of Shimla, between the states of Kuthar and Nalagarh. It's area was 43 square miles and population was 8,968 in the year 1901. The capital Patta, lied at the foot of the Kasauli Hill and was at a distance of some seven or eight miles from that place.

Balsan or Ghodna as is sometimes called was some thirty miles east of Simla on the left Bank of the Giri river between $30^{\circ} 58'$ and $30^{\circ} 7'$ N., and $77^{\circ} 24'$ and $77^{\circ} 35'$ E. It was a finely wooded tract of some 51 square miles, and had a population of 6,704 according to the 1901 census. The average annual revenue was between Rs. 10,000 to Rs. 15,000.

Dhami state was located some 16 mile west of Simla between $31^{\circ} 7'$ and $31^{\circ} 13'$ N.; and $77^{\circ} 3'$ and $77^{\circ} 11'$ East and bounded on the North by Bhajji, on the East and South by Patiala, and on the West by Baghal. It's area was 26 square miles, and the population in 1901 was 4,505. The capital was Halog and bulk of the state lied on eastern slopes of the Kainthu Dhar, Ridge running North-West from Jutogh.

Kuthar state was situated between $30^{\circ} 55'$ and $31^{\circ} 1' N.$, and $76^{\circ} 57' N.$, and $77^{\circ} 1' E.$, on the opposite side of Sabathu of the Kuthar river valley. It was bounded on the north by Patiala, on the east by Patiala and British Pargana of Bharauli, on the south by Beja state, and on the west by Mehlog. Its area was twenty square miles and the population in 1901 was 4,195.

Kunihar state was lying some fifteen miles west of Simla between $30^{\circ} 39'$ and $31^{\circ} 7' N.$, and $76^{\circ} 59'$ and $77^{\circ} 3' E.$ The approximate area was seven square miles; and the population in 1901 was 2,168. The annual revenue was Rs. 4,000 with 1,000 maunds of grain, and Rs. 180 were paid to government as tribute. The head-quarters were at Hat Kot in the middle of a plateau celebrated for its fertility and close to beautiful natural tank, which was famous for its water lilies.

The Thakurai of Ratesh lied on the right bank of the Giri river surrounded by Keonthal territory, and close to Digthali, the first camping ground from Fagu on the lower Charate road, which passed under the Chur mountain and through the Jubbal village of Sarahan. It consisted of four villages and measured not more than three square miles. The population in 1901 was 449.

The capital of the state of Bagal was Arki, a picturesque town twenty one miles from Shimla by road. The area of the state was 124 square miles, the larger part of which was in the basin of one of the tributaries of the Gambhar. This was an exceptionally fertile tract sloping from the wider mountains on the North, which guarded the Sutlej South wards into the rich valleys below Sairi and Subathu. The population of Baghal in 1901 was 25,720 or just over 200 per square miles. It was naturally more dense along the watershed valleys than in the arid uplands.

The state of Baghat was lying between $30^{\circ} 50'$ and $30^{\circ} 55'$ N., and $76^{\circ} 63'$ and $76^{\circ} 66'$ E. Earlier the capital of the state was Bhoch in the Bhochali Pargana, but it was changed to Solon after the construction of the cantonment at that place, Solon had a station on the Kalka-Shimla railway with two dak bungalows. The presence of the troops in the summer made it a thriving little town.

Baghat state was fairly well populated. The villages were small but numerous. The population in 1901 was 9,490 and the incidence was thus about 263 per square mile.

State of Jubbal lied on the right bank of the Pabar river stretching up to the high mountains on the north-west, and on the South bordering along the Chor ridge with Sirmour. On the East, was bounded by the Rawin pargana of Keonthal, the small state of Rawin, the Dehradun district, and the Taroch state. To the north was Bashahr. To the west it marched with the state of Balsan and the British tehsil of Kotkhai.

The geographical situation of Jubbal was between latitudes $30^{\circ} 46'$ and $31^{\circ} 3'$ North and longitude $77^{\circ} 28'$ and $77^{\circ} 54'$ East, and its area, 285 square miles. The population of the state in 1901 was 21, 172. This was an increase of 2,235 since 1881 but a decrease since the census of 1891 when the population was 21, 431 The density of population in the state was 74.3 per square miles. Rawin and Dhadi were the tributaries of this state.

Mangal state was on the left bank of the Sutlej between $31^{\circ} 18'$ and $31^{\circ} 22'$ N., and $76^{\circ} 55'$ and $77^{\circ} 1'$ E. It was bounded on the north by the river and on the south by Bilaspur and Baghal. It measured some 12 square miles and had a population of 1,227. Mangal was the most inaccessible of the hill states.

Beja was another small state of four square miles, lying on the western slopes of the Kasauli hill. The population in 1901 was 1, 131.

Darkoti from the point of view of size, was the smallest of the independent hill states. It was forty miles to the East of Shimla, and measured four square miles. The road from Kotkhai and to Jubbal crossed through the middle of the state.

Tarhoch with an area of 75 square miles was situated near and to the west of the Tons and Pabar rivers, and about 40 miles east of Simla. By road it was 60 miles from Simla.

Another state Sangri was on the left bank of the sutlej between $31^{\circ} 16'$ and $31^{\circ} 22'$ N., and $77^{\circ} 22'$ and $77^{\circ} 28'$ E. A river enclosed it on two sides, and it was otherwise surrounded by Kumarsain, Bhajji just touching it on the South West corner. It's area was sixteen square miles, and population was 2,774 in 1901.

1.2 History of Shimla Town

Shimla town is situated on the last traverse spur of the central Himalayas, south of the river Satluj at $31^{\circ} 4'$ North to $31^{\circ} 10'$ North latitude and $77^{\circ} 5'$ East to $77^{\circ} 15'$ longitude, at an altitude of 2130 metres above the mean sea level. In shape it has been described as an irregular crescent. It is 86 kilometers from Kalka having exquisite scenery. It is spread over an area of 9950 hectares along with it's commanding position³. The city is a unique combination of hills, spurs and valleys to the North and East; a network of mountain ranges which are crossed at a distance, by a magnificent crescent of new peaks, the mountains of Kullu and Spiti in North, the central range of the Eastern Himalayas in the east and South east. Shimla town occupies a unique place in the history of the Indian sub-continent Emerging as a nostalgic reminder of their country, for the British officers, posted in the region, the town went on to occupy the centre stage during the hey days of the Raj.

³ *Development for Shimla Planning Area* (2004). Town and Country Planning Department, Government of Himachal Pradesh, Shimla, p.6.

Barely two centuries ago the area occupied by the modern day Shimla was dense forest. Only the Jakhu temple, which has stood the test of time and a few scattered houses comprised the signs of civilisation. For a lack of contemporary history, opinion is divided even over the origin of its name. While some assert that the name is derived from a solitary house called Shamlay, others believe the name is a derivative from name of the village called Shimlah or Shumlah. A few others believe that a temple of goddess Shamli gave birth to the modern name but others assert that its original name was Shymalaya⁴. The earliest available records revealed that the area formed a part of Keonthal state at the turn of the 18th century. In 1817 it was a middling village where a fakir used to give water to travellers. According to W.H. Garrey the original village of Shimla was situated on the ground lying to the East of the present secretariat building, above the road leading to Ripon hospital, and immediately below the Roman Catholic Chapel, S. Michaels school and the court house.

Shimla town has a very interesting history of its origin, gradual growth and development. At the beginning of the nineteenth century, Shimla was taken from Jhind Rana in 1815 and given to the Patiala Raja for assistance rendered by him to the British in the Nepal war. Subsequently, it was used by the Raja for a sanatorium. It is said, that the first person who brought Shimla to notice was a British officer, who while moving Gurkha toops from Sabathu to Kotgarh in about 1816, passed through Shimla, was impressed by its cool climate. It was a dense jungle infested with wild beasts. It is however claimed by A. Wilson in his 'Abode of Snow' that the hill on which Shimla is situated was first made known by Gerad Brothers. These two scotch officers were engaged in the survey of the Sutlej Valley.⁵

⁴ Pubby, Vipin (1988). *Shimla Then and Now*, Indus Publishing Company, New Delhi, p.17.

⁵ Ibid, p.18.

The British connection with the area had its roots in battle of Kangra between the Sikhs and the Gurkhas during 1804. The Sikh army had inflicted a crushing defeat on the Gurkhas, which had forced them to retreat and take shelter in the hills. If one were to rely on accounts left by the British, the Gurkhas spread a reign of terror, 'until at length the people in their wretchedness appealed to the British for help'. Therefore the British, the record states resolved to expel the Gurkhas from the hill territories. Some historians assert that it was merely an excuse to annexe the strategic hill state. Despite of the difficulties of travelling over hilly track, the British used to visit Shimla every summer season like a flock of the faithful, to escape the scorching heat of the plains and to smoothen their home sick feelings and were considered "wise to surround themselves as far as they can, with an English atmosphere". By 1844, the number of houses in Shimla had risen to 100 as compared to 60 residences reported in 1831⁶ Rapid growth led to necessity of providing amenities and services. Some of the social institutions through a central authority promoted the municipal committee at Shimla in 1851. The committee was responsible for establishment of the town hall with a library, Gaiety theatre and Police Station. Municipal market and Fire Brigade services were also provided in the subsequent years⁷. The older, narrower track from Kalka to Shimla was improved. A new road named Grand Hindustan-Tibet Road, 58 miles in length, passing through Dharampur, Solan and Kiaree Ghat was built.

The emergence of Simla as the summer capital of the country also resulted in the acquisition of several old buildings by the government for its officers. In addition, construction of new buildings was also started. A new secretariat building, very close to the Mall was constructed on the site of Gorton Castle. In 1871, the Punjab Government also decided to

⁶ *Gazetteer of Shimla District 1888-89*, Government of Punjab, Calcutta, p.35.

⁷ *Punjab District Gazetteer, Shimla District* (1904). Vol. VIII-A, Punjab Government, Lahore, p.40.

use Shimla as its summer capital. In order to meet the water requirement of the much increased population of the town, the municipal committee installed powerful water pumps in 1901 at Churat Nallah near Sanjauli, to lift up 200,000 gallons of water⁸. In 1885 Ripon Hospital and in 1906 Walker Hospital was opened. In 1904, the Kalka-Shimla railway line was commissioned to make the town easily and comfortably accessible. Shimla by now had grown considerably, mainly extending along the entire length of ridge, the extreme ends of town were separated by a distance of six miles. Limits of the town were bounded by the states of Patiala, Keonthal and Koti on the North West, South West and North East respectively. Nursed and popularized by the Government, the elite, the traders and the tourists, the town continued to grow in importance and size and when India became independent in 1947, Shimla was one of the most important hill stations of the world. After the partition of India in 1947, many of the Punjab Government offices from Lahore in Pakistan were shifted to Shimla. In 1966, with the re-organisation of territory into Punjab, Haryana and Himachal Pradesh, Shimla became the capital of Himachal Pradesh. Since then, Shimla has flourished, as capital of the state and has continued to be an important tourist resort of India and the world.

Historically speaking the root cause of all the problems of Shimla town in the both past and present have been due to spurt of population. For example, the population of Shimla town increased from 18,245 in the year 1941 to 46,150 in the year 1951. The British rulers had sought to restrict the population of the town mainly from the security point of view in the days of rising nationalist movement and partly because they were aware, that the limited resources in Shimla would not be able to hold a large population⁹. The jump in population between 1941 to 1951 was

⁸ *Report of the Shimla Water Works Committee* (1904). Punjab Government, Shimla, p.45.

⁹ Pubby, Vipin (1988). *Shimla Now and Then*, Indus Publisher, New Delhi, p. 121.

mainly on account of refugees from Pakistan and the shifting of Punjab government offices to Shimla. However, as per 1961 population-census, population of Shimla declined to 42,597. But, with the merger of Shimla in Himachal Pradesh and after becoming the state capital, it's population has been on a continuous rise and as per 2001 Population Census it stood at 1,44,975.

1.3 Present Scenario of District Shimla

Territory

Shimla District lies between 30° 45'48"-30°43'0" North latitude and 76° 59' 22" - 78° 18' 40" East longitude¹⁰. It is bounded by Kinnaur district in the Northeast, by Kullu and Mandi districts in the Northwest, by Solan and Sirmour districts in the Southwest and by the State of Uttrakhand in the Southeast.

The total area of the present district is 5,131 Sq. Kms. It has a total number of 2,897 villages, of these 2311 villages are inhabited and the remaining are uninhabited. There are 10 Towns in the district. These include one municipal corporation (Shimla), two Municipal Committees, (Rampur, Theog), six notified area committees (Narkanda, Seoni, Chopal, Jubbal, Kotkhair, Rohru) and one cantonment Board (Jutogh).

The district comprises of 7 sub-divisions and 17 tehsils and sub tehsils. The sub-divisions are, namely Shimla (rural), Shimla (urban), Theog, Rampur, Rohru, Chopal and Dodra Kwar. The tehsils are namely Seoni, Shimla urban, Theog, Kumarsain, Rampur, Rohru, Kotkhair, Chopal, Jubbal-Cirgaon and Dodra Kwar while Junga, Nankhari, Tikkar, Chela, Nerwa are the Sub-Tehsils. For the rural development, the district has been divided into nine community development Blocks, namely

¹⁰ *District Census Handbook Shimla, 1991, Series 9, :Part XII-A,B*, Director of Census Operations, Himachal Pradesh, p. 3.

Rampur, Narkanda, Theog, Mashobra, Chopal, Jubbal-Kotkhai, Rohru, Chhohara and Basantpur.

Shimla district ranks 6th in order of area and 3rd with respect to population size, among the districts of Himachal Pradesh.

Physical Features

Except a few small valleys the district is entirely mountainous. The elevation of the district ranges from 300 to 6000 metres. The district has a number of peaks, such as Jakhoo in Shimla Town, Siah near Chail, Churadhar in tehsil Chopal, Chensal in Rohru tehsil and Hatoo in Narkanda tehsil and Shali in Seoni tehsil. Mostly the terrain is rough. The prevalence of interlocking spurs, narrow and steep sided valleys with high peaks and thick forest of Deodar and Kail throughout the district are the general topographical features of the district. On the whole, the soils are young and thin, however these get heavier and comparatively acidic with increase in altitude.

River System

Shimla district is covered by the catchment area of the rivers Sutlej, Pabbar and Giri. The district drains itself into these rivers. The Sutlej which is the principal river of the district rises from Mansarover lake in the Eastern peaks of the Himalayas. Taking its course through district Kinnaur the river enters Shimla district at Badhal in Rampur Tehsil and then takes course by touching Kumarsain tehsil and Seoni tehsil. The main Khads falling in the river are Nogli, Machhada Bhaira and Kingal khad. In addition, the Nallahs and other Khads of Khekhar, Chamola, Savera, Bagh etc. also feed the river. All the above mentioned Khads and Nallahs are perennial being snow fed and have regular flow of water throughout the year which, ensures uninterrupted discharge of river.

The Pabbar river rises from the base of Chandernahan peak in between Sangla tehsil of Kinnaur district and Rohru tehsil of Shimla district. The river takes Southeastern course and passes through tehsil Rohru, Jubbal and merges with river Tons at Tiuni in Uttrakhand. The river receives the entire drainage in these two tehsils and is fed by Shikri, Andra, Pejore and Hatkoti streams/khads.

The Giri or Giri ganga originates from the hills, north of Churdhar called Kupar. The river collects the drainage of the whole track north of Churdhar and Shimla range. It flows Southwest until meeting the lines of outer Himalayas sharply turning to the Southeast and passing through Kotkhai, Theog and Shimla tehsils. The principal feeder of Giri is Ashni which rises from Mahasu in the Shimla range and after receiving a considerable contribution from the eastern face of the hill upon which the Shimla town stands, joins the Giri at a point where, the river, turns South-East. The Giri and its tributaries also retain perpetual flow of water.

Climate

There are four broad seasons. Winter normally starts from mid November and continues till mid March. December, January and February are severe cold months, when the winter season is at its peak. The upper reaches, have snow and sleet while the rains are frequent in the lower areas and snow may fall as early as the beginning of October but usually the areas have snow fall from the later part of December and continues till mid of March. The higher peaks experience heavier snow-fall and it starts melting from March. From mid March to mid May, climate in most parts of the district is at its bloom because of the delightful spring. The nights are colder. The climate is comparatively hot from mid May to mid July. The places situated in the lower reaches on the banks of rivers and streams are, however, hot as in the plains. Rainy season generally starts from mid July and extends up to the mid

September. Autumn season is generally very small from mid September to mid November. The extended rainy season and early setting of winter are the reasons for its short duration. Due to variation in altitudes, the temperature also varies considerably. Minimum temperature in the higher reaches, goes down much below 0° C during the winter months. The maximum temperature in the lower areas, exceeds even 40° C during the summer months.

Forests

Forests play a vital role in shaping the characteristic conditions of an area. Besides, these also influence the economic and social life of the people considerably. The climatic conditions prevailing in Himachal Pradesh and varying elevations are most suitable for the growth of forests. The forests provide valuable timber, medicinal herbs, raw material for industries and also provide employment and play a vital role in conserving the soil and ensure timely rains. In district Shimla 340103 hectares of land area was under forest at the end of the year 1989-90. However, by the year 2001, the land area under forests rose to 341800 hectares. Out of this total area under forests, in the year 2001, 5347 hectares constituted reserved forests, 331051 hectares as protected forests and 5402 hectares as undemarcated forests.

In Shimla district, various important species of trees namely, Deodar, Kail, Chil, Oak, Mohru and Kharll etc. are found in the forests and the major forest produce are resin and medicinal herbs. The available resin in the district is being processed by two resin and turpentine factories at Bilaspur and Nahan. However the medicinal herbs are being exported in raw form out of the district.

The forests in the district are mainly in the track of outer Shivalik to the mid Himalayas. The soil is generally sandy loam and depth is shallow, except in the areas having vegetation over where it is fairly deep. In the regions above 1,500 metres, the soil is generally deep and contains

a thin layer, of leaf moulded species of Ban, Oak, Chil, Kail and Deodar. In the lower elevation, shrub forms are found while in the higher altitude chil. Deodar, Kail etc. are available. In the lower ranges with warmer aspects and sharp slopes, with deep soil and favourable condition, species of mixed forest, of bamboo and shrubs are found.

Flora

The district is endowed with a variety of trees, shrubs grasses and climbers. In addition to the above mentioned varieties of trees found in district Shimla, certain other varieties of trees available are Tosh, Khair, Rikhaudlu, Parong, Bul, Khanor Siris, Kunish, Chal Dahu, Neem, Karyal, Badhar, Dhak, Amaltas, Diar, Shisham, Chilru, Samana, Safeda, Barmeli Shin, Chuli, Rai Jharinu, Kaphal, Amb, Kela, Ailan, Akhrot, Beul, Ban, Kainth etc.

Certain shrubs, found in the district are, Ramban, Bassuti, Akhota, Charmar, Kashamal, Bomol, Sandroi, Ailwan, Ak, Bhang, Karunda, Relan, Kringham, Pror, Gadoos, Gangara, Reuns, Chamror, Kothla, Murt, Mehndu, Sidhara, Kathi etc.¹¹

Fauna

The district used to be a home of wild life in the distant past. However, with modernisation, growing means of transportation and communication, with coming up of large net work of roads, picking up of construction activities and due to liberal grant of fire arms and shooting licenses in the past, have literally led to virtual extinction, of some of the precious species of animals and birds. To save the wild life from extinction the government has now imposed a ban on the shooting of the animals and birds and has also developed sanctuaries, for progeny and

¹¹ *District Census Handbook Shimla, 1991, Series 9, Part 12-A,B, Director of Census Operations, Himachal Pradesh, p.3.*

breeding of the species. Certain important animals found in the district are Suar, Hiran, Khargosh, Bagh, Bhalu, Ghurral, Kakar, Chittal, Sambar etc. Certain birds found are, Bater, Ghuggi Mor, Kala Tittar, Harrial, Kabuttar, Jangle Murgi, Kolsa, Chakour etc.¹²

Mineral and Mining

Though Shimla district is not endowed with mineral resources yet certain minerals like Barytes, Pyrite, Building Stone, Dolomite, Galena, Lime Stone are found in the district. These minerals found in the district are utilized in paint industry, construction of buildings, refractory industry, pipe industry and in cement industry.

Electricity and Power

Electricity and power are the life and blood of modern process of development. The development of both agriculture and industry depends upon smooth and sufficient supply of power. Socio-economic gap between rural and urban areas can be effectively curtailed through electrification. Quality of life also directly as well as indirectly, depends upon power supply in a region. Inter-regional disparities can also be effectively checked if the smooth supply of power is provided in different regions. Before independence, electricity facilities were confined to a few places in the district, but in the post-independence era, the programme of electrification was taken on war footing by the government. Himachal Pradesh Electricity Board was created in September 1971. Three power houses namely Nogli in Rampur Tehsil, Andhara in Chirgaon Tehsil and Chaba in Seoni Tehsil are generating electricity in the district. Nathpa Jhapri with 1500 MW, a SJVNL project under joint sector, Ghanvi with

¹² Ibid, p. 15.

22.5 MW in Rampur Tehsil and Sundasu in Chirgaon are also operating in the district.

For the speedy execution of Hydel Potential in the State the government of Himachal Pradesh invited global bids for the implementation of Shalvi project of 7 MW in the district. Another project Rupin of 39 MW on Rupin/Yamuna nallah/river basin has also been identified and its feasibility is to be ascertained¹³.

For making access of electricity available to cent per cent households in the state, schemes for all the districts in Himachal Pradesh have been formulated under Rajiv Gandhi Grameen Vidyutikaran Yojana.

Land and Land use Pattern

The district is spread over deep small valleys and high elevations and cultivation is possible, only in small terraces of holdings in the high hills or in the basins of streams/khads. However, in the deep valleys though very few in number, the cultivation is spread over in a vast area. Most of the land, is either under shrub forests or greasy land with Chil, Pine trees up to the height of 1,500 metres from mean sea level and Kail, Deodar, Rai, Ban, Mauru, Rhododendrons and Kanor on the high altitude. It is only in the basins of rivers and khads that the land is little bit flat and fertile and the cultivation of cereals and pulses as well as of, off season vegetables is extensively done. Sloppy areas of high altitudes, are most suitable for horticulture purposes, especially for the growing, delicious varieties of apples and other stone fruits such as almonds, walnuts, apricots etc.

Prior to the coming of Tenancy and Land Reforms Act, there were three kinds of land tenure systems prevalent in the district and these

¹³ Official Documents of Himachal Pradesh State Electricity Board, Shimla, 2007.

were (i) Zamindari, (ii) Pattedari and (iii) Bhaichara. Zamindari system of land tenure was abolished after the introduction of Himachal Pradesh Tenancy and Land Reforms Act and most of the cultivators who were tenants of the landlords for generations became the owners of the land except in case of holdings of those land lords who are minors, widows, disabled and service personnel.

Land holding in the hilly terrains, of the district are small in size, scattered and fragmented and comprise terraced fields, in major part of the cultivable area. With a view to do away, with uneconomical land holdings, the Government of Himachal Pradesh has taken certain steps for the consolidation of holdings, under the Consolidation of Holding Act. Under this Act, bulk of the uneconomic holdings have been done away.¹⁴

Agriculture

Agriculture is the primary occupation of the people in the district. The different types of soil and agro-climate conditions are quite suitable for growing varied types of cereals, off season vegetables, temperate and stone fruits and other cash crops in the district. Whereas, climate in the lower elevations is quite hot, in the higher ones it is quite cold. As a result, whereas lower elevations, are suitable for the production of cereal crops, stone and citrus fruits, places in higher elevations, are most suitable for the growing of seed potatoes, off season vegetables and temperate fruits.

The district can be divided into three broad regions from the point of view, of agriculture production. These are (i) Valleys and basin areas (ii) mid hills and (iii) high hills. The low lying areas of Rampur, Seoni, Kumarsain, Jubbal and Kotkhai, Chopal, Mashobra, Theog and Rohru tehsils, are particularly suitable for the cultivation of cereal crops. In the mid hill areas of these areas/blocks, the scope to produce vegetables,

¹⁴ *District Census Handbook Shimla, 1991, Series 9, Part XII, A & B Census of India, Director of Census Operation, H.P., p.16.*

fruits and cereals is immense. The higher elevations of these blocks are suitable, for growing apples, cherry, seed potatoes, almonds and walnuts, paddy, wheat, maize, millets and pulses. Number of vegetables i.e. potatoes, peas, cauliflower are also grown in the district. Growing of, off season vegetables, has become quite popular among the farmer in the district. Central Potato Research Institute which has a Potato research station in Kufri and Potato farms functioning in Shillaru, Kharapathar, Khadralla and Dhurla has indeed helped the farmers to acquire the modern knowhow and latest modern techniques of cultivating seed potatoes in a big way. Another land mark made in agriculture sector, in District Shimla is Mushroom cultivation. It's production is also, expected to grow in the near future.

Horticulture

The credit of apple revolution in district Shimla goes to an American missionary, Samuel Strokes (Satyanand Strokes) for starting apple cultivation in Kotgarh. Apple production has proved to be a major instrument in changing the economic lot of the masses, in the district. One third, of total fruit production, of the state is coming from district Shimla alone. Nearly fifty per cent of total apple crop of the state is produced by district Shimla. Royal Delicious, Rich-a-Red, Red Delicious and Golden Delicious are the main commercial varieties of apple produced in the district.

With a view, to promote fruit production on modern scientific lines, two fruit research stations, one at Mashobra and the other at Kotkhai, are functioning in the district. Further there are 17 progeny orchards, 31 plant protection centres, 2 garden colonies, 1 community colony and 6 grading and packaging houses, working in the district. With a view, to provide all required essential infrastructure, to fruits production, government has set up four cold storage centres i.e. at Oddi, Jarol

Tikkar, Rohru and Gumma, each with a capacity of one thousand tonnes. There is one canning unit also in the district.

Bee Keeping

Bees are very important in the context of apple production. They help in pollination of apple crop for setting of fruits. District Shimla has all the required flora for the bees, for the extraction of honey. In Kotkhai, there is one Ag-Mark laboratory, engaged in processing and packaging of honey under Ag-Mark label. There are, seven bee keeping stations also functioning in the district. These bee keeping stations, are in Sawra, Nerva, Dodakwar, Hatkoti, Annu, Gauna and Shimla. There are more than 60 commercial private units and more than 500 small private, bee keeping, units functioning in the district.

Animal Husbandry

Live stock, is an integral part of the economy of the district. In view of peculiar difficult geographical features of the district, live stock is indispensable in day today functioning. Farmers are depending so much on livestock that it will not be an exaggeration if it is said that livestock growth is complementary to agriculture/horticulture development in the district. In rural areas, of the district, every farmer is keeping cows and buffaloes or sheep or goats. Even pigs are also kept, by the households. Though, the district is having large number, of livestock but their quality is generally poor. Most of the cows, in the district are of local variety and hence their yield, is also very low. The state government, from time to time, also started certain schemes, for the improvement in the genetical make-up of the cows. Cross breeding of Jersey and Holstein breed cows, marino and rebuilt in sheep and white leg horn and rhode island red birds in poultry were introduced. Number of veterinary hospitals, dispensaries, outlying dispensaries artificial insemination centres, are also functioning in the district, with a view to prevent common ailments

and control of infectious diseases, in the livestock. For improving, the quality of sheep and wool, Government Sheep Breeding farm at Jeori is supplying, improved sheep to the breeders of the district.

Fishery

Fishing in the district is regulated under Himachal Pradesh. Fisheries Act, 1976. Sutlej and tributaries of Yamuna i.e. Giri, Pabber Tons, Ashani and Shalvi, which have more than 400 kms of total length for fishing, are known for Turputitora, Salmotrulta, Schyzpthorax, Fasio Salmo, Gairdineri, Gairedinerri Bagarius and weedy fishes. Fast flowing, cold water, in different rivers and khuds is quite suitable for tropical species of fish in the district.

Places of tourists interests and Social and Cultural Events

District Shimla, being the tourist hub, of the state has many places of historical, archaeological and religious importance. Apart from Shimla town, Kufri, Naldehra, Narkanda, Rohru, Hatkoti, Kotgarh, Rampur, Sarahan are the main centres, of tourist interest, in the district. Recently, the district has also come up, on the map of winter sports. Shimla is the only place in Asia, which has the privilege of having a natural Ice-skating rink of it's kind. Winter sports festival, is organized in Kufri and Narkanda during the winter months. Water sports, are also becoming, quite popular in the district.

District Shimla, is also known for a number of fairs and festivals. People of the district are simple, religious and God fearing, thus number of fairs, are also held in the honour of gods and goddesses and local devtas. Lavi fair of Rampur, which has acquired the status of international fair, is the most important and popular fair of the district. Large number of traders come all the way from other states to Rampur to buy woollen articles, dry fruits and medicinal herbs. Certain other fairs held in the district are Sippi fair of Mashobra, Barara fair of Kumarsain, Bhoj fair organized in village Guman in Rohru Tehsil, Charyoli fair held

in village Bodna in Chopal tehsil, Chunehar fair of Theog tehsil, Dudhbahali fair of Rampur tehsil. In addition, Jagna Shari fair of tehsil Jubbal, Mahasu Jatar (Mahasu Village), Pathar-ka-khel fair (of Halog), Rampur-k-Jatar (village Rampuri), Rihali Fair (Seoni tehsil), Rohru Fair, Sarahan Fair and Shancha fair (Village Baragaon) also take place in the district¹⁵. These fairs provide not only a good platform of social and cultural intergration, but also provide a big boost to economic activity. Through, folk songs and folk dances, efforts are made to appease, the local deities in these fairs.

Industries

The economic status, of a region to a large extent, is known through the level of its industrialisation. However, on account of difficult geographical terrain and topography of the district, the chances to set up modern, medium and large scale industries are quite limited, in the district. Therefore, the only way out, to industrialise district Shimla, is through the setting up of cottage and small scale industries. The district is having, varied type of local raw materials, like wool, juices, fruits and wood, which, if processed on modern lines, can give a big boost, to industrial set up of the district. Above all, the cool and dust free climate of the district is also quite congenial for the growth of electronic industry in the district. There is already, one electronic complex operating in Shoghi, near Shimla Town

Atta chakki, cotton carding, thresher, fruit canning preservation, bakery, oil expeller etc. are the main agro-based industries operating in the district. Earlier, wooden packaging cases, was the main wood based industry, operating in the district, but with the replacement of wooden boxes by cartels, this industry has lost, its importance. However, wooden furniture, toys, sticks, joinery are still, some of the wood based, industries operating in the district.

¹⁵ *District Census Handbook Shimla, 1991, Series 9, Part XII, A & B Census of India, Director of Census Operation H.P., p. 20.*

Stone crusher and earthen pottery are the main mineral based industries of the district. There are number of textile based units also which are engaged in the manufacturing of hosiery products, patties, Shawls, chaddars, fancy handicraft etc. Further, there are some engineering, chemical and electronic based, units also operating in the district. Some of the engineering units, are producing barbed wire, wire nails, tinsmithy products, steel fabrications, steel furniture, auto repairs and sewing machine, assembling etc.

Laundry soap, detergent, bread wrapper, ink, candles, tyre retreading are some of the chemical based units set up in the district. Electronic based, products being produced in the district, are video cassettes, televisions, voltage stablizers TV/radio repairs and intercom etc.

The percentage share of district Shimla (as per the report of the Third All India Census of Small Scale Industrial Units for Himachal Pradesh), with respect to total fixed investment, investment in plant and machinery and in total production, made by registered modern small scale industrial units in the state, increased marginally in the year 2001-2002 as compared to in the year 1987-88 (Table-1.1).

Table-1.1

Percentage Share of District Shimla in Registered Modern Small Scale Industrial Units in the State

	1987-88 (%)	2001-02 (%)
Share in No. of units	14.08	10.61
Share in fixed investment	5.74	6.84
Share in investment in Plant and machinery	4.93	5.55
Share in total Production	4.67	5.82

Source: Data compiled on the basis of (1) Report of the Second All India Census of Small Scale Industrial Units 1987-88 and; (2) Report of the Third All India Census of Small Scale Industrial Units 2001-02 for Himachal Pradesh, published by Development Commissioner Small Scale Industries, Government of India, New Delhi 2001.

As per information collected from Industries Department of Himachal Pradesh, out of total investment made by SSI's and by SSI's, medium and large scale units taken together in the state, 6.43 per cent and 2.53 per cent of investment was respectively deployed in district Shimla in the year 2001 (Table 1.2).

Table-1.2
Percentage Share of District Shimla in Total Investment and Employment Provided by Small and Small, Medium & Large Scale Industries (taken together) in Himachal Pradesh

	2001 (%)	2004(%)
Investment in small Scale industry	6.43	6.14
Investment in SSI's and medium and large unit	2.53	2.50
Employment in Small Scale Industries	7.96	7.88
Employment in SSI's & medium and large units	6.79	6.74

Source: Official Records, Directorate of Industries, Himachal Pradesh, 2006.

In the year 2004, the percentage share of investment in S.S.I.'s and S.S.I.'s and medium and large unit taken together in district Shimla declined respectively to 6.14 per cent and 2.50 per cent. However, as compared to the district's share in total investment, it's share in total employment, provided by SSI's and by SSI's and medium the large scale industrial units taken together comes out to be marginally more. In the year 2001, out of total employment provided by S.S.I.'s and S.S.I.'s and medium and large taken together, the share of district Shimla stood respectively at 7.96 per cent and 6.79 per cent. However in the year, 2004 the percentage share of district Shimla in total employment provided by SSI's and by SSI's, medium and large scale units taken together in the state declined marginally over the year 2001.

Table 1.3
Investment and Employment Per Unit in SSI's and in Small, Medium and Large Scale Industries Taken Together in District Shimla

	Investment per Unit in lacs				Employment per Unit (number)			
	Small Scale Industries		Small Medium and Large Scale Industries		Small Scale Industries		Small Medium and Large Scale Industries	
Year	2001	2004	2001	2004	2001	2004	2001	2004
Shimla	1.56	1.59	2.82	2.75	3.69	3.67	3.89	3.86
Himachal Pradesh	2.03	2.20	9.87	9.65	4.04	4.1	4.94	4.96

Source: Data compiled on the basis of official records, Directorate of Industries Himachal Pradesh, 2006.

An examination, of industrial set up, in district Shimla revealed, further that both investment per unit and employment per unit (both in SSI's and in Small and Medium and large scale units taken together) is quite low in the district vis-à-vis the state as a whole (Table 1.3). Whereas, investment per unit, in a SSI marginally moved up from Rs. 1.56 lacs in the year 2001 to Rs. 1.59 lacs in the year 2004, employment per SSI unit marginally declined from 3.69 to 3.67 during the same period. As far as employment per unit is concerned, whereas in small scale units it has marginally moved up, in small, medium and large scale units taken together it has declined in the year, 2004 over the year 2001.

1.4 Population

Shimla district returned a population of 7,22,502 as per 2001 census, as against a population of 2,30,144 persons recorded by 1901 Census (Table 1.4) District Shimla recorded an overall increase of 213 per cent in population during the past one century.

Table-1.4
Decadal Variation in Population in District Shimla
Since the Year 1901

Year	Person	Males	Females	Percentage decadal Variation of person
1901	230144	124215	105929	-
1911	223701	118953	104748	-2.80
1921	228138	123854	104284	1.98
1931	238280	126374	111906	4.45
1941	259656	139095	120561	8.97
1951	286111	152608	133503	10.19
1961	341461	184413	157048	19.35
1971	419844	224631	195213	22.96
1981	510932	272126	238806	21.70
1991	617404	325897	291507	20.84
2001	722502	380996	341506	17.02

Source: (1) District Census Hand book Shimla Series-9 Part-XII – A&B Census of India, 1991, Director of census operation of Himachal Pradesh.

(2) Primary Census Abstract series-III, H.P. Census of India, 2001, Director of census operation of Himachal Pradesh.

A decennial analysis, of growth of population in district Shimla revealed that population recorded a positive growth, in each decade, except the decade 1901 to 1911. Population, recorded a modest rate of growth during the decades 1911 to 1941. However, during the decade 1961 to 1971 the rate of growth of population stood at 22.96 per cent. In the subsequent decades, the population growth took a mild dip. In contrast to 20.84 per cent rate of growth recorded, during the decade 1981-1991, population recorded only 17.02 per cent increase in district Shimla during the last decade (1991 to 2001) **In contrast to, 207**

per cent increase in male population during the last century, female population recorded marginally higher i.e. 222 per cent increase in district Shimla.

Table 1.5 shows block-wise distribution of population during the years 1991 and 2001 and the percentage decadal variation. Rampur block (20.72%) followed by, Chhohara (19.35%) and Rohru (18.83%) recorded highest decadal variation in populations during the period 1991 to 2001. On the contrary, Narkanda (1.79%), followed by Jubbal-Kotkhai (3.73%) and Mashobra (5.20%) registered lowest decadal variation.

As far as, male population is concerned, it also recorded highest increase in Rampur block (22.03%). It was followed by Rohru (20.42%) and Chhohara block (19.67%). **Male population recorded a negative increase in Narkanda block, recording a fall in number of males from 20763 in the year 1991 to 20713 in the year 2001.** Otherwise, male population recorded lowest rate of increase in Jubbal-Kotkhai (1.34%), followed by Mashobra (7.23%) and Chopal block (12.22%) in district Shimla. Female population also recorded highest decadal increase in Rampur block (19.29%), closely chased by Chhohara (19.02%) and Chopal block (16.83%).

Table-1.5
Block-Wise Distribution of Population in District Shimla in the Years 1991 and 2001

Year	Persons					Males					Female				
	1991		2001		%decade variation	1991		2001		% decade variation	1991		2001		% decades Variation
	Number	% to total	Number	% to total		Number	% to total	Numbers	% to total		Number	% to total	Numbers	% to total	
Rampur	80501	13.03	97180	13.45	20.72	42033	12.89	51293	13.46	22.03	38468	13.19	45887	13.43	19.29
Narkanda	39861	6.45	40577	5.61	1.79	20763	6.37	20713	5.43	0.002	19098	6.55	19864	5.81	4.01
Theog	68738	11.13	76957	10.65	11.96	35150	10.78	39948	10.48	13.65	33588	11.52	38006	11.12	13.15
Mashobra	209278	33.89	220111	30.46	5.20	114170	35.03	122433	32.13	7.23	95108	32.62	97678	28.60	2.63
Chopal	66262	10.73	76410	10.57	15.31	34511	10.58	39314	10.31	12.22	31751	10.89	37096	10.86	16.83
Jubbals - Kotkhai	65272	10.57	67805	9.38	3.73	34430	10.56	34890	9.15	1.34	30845	10.58	32914	9.63	6.71
Rohru	48370	7.83	57477	7.95	18.83	24852	7.62	29928	7.85	20.42	23518	8.06	27549	8.06	17.14
Chhohara	37851	6.13	45177	6.25	19.35	19351	5.93	23158	6.07	19.67	18500	6.34	22019	6.44	19.02
Basantpur	-	-	39812	5.51	-	-	-	19319	5.07	-	-	-	20493	6.00	-
District Shimla	617404	100	722502	100	17.02	325897	100	380996	100	16.89	291507	100	341506	100	17.15

Source : As per Table-1.4

Note : Basantpur was not a block in the year 1991. The population of Basantpur Block was reported for the first time in the year 2001 only.

Out of all blocks, it is Mashobra followed by Rampur block, where the highest percentage of population of the district is located. In the year 1991 and 2001, these two blocks together accounted for 47.7 per cent and 44 per cent of total population of the district respectively. Whereas, the percentage share of males living in these two blocks declined from 47.92 per cent in 1991 to 45.59 per cent in the year 2001, that of females declined from 45.81 per cent to 42.03 per cent during, the same period. On the other extreme, the other two blocks i.e. Chhohara and Narkanda together accounted for, only as little as, 12.58 per cent and 11.86 per cent, of total population of the district respectively in the years 1991 and 2001. **In these two blocks, in the year 1991, 12.30 per cent of males and 14.89 per cent females of the district were living, but in the year, 2001 the percentage share, of males and females declined respectively to 11.5 per cent and 12.25 per cent.**

As far as rural population in district Shimla, is concerned, it increased from 4,91,272 in the year 1991 to 5,55,269 in the year 2001 (Table 1.6). **Whereas in the year, 1991, 79.57 per cent of total population, lived in rural areas in the district, in the year 2001 this figure declined to 76.85 per cent. As against it, the corresponding figures for the state as a whole stood at 91.31 per cent and 90.20 per cent respectively, during the years 1991 and 2001.**

In absolute terms, rural population recorded, highest rate of increase, in Rampur block (20.18%), closely chased by Chhohara (19.35%) and Chopal block (14.90%). **On the other extreme, in Mashobra block, the rural population declined from 98,918 in the year 1991 to 75,136 in the 2001, thus registering (24.04%) a negative rate of increase in the block.** In Narkanda (1.76%) and Jubbal-Kotkhai (3.67%) also rural population recorded a very nominal increase. Another observation made was that in Rampur, Theog, Rohru and Chhohara blocks, male rural population recorded higher decadal growth and in the remaining blocks female rural population witnessed higher decadal variation. **In Mashobra block, though both male and female rural population declined, but female population witnessed higher rate of decline (26.58%) than males (21.61%).**

Table-1.6

Block- Wise Rural Population in District Shimla in the Years 1991 and 2001

Years	Persons				%decadal variation	Males				%decadal variation	Female				%decadal variation
	1991		2001			1991		2001			1991		2001		
Blocks	Number	% to total	Number	% to total	Number	% to total	Number	% to total	Number	% to total	Number	% to total	Number	% to total	
Rampur	76159	15.50	91527	16.48	20.18	39339	15.56	47988	16.82	21.98	36820	15.44	43539	16.12	19.71
Narkanda	39174	7.97	39864	7.17	1.76	20312	8.03	20267	7.10	-0.22	18862	7.91	19597	7.25	3.89
Theog	65981	13.43	74200	13.36	12.46	33522	13.26	37816	13.25	-12.81	32459	13.61	36384	13.47	12.09
Mashobra	98918	20.13	75136	13.53	-24.04	50509	19.90	39593	13.88	-21.61	48409	20.30	35543	13.16	-26.58
Chopal	65188	13.27	74903	13.48	-14.90	33811	13.37	38435	13.47	13.68	31377	13.16	36468	13.50	16.22
Jubbal - Kotkhai	62997	12.82	65309	11.76	3.67	33090	13.09	33436	11.71	1.04	29907	12.54	31873	11.80	6.57
Rohru	45004	9.16	50870	9.16	13.03	22877	10.23	26057	9.13	13.90	22127	9.27	24813	9.19	12.14
Chhohara	37851	7.70	45177	8.13	19.35	19351	7.65	23158	8.12	19.67	18500	7.75	22019	8.15	19.02
Basantpur	-	-	38283	6.89	-	-	-	18555	6.50	-	-	-	19728	7.30	-
District Shimla	491272		555269		-	252811		285305		12.85	238461		269964		13.21
Rural Population to Total Population in the district (in %)		79.57		76.85			77.57		74.88			81.80		79.05	

Source: As per Table-1.4.

As far as, distribution of rural population, among different blocks is concerned, it is observed, that in Mashobra block, the rural population has declined, by a big margin. Whereas, in the year 1991, 20.13 per cent of total rural population of the district was located in Mashobra block, in the year 2001, it's share declined to 13.53 per cent. In addition, percentage share of Narkanda, Theog and Jubbal-Kotkhai, in total rural population of the district, also, declined marginally, in the year 2001, vis-a-vis 1991. On the contrary, in Rampur and Chhohara block the percentage share of rural population has marginally increased, during the period under context.

It is observed further, that whereas out of total male rural population, the percentage Share of Rampur, Chopal, and Chhohara increased in the year 2001 vis-a-vis 1991, that of Mashobra, Jubbal-Kotkhai, Narkanda, Rohru and Theog declined. As far as female population is concerned, it was only in Rampur, Chopal and Chhohara that their percentage share in the rural areas increased further in the year 2001.

Urban population in district Shimla stood at 1,26,132 in the year 1991 and rose to 1,67,233 in the year 2001 (Table 1.7), recording 32.58 per cent rate of increase. In the year 1991, 20.42 per cent of total population of the district lived in urban areas, but in year 2001 this figure rose to 23.14 per cent.

Table-1.7
Urban Population of District Shimla in the Years 1991 and 2001

Year	Persons					Males					Female				
	1991		2001		%decadal variation	1991		2001		%decadal variation	1991		2001		%decadal Variation
Urban Area	Number	% to total	Number	% to total		Number	% to total	Number	% to total		Number	% to total	Number	% to total	
Chopal (N.A.C)	1074	0.85	1507	0.90	40.31	700	0.95	879	0.92	25.67	374	0.70	628	0.87	67.91
Jubbal (N.A.C)	1379	1.09	1347	0.80	-2.32	805	1.10	792	0.83	-1.61	574	1.08	554	0.77	-3.48
Kotkhai (N.A.C)	896	0.71	1149	0.68	28.24	532	0.73	662	0.69	24.44	364	0.68	487	0.68	33.79
Narkanda (N.A.C)	687	0.54	713	0.43	3.78	451	0.61	446	0.46	-1.11	236	0.44	267	0.37	13.13
Rampur (M.C)	4342	3.44	5653	3.38	30.19	2694	3.68	3305	3.45	22.68	1648	1.22	2348	3.28	42.47
Rohru (N.A.C.)	3366	2.67	6607	3.95	81.97	1975	2.70	3871	4.04	96	1391	2.62	2736	3.82	96.69
Seoni (N.A.C)	1271	1.01	1529	0.91	20.30	640	0.87	764	0.79	19.37	631	1.18	765	1.06	21.24
Shimla (U.A)	110360	87.49	144975	86.69	31.36	63661	87.10	82840	86.57	30.13	46699	88.03	62135	86.85	33.05
(a) Shimla (M.C & O.G)	102,186	92.59	142555	98.33	39.50	58874	80.55	81186	98.00	37.89	43312	92.74	61369	98.76	41.69
(b) Jutogh (C.B & O.G)	5827	5.27	2420	1.67	-58.46	3323	5.69	1654	1.99	-50.22	2504	5.78	766	1.23	-69.40
(c) Dhali (N.A.C)	2347	2.12	-	-	-	1464	2.48	-	-	-	883	1.89	-	-	-
Theog (M.C.)	2757	2.18	3754	2.24	36.16	1628	2.22	2132	2.22	30.96	1129	2.12	1622	2.26	43.67
District Shimla	126132	100	167233	100	32.58	73086	100	95691	100	30.93	53046	100	71542	100	34.87
Urban Population to total to population in the district (%)		20.42		23.14			22.42		25.11			18.19		20.94	

Source: As per Table-1.4.

Note: Dhali reported urban population only in 1991 Population Census.

Urban population, recorded highest, decadal variation in Rohru i.e. 81.97 per cent. In Rohru, urban population, increased from 3366 in the year 1991, to 6607 in the year 2001. The second town, which, recorded highest rate of increase, in urban population was Chopal. Here the urban population increased from 1074 in the year 1991 to 1507 in the year 2001. **However, in Jutogh and Jubbal, urban population recorded a net absolute fall in the year 2001 as compared to the year 1991, by 58.46 and 2.32 per cent respectively. Here both, male and female population declined in the year 2001 over the year 1991, but the latter, declined at a faster rate. In all the remaining urban centers, female population recorded higher rate of decadal increase than male population.**

An important, observation made is that 87.49 per cent in 1991 and 86.69 per cent of total urban population, of district Shimla in the year 2001, lived, within the limits, of Municipal Corporation Shimla. Meaning thereby that it was only 12.51 per cent of total urban populations in the year 1991 and 13.31 per cent in the year 2001 that lived in the towns, other than Shimla (urban) in the district. In fact, it was only in Chopal (NAC) and Rohru (NAC) that the percentage share of urban population to total district urban population marginally improved in 2001 as against the year 1991. **Despite the fact, that as compared to urban males (30.93%), urban females (34.87%) recorded higher increase, yet there continued to live less of females (20.94%) than males (25.11%) in the urban areas in district Shimla (Table 1.7).**

Thus in district Shimla as a whole, the trend of urbanisation was similar to that of the state and country as a whole, but it was mainly due to Shimla urban.

Further, scheduled caste constituted about 26.1 per cent and scheduled tribes about one per cent of total population in Shimla district as per 2001 Population Census.

Table 1.8
Density of Population in District Shimla 2001

Block	Population Density Per Sq. Km.
Mashobra	493
Basantpur	164
Theog	103
Narkanda	175
Rampur	151
Jubbal-Kotkhai	89
Chhohara	191
Rohru	130
Chopal	133
District Shimla	170
CV (%)	63.71

Source : As per table 1.4.

In district Shima as per 2001 Population Census, on an average 170 persons are living per sqr. km. (Table 1.8). Mashobra (493), followed by Rohru (191), Narkanda (175) and Jubbal-Kotkhai (151) registered highest density of population per sqr. km. On the contrary, Chhohara (89), Rampur (103), Chopal (130) and Basantpur (133) recorded lowest pressure of population

on land. As indicated by the value of co-efficient of variation, there are large inter-block disparities (63.71%) with respect to density of population in the district.

Sex-Ratio

In Table 1.9 sex ratio i.e. number of females per 1,000 males since the year 1901 in district Shimla is exhibited. In the year 1901, sex ratio was 853. As per 1931 population census, it increased to 886, and since then it was only in the year 1991, that it crossed this figure. In the year 1991, it stood at 894. However, as per 2001 census, this figure has marginally improved to 896, but this sex ratio is much lower when

placed against the sex ratio of 970 for the state and 933 for the country as a whole. **Surprisingly, Shimla district has shown adverse sex ratio right from the year 1901 and situation doesn't seem to have improved much with passage of time.**

Table 1.9

Overall Sex-Ratio in District Shimla Since the Year, 1901

Year	Females per 000 males
1901	853
1911	881
1921	842
1931	886
1941	867
1951	875
1961	852
1971	869
1981	878
1991	894
2001	896

Source: As per Table-1.4

With a view to have a deep insight of sex ratio in district Shimla, both overall sex-ratio (Table. 1.10) and sex-ratio in the age group of 0-6 years (Table. 1.11) is discussed here. Further, in order to understand the picture of sex ratio in a more detailed way, it has been studied separately for rural and urban areas.

Table-1.10
Block- Wise Overall Sex-Ratio in District Shimla as Per 2001 Population Census

Block	Overall Sex-Ratio	Sex- Ratio in Urban Areas	Sex-Ratio in Rural Areas	Sex-Ratio in SC Group	Sex-Ratio in ST Group	Sex -Ratio of SC in Rural Areas	Sex-Ratio of SC in Urban Areas	Sex-Ratio of ST in Rural Areas	Sex-Ratio of ST in Urban Areas
Mashobra	798	750	898	871	743	966	788	776	737
Basantpur	1060	1001	1063	1014	1055	1016	963	1308	400
Theog	951	761	962	957	500	962	801	555	364
Narkanda	959	599	967	978	333	981	617	214	928
Rampur	894	710	907	959	913	964	836	916	901
Jubbal – Kotkhai	943	716	953	990	454	996	856	411	1000
Chhohara	951	-	951	963	375	963	-	375	-
Rohru	920	796	952	957	806	967	805	839	636
Chopal	943	942	949	938	953	941	792	953	-
Distt. Shimla	896	832	946	943	778	969	794	803	755

Source : As per Table 1.7.

Note: (1) In Chhohara block, there is no urban area.

(2) In Chopal block, there was no ST population in urban areas.

Table-1.11
Block-Wise Sex-Ratio in 0-6 Age Group in District Shimla as Per 2001
Population Census

Blocks	Over all 0-6 Sex Ratio	Sex- Ratio in Urban Areas	Sex- Ratio in Rural Areas	Sex- Ratio in SC Group	Sex- Ratio in ST Group	Sex-Ratio of SC in Rural Areas	Sex-Ratio of SC in urban Areas	Sex-Ratio of ST in Rural Areas	Sex Ratio of ST in Urban Areas
Mashobra	890	831	985	1062	666	1059	862	667	636
Basantpur	987	880	992	986	500	1082	1076	1000	*
Theog	948	841	954	906	1000	909	775	1000	1000
Narkanda	892	963	890	950	1000	950	1000	2000	1500
Rampur	914	834	918	951	959	943	1312	951	100
Jubbal & Kotkhai	936	852	939	1010	833	1018	800	500	**
Chhohara	993	-	994	951	333	951	-	333	-
Rohru	901	796	918	918	545	928	763	444	1000
Chopal	975	942	976	1017	1000	988	1368	1000	-
Distt. Shimla	929	832	953	966	770	978	877	809	726

Source : As per Table 1.7.

Note : * Denotes only one ST boy and no ST girl in the block.

** Denotes two ST girls and no ST boy in the block.

ST population was exceptionally low in most of the blocks, so sex ratio w.r.t. ST group can't be taken as conclusive.

Sex-ratio for SC and ST group is also separately analysed both in rural and urban areas in the concerned blocks. As compared to overall sex-ratio (896), sex-ratio in the age group of 0-6 years (929) on an average, stands on a better footing in district Shimla as per 2001 Population Census. Among different blocks, overall sex ratio stood highest in Basantpur block (1060) followed by Chhohara block (951). On the contrary, it was lowest in Mashobra (798) and Rampur block (894). **In fact sex-ratio in the age group of 0-6 years turned out, to be better than overall sex-ratio in Mashobra, Rampur, Chhohara and Chopal. In rest of the blocks, overall sex-ratio stood better than sex-ratio in the age group of 0-6 years.**

In all the blocks, in rural areas, overall sex-ratio stood, higher than in urban areas. Probably, in urban areas, the access of the masses to pregnancy tests are more, therefore the malpractice of abortions, could also be more or it could be that in urban areas, people being more materialistic, go for small families and thus their preference for a male child becomes a cause of female foeticides.

It is observed, further, that in all the blocks as compared, to over all sex-ratio, sex-ratio in SC group stood higher, except in Basantpur block. In Basantpur, Overall sex ratio in SC group stood at 1014 as against 1060 for the overall population. In case of SC population also, just like in overall population, in rural areas (in all blocks) sex ratio turned out to be better vis-a-vis the urban areas. However an analysis of sex ratio in ST group remains inconclusive in view of exceptionally low population figures of ST in some of the blocks in district Shimla.

Sex ratio in the age group of 0-6 years also turned out to be better in rural areas (Table-1.11) than in urban areas in all the blocks of district Shimla. The only exception was Narkanda block. In this block, sex-ratio in 0-6 age group in urban areas stood at 963 as against 890 in the rural areas as per 2001 Population Census.

1.5 Work Participation

Work participation rate is an important indicator of economic and social advancement of an economy. Here in this context, female work

participation rate is all the more important factor indicating better gender status in an economy. As economic and social advancement, takes place, female participation in work also goes up. However, it needs to be clarified here that higher economic status of the family at times may even dissuade females to go for work also. But otherwise by and large it is a common notion that higher female work participation rate is a healthy sign from gender equality point of view.

As far as women's participation in work in an agricultural based hill district like Shimla is concerned, it varies greatly from cultivation of cereal to cultivation of vegetables, to fruit crops. A rural women works between 8-10 hours per day in agriculture and household activities¹⁶. The work load is more on the females in vegetable based farming system of mid hill zone followed by mixed farming system of low hills and the fruit based farming system of high hill zone. The female participation is higher in animal husbandry followed by crop production activities¹⁷.

In district Shimla overall work participation rate as per 2001 population census turned out to be 51.24 per cent, with highest 64.60 per cent in Basantpur and lowest i.e. 32.19 per cent in Rohru block (Table 1.12). In all the blocks male work participation stood more vis-a-vis female work participation rate.

Whereas on an average female work participation rate stood at 44.24 per cent in District Shimla, male work participation rate turned out to be 57.51 per cent. In Mashobra, female and male work participation rate stood at 26.43 per cent and 56.38 per cent respectively, recording, the highest difference, of 29.95 points. But, in some other blocks, for example in Basantpur, these values stood as close as 61.83 per cent (FWPR) and 62.43 per cent (MWPR). In Chhohara also, the absolute difference between male and female work participation rate, stood, as little as, 2.98 per cent. Otherwise, in the district as a whole, the gender gap, in overall work participation rate, stood at 13.27 per cent.

¹⁶ Meenakshi and Ranveer Singh (1995). *Role of Women in Different Systems of Hill Farming, A Study of H.P.*, Agro-Economic Research Centre, H.P. University, Shimla (Mimeo) p.5.

¹⁷ Ibid, p.8.

Table- 1.12**Work Participation Rate and Gender-Gap in Work Participation in Various Blocks in Shimla District in the year 2001****(in percentage)**

	Mashobra	Theog	Rampur	Narkanda	Jubbal & Kotkhai	Chhohar a	Rohru	Chopal	Basantpur	Average	Co-efficient of Variation
Overall WPR	43.09	58.59	55.39	58.84	54.72	52.69	32.19	44.83	64.6	51.24	18.15
Overall FWPR	26.43	56.69	50.46	55.89	50.49	52.95	51.75	38.81	61.83	44.24	20.82
Overall MWPR	56.38	60.39	59.8	62.38	58.7	55.93	56.89	50.52	62.43	57.51	6.09
Overall Rural WPR	48.24	57.02	50.64	51.64	52.02	43.89	53.24	49.34	54.5	54.52	7.26
Overall Rural FWPR	44.89	58.65	52.48	55.65	51.72	39.27	55.87	52.95	63.04	51.79	12.7
Overall Rural MWPR	52.22	55.38	50.2	47.67	53.76	49.21	51.87	46.82	46.57	58.2	7.5
Overall Urban WPR	38.42	38.39	37.74	50.77	41.04	-	36.84	39.48	42.97	38.47	36.85
Overall Urban FWPR	15.88	12.88	13.11	17.98	12.96	-	14.44	12.26	30.45	15.75	50.72
Overall Urban MWPR	55.32	57.59	55.24	70.4	61.14	-	52.67	58.93	55.49	55.46	36.4
Gender gap in Overall WPR	29.95	3.7	9.34	6.49	8.21	2.98	5.14	11.71	0.6	13.27	90.91
Gender gap in Rural WPR	7.33	3.27	2.28	7.98	2.04	9.94	4	6.13	16.47	6.41	65.7
Gender Gap in Urban WPR	39.44	44.71	42.13	52.42	48.18	-	38.23	46.67	25.04	39.71	40.23
Gap in overall Rural-Urban WPR	9.82	18.63	12.9	0.87	10.98	-	16.4	0.86	11.53	16.05	70.51
Gap in overall rural-urban FWPR	29.01	45.72	39.37	37.67	38.76	-	41.43	40.69	32.59	36.04	37.68

Source: Compiled on the basis of data provided in Primary Census Series, 3 H.P. Census of India 2001 Director of Census operations H.P.

Note : WPR Stands for work participation rate, FWPR stands for female work participation rate and MWPR stands for male work participation rate.

Another important observation is that in all the blocks, rural work participation rate, stood more than urban work participation rate. In district Shimla, in contrast to 54.52 per cent rural work participation rate, the overall urban work participation rate stood at just 15.75 per cent. In Theog block (18.63%), followed by Rohru block (16.40%), the percentage difference, between rural and urban work participation rate, turned out to be highest. On the other extreme, in Chopal (0.86%), followed by Narkanda block (0.87%), gap in overall rural-urban work participation rate stood lowest. **Though, within the rural areas there is very little gender gap in work participation rate (6.41% for District Shimla) but in contrast this gap is quite substantial (39.71 per cent) in urban areas.**

Gender gap in rural work participation rate, was highest in Basantpur block and there also the value stood as little as 16.47 per cent only. In urban areas, the gender gap in work participation rate continued to range between 25.04 per cent in Basantpur to 52.42 per cent in Narkanda block.

As far as, gap in overall rural-urban female work participation rate, is concerned, there continues to exist, a large gap between them. In district Shimla the average gap in rural-urban female work participation rate stood as high as 36.04 per cent. In Theog block, difference between rural-urban female work participation rate was highest (45.72%), followed by Rohru (41.43 per cent) and Chopal (40.69%). In Mashobra (29.01%) and Basantpur blocks (32.59%) gap in overall rural-urban female work participation rate stood lowest.

Thus the analysis, revealed that there continues to exist a large gender gap, in work participation rate, in different blocks in district Shimla. Not only that, rather in terms of rural-urban areas also, there existed a big gap in gender work participation rate.

An analysis of the values of co-efficient of variation, revealed that there are very nominal variations among different blocks, whether it is

overall work participation rate (18.15%), overall female work participation rate (20.82%), overall male work participation rate (6.09%), rural work participation rate (7.26%) or overall urban work participation rate (7.50%) is concerned. But in contrast, there existed large inter-block disparities, when gender gap in work participation, is explained. For example, the value of coefficient of variation with respect to gender gap, in overall work participation rate in the district stood at 90.91 per cent. The value of coefficient of variation stood so high, mainly due to very high gender-gap in overall work participation rate in Mashobra block. In Mashobra block this value was very high, on account of very low overall urban female work participation rate. However with respect to gender gap, in rural work participation rate, the value of coefficient of variation turned out to be high (65.70%) vis-a-vis in urban work participation rate (40.23%). There existed, high inter-block variations, with respect to gap in rural-urban work participation rate also (70.51%).

1.6 Panchayat Administration

In Table 1.13 a broad overview of panchayat administration in district Shimla for the year 2005 is given. There were in all 363 gram panchayats, with as many as 2075 ward members in the district. The highest (306) members were in Jubbal-Kotkhai and lowest in Rampur block (150). Out of total 2075 Panchayat members, 1233 (59.42%) were male members and rest 842 (40.58%) were females. Out of total Panchayat members (both males and females), 884 (42.6%) males and 510 (24.58%) females belonged to general category. Further, 348 (16.77% of total) male members and 332 (16%) female members belonged to scheduled caste group.

Thus, in aggregate 67.18 per cent of total members belonged to general category and 32.77 per cent of total members belonged to scheduled caste category. There was only one male member who belonged to scheduled tribe group. In case of females not even single member belonged to scheduled tribe group.

Table 1.13
Number of Gram Panchayat and Description of Members Sex-Wise and Social Group-Wise in the Year 2003

Bock	No. of Gram Panchayat	No. of panchayat member	Total male member	Total woman member	%of woman panchayat	Male members belonging to---- category	Female member belonging to general category	Male member belonging to SC group	Female member belonging to SC group	Male member of belonging to ST group	Female member of belonging to OBC group
Mashobra	45	271	162	109	40.22	127	64	35	45	0	0
Basantpur	29	157	94	63	40.13	63	47	31	16	0	0
Theog	50	282	165	117	41.59	121	75	44	42	0	2
Narkanda	26	150	89	61	40.67	60	40	29	21	0	0
Rampur	48	306	184	122	39.86	117	69	66	53	1	0
Jubbal-Kotkhai	48	254	150	104	40.94	110	67	40	37	0	0
Chhohara	31	171	102	69	40.35	81	40	21	29	0	0
Rohru	32	186	111	75	40.32	77	43	34	32	0	0
Chopal	54	298	176	122	40.94	120	65	48	57	0	3
Distt. Shimla	363	2075	1233	842	40.68	884	510	348	332	1	5

Source: Official Records, Panchayat Raj Department, Govt. of Himachal Pradesh.

Note : (1) There was no male member belonging to OBC Group.

(2) There was no female member belonging to ST Group.

Another, important observation, made regarding panchayat members, is that, the percentage share of women members is quite less vis-a-vis their share in total population. For example, as against their 47.27 per cent share in total population, their percentage share in total panchayat members, on an average stood at only 40 per cent. The extent of women participation, ranged from 41.59 per cent in Theog to 39.86 per cent in Rampur block.

As far as, gender empowerment, as reflected through the decision making power of women on account of holding the position of Pradhans in various gram panchayats is concerned (Table 1.14), in contrast to 240 (66.12%) male Pradhans, there were only 123 women Pradhans (33.88%). Thus, as against the percentage share of women members in total panchayat members (40.58%), their percentage share in village Pradhans turned out to be still lesser in the district. However, the mandatory norm of 33 per cent of women participation (as Pradhans) was satisfied in all the blocks of district Shimla.

As far as caste-wise break-up of Pradhans is concerned, 45.73 per cent of male members belonged to general category and 19 per cent to SC and 1.36 per cent to backward classes. However, in case of women Pradhans 22.31 per cent of total members belonged to general category, 10.47 per cent to SC and 1.1 per cent were from OBC. Thus, whereas, 68.04 per cent of the Pradhans belonged to general category, 29.47 percent were of SC group.

Coming to, area-wise and population-wise distribution, of gram panchayats (Table 1.15), it is observed, that there are on an average 8.4 panchayats per 100 sq. km. in district Shimla. There is a very nominal, difference among various blocks, with respect to panchayats per 100 sq. km., as reflected through the value of co-efficient of variation (25%). However, numbers of panchayats in terms of geographical area stood highest in Narkanda (10.80%) and minimum in Chhohara block (4.97%).

Table -1.14
Block-Wise Description of Chairpersons (Pardhans) in District
Shimla in the Year 2003

Block	No. of Pardhan	No. of male Pradhan	No. of female Pradhan	% of woman Pradhan	No. of male Pradhan belonging to general category	No. of woman Pradhan belonging to general category	No. of male Pradhan belonging to SC category	No. of woman Pradhan belonging to SC category	No. of woman Pradhan belonging To OBC group
Mashobra	45	30	15	33.33	22	10	8	5	0
Banstpur	29	19	10	34.58	14	7	5	3	0
Theog	50	33	17	34.00	22	10	9	5	2
Narkanda	26	17	9	34.62	12	6	5	3	0
Rampur	48	32	16	33.33	22	11	10	5	0
Jubbal-Kotkhai	48	32	16	33.33	24	12	8	4	0
Chhohara	31	20	11	35.58	14	8	6	3	0
Rohru	32	21	11	34.48	14	7	7	4	0
Chopal	54	36	18	33.33	22	10	11	6	2
Distt. Shimla	363	240	123	33.98	166	81	69	38	4

Source: As per Table .1.12

Note : (1) There was no male/female Pradhan belonging to ST Group.

(2) There was no male Pradhan belonging to OBC Group.

Table 1.15
Area and Population-wise Distribution of Gram Panchayats in District Shimla During the Year 2005

Blocks	No. of Panchayats per 100 Sq.Kms.	Population Covered Per Panchayat
Mashobra	9.99	2096
Basantpur	9.09	1209
Theog	9.55	1732
Narkanda	10.8	1623
Rampur	4.58	2260
Jubbal-kotkhai	9.61	1413
Chhohara	4.97	1738
Rohru	9.71	1982
Chopal	8.22	1592
Mean	8.44	1569
Co-efficient of Variation (%)	25	36.23

Source : As per table 1.13

The analysis, of number of gram panchayats, in terms of population revealed, that on an average one panchayat, served a population of 1569 in district Shimla. In Rampur block, population served per panchayat stood highest (2260) and in Basantpur block it was lowest (1209). However, as compared to the indicator of number of panchayats per 100 sq. km., there was relatively, higher inter-block disparities, with respect to population served per gram panchayat in district Shimla (36.23%).

In brief, an analysis of broad contours of socio-economic profile of district Shimla reveals that it has some peculiar features, which directly or indirectly, are likely to effect and shape the process of economic development in general and human development in particular. Development of horticulture sector has gone a long way in changing the economic lot of masses in the district. Strengthening of physical as well as social infrastructure can boost the socio-economic status of masses in

a big way. An analysis of growth of population in the district revealed, that it recored some peculiar demographic features, which may be quite important from policy point of view. There is a need to explore the specific reasons and circumstances, leading to adverse sex ratio in the district. Adverse sex ratio does not appear to be a gift of modernisation in the district, but seems to have a historical perspective.

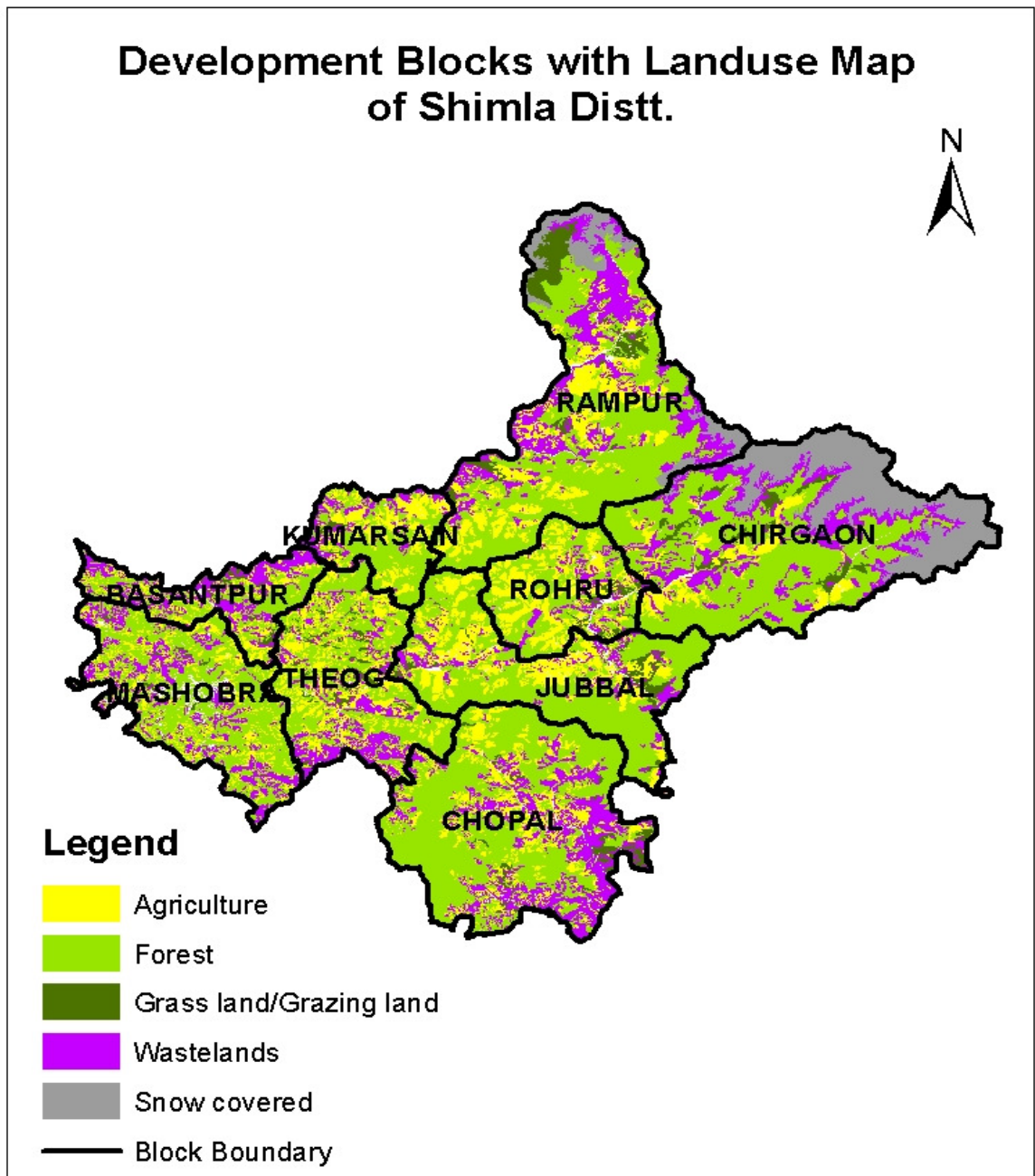
Development Block Map of Shimla Distt.



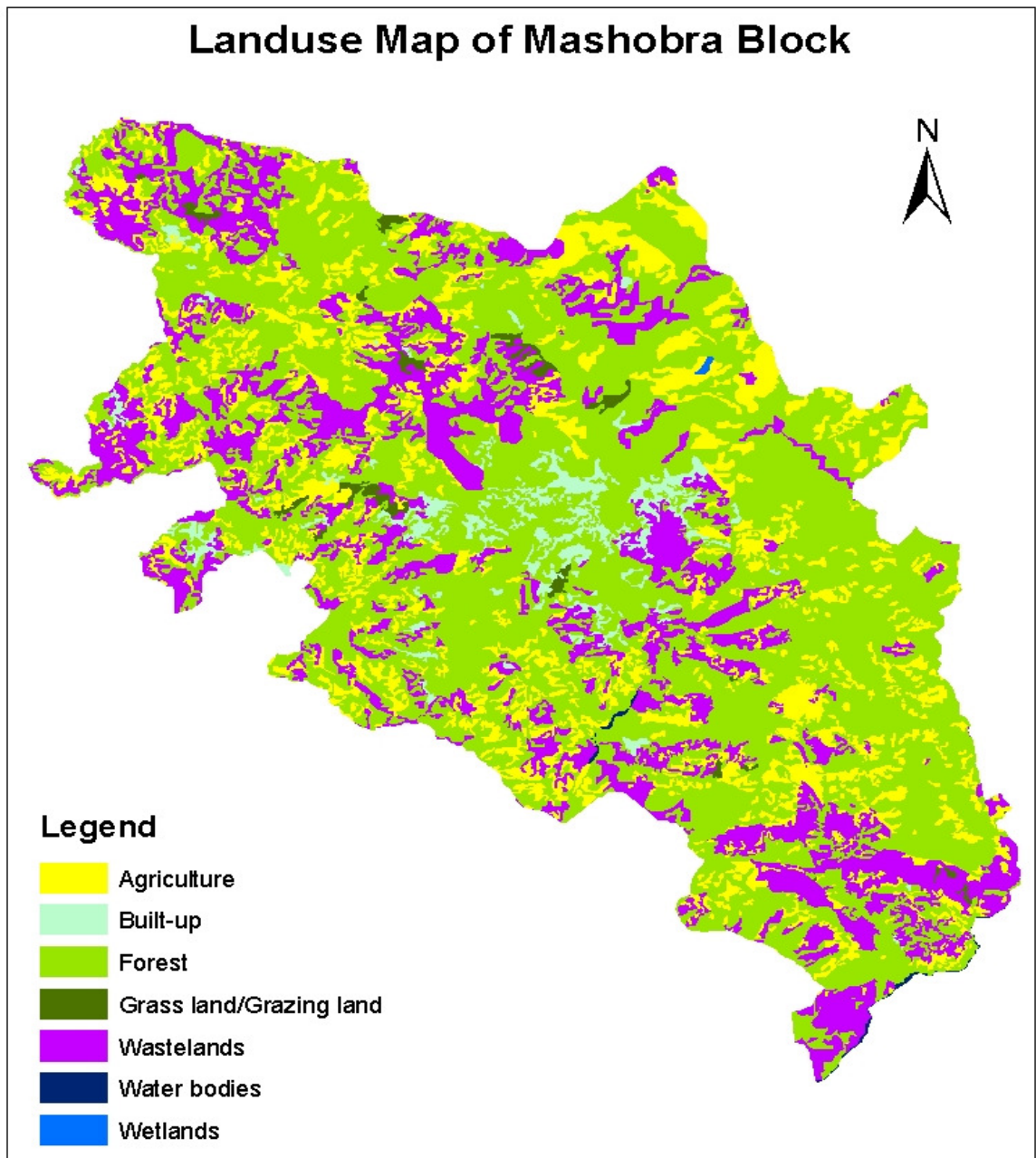
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 Development Blocks

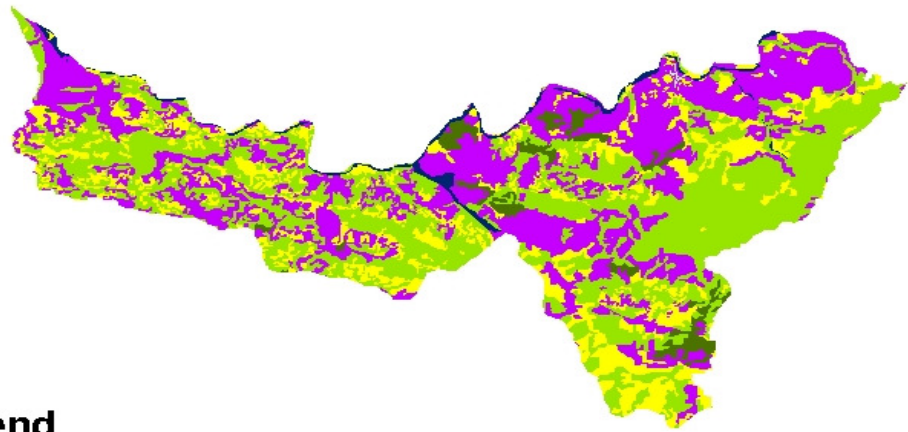
Development Blocks with Landuse Map of Shimla Distt.



Landuse Map of Mashobra Block



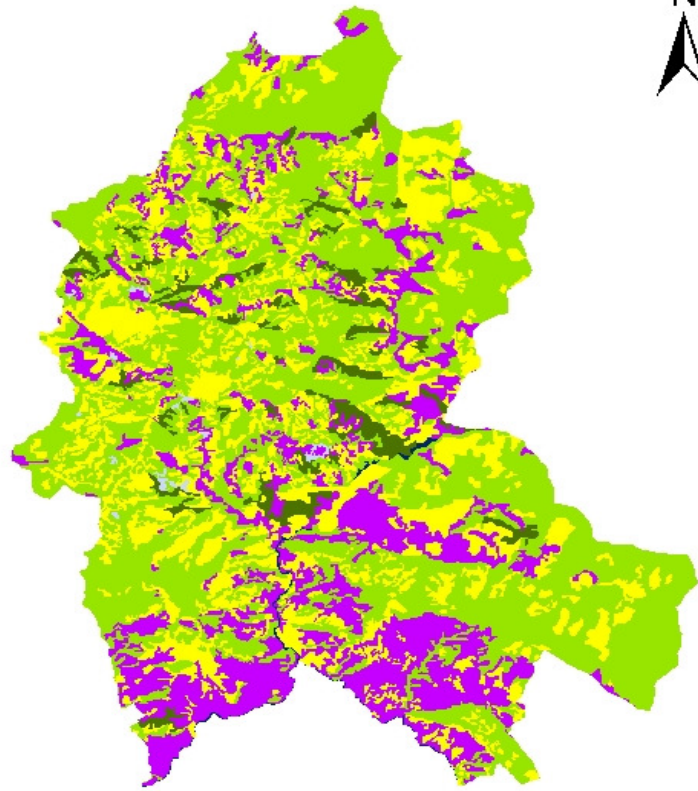
Landuse Map of Basantpur Block



Legend

-  Agriculture
-  Built-up
-  Forest
-  Grass land/Grazing land
-  Wastelands
-  Water bodies

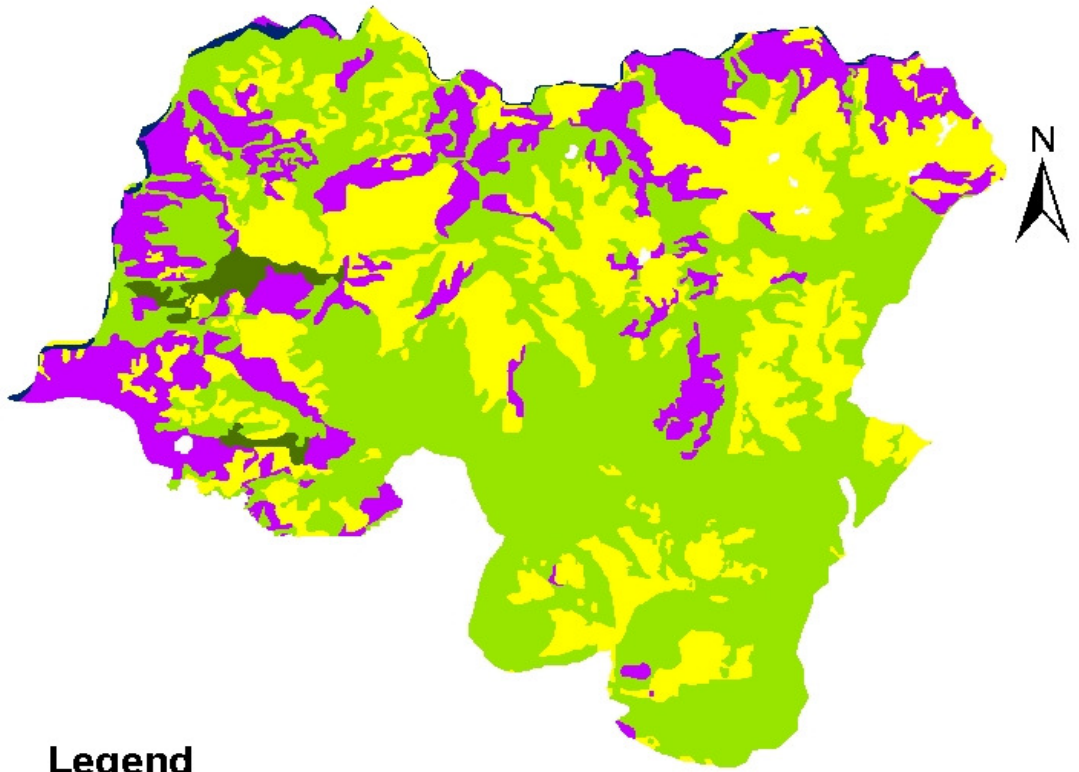
Landuse Map of Theog Block



Legend

-  Agriculture
-  Built-up
-  Forest
-  Grass land/Grazing land
-  Wastelands
-  Water bodies

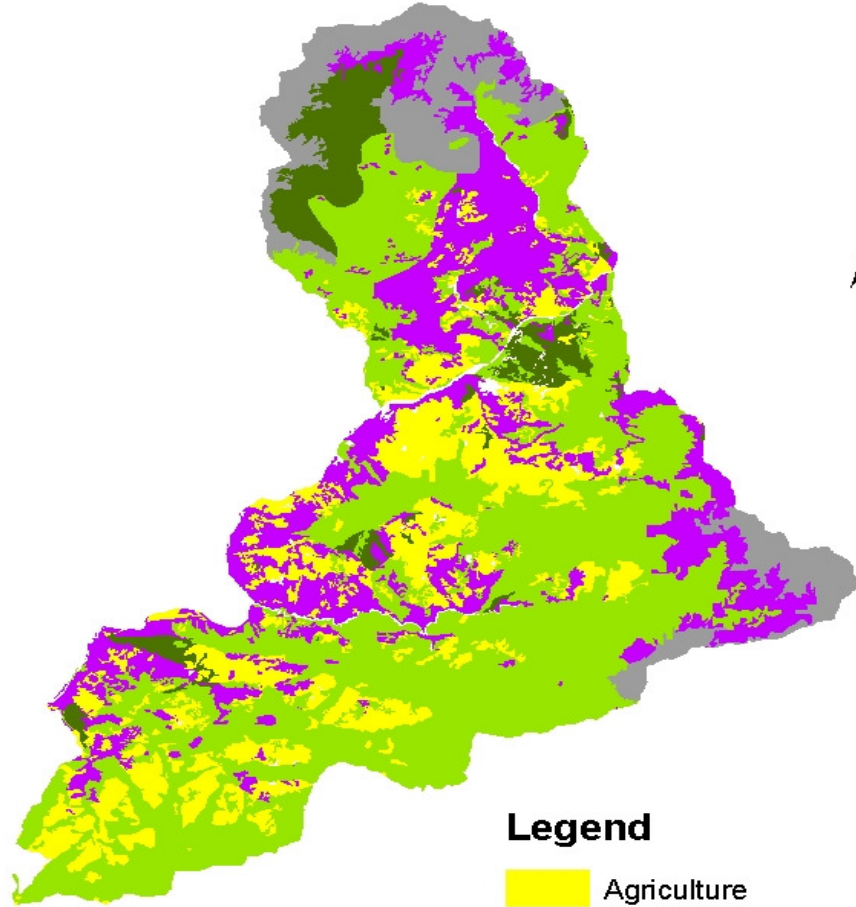
Landuse Map of Kumarsain Block



Legend

-  Agriculture
-  Forest
-  Grass land/Grazing land
-  Wastelands
-  Water bodies

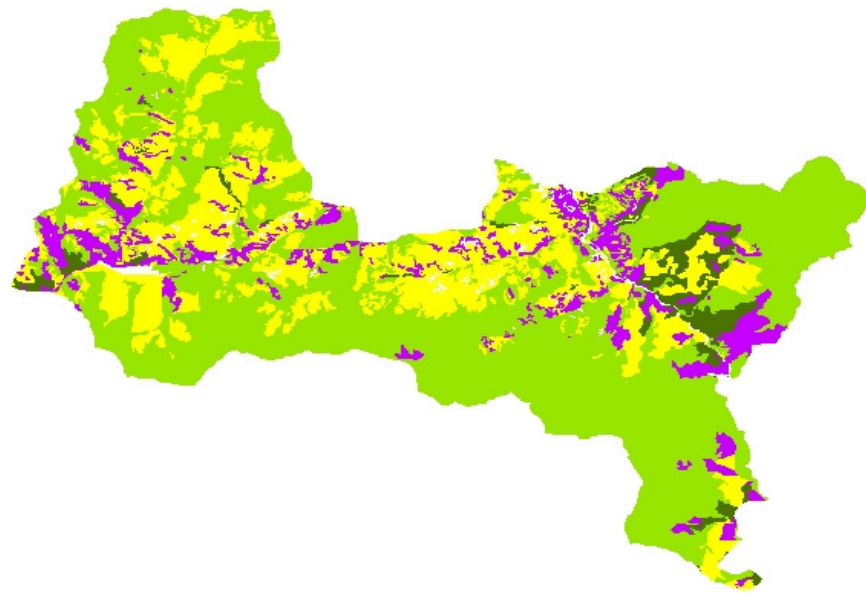
Landuse Map of Rampur Block



Legend

-  Agriculture
-  Forest
-  Grass land/Grazing land
-  Wastelands
-  Snow covered

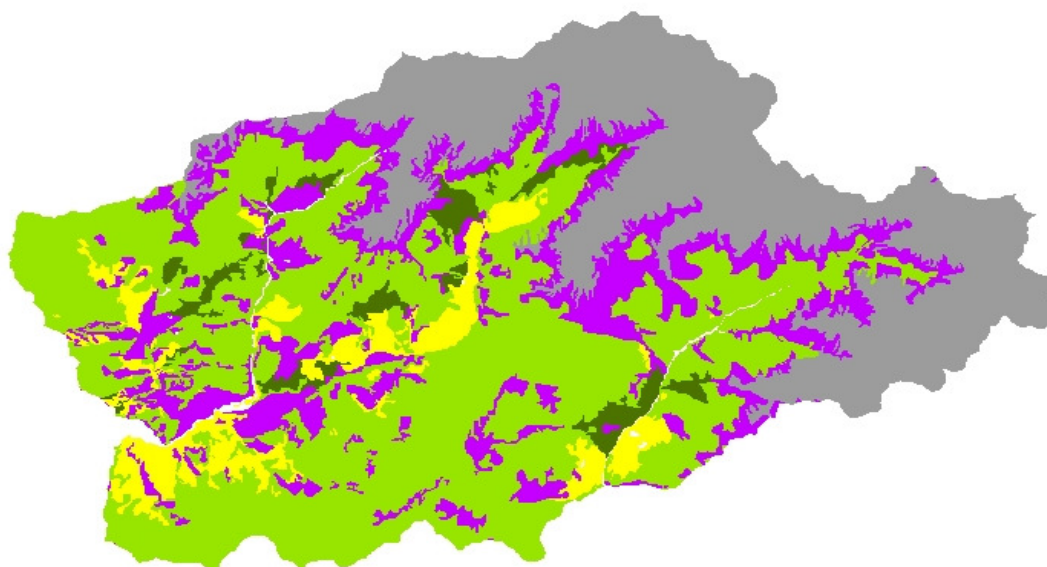
Landuse Map of Jubbal & Kotkhai Block



Legend

-  Agriculture
-  Forest
-  Grass land/Grazing land
-  Wastelands

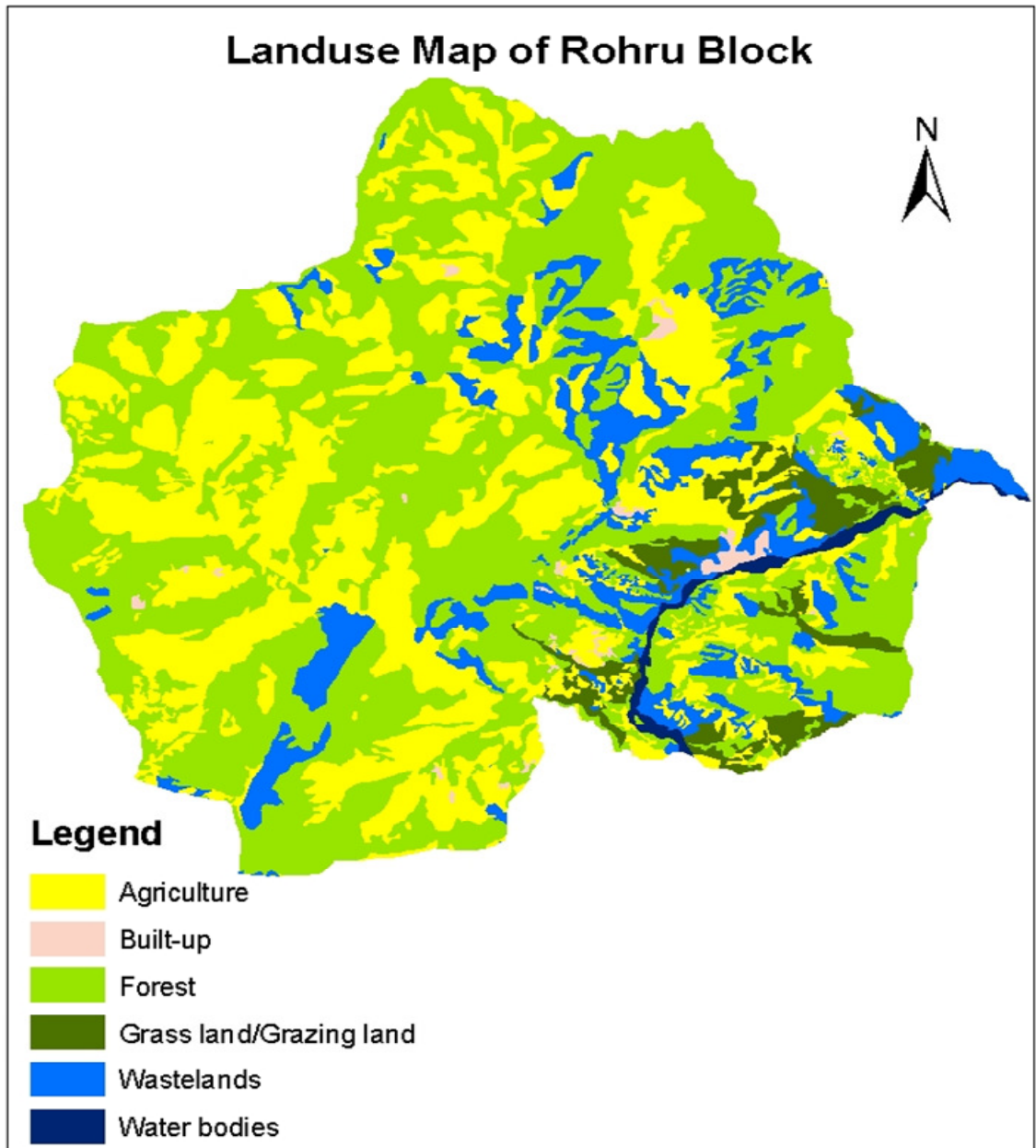
Landuse Map of Chhohara Block



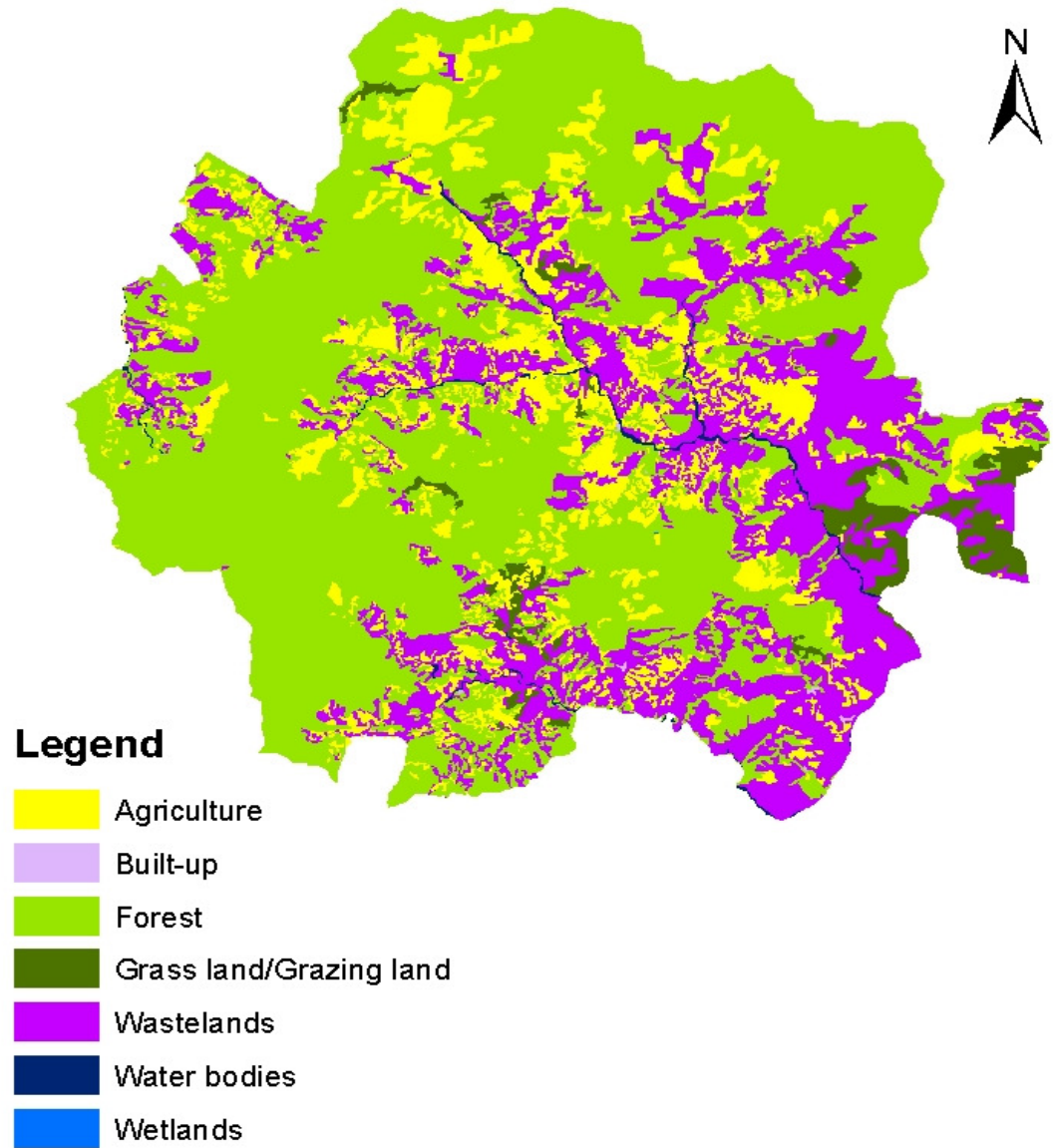
Legend

-  Agriculture
-  Forest
-  Grass land/Grazing land
-  Wastelands
-  Snow covered

Landuse Map of Rohru Block



Landuse Map of Chopal Block



CHPATER – II

CONCEPTUALISING HUMAN DEVELOPMENT

“The basic purpose of development is to enlarge people’s choices. In principle, these choices can be infinite and can change over time. People often value achievements that do not show up at all, or not immediately, in income or growth figures, greater access to knowledge, better nutrition and health services, more secure livelihoods, security against crime and physical violence, satisfying leisure hours, political and cultural freedoms and sense of participation in community activities. The objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives”.

Mahbub-ul-Haq

The Human Development approach was developed by a group of economist and thinkers led by Mahbub-ul-Haq and Amartya Sen, working on the UNDP Human Development Report. Put simply, the starting point for the human development approach was the idea that the purpose of development is to improve human lives by expanding the range of things that a person can be and do, such as to be healthy and well nourished, to be knowledgeable, and to participate in community life. Seen from this view point, development is about removing the obstacles to what a person can do in life, obstacles such as illiteracy, ill health, lack of access to resources, or lack of civil and political freedoms.

Human development is about much more than the rise or fall of national incomes. It is about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests. People are the real wealth of nations. Development is thus about expanding the choices people have to lead lives that they value. It is thus about much more than economic growth, which is only a means of enlarging people’s choices. Human Development is the most systematic and influential attempt to widen our

understanding and our search for local, national, and international development in the 21st century. Its aim is to reconceptualize “development”, measure it properly, and redesign policies to achieve it in a way that does not compromise but further all basic human values.

An important feature of the Human Development Approach is that it has an explicit basis in philosophical reasoning and the longstanding intellectual traditions of philosophy, political economy, and economics, dating back to Aristotle and including the works of Adam Smith and Immanuel Kant, among others. Aristotle argued that “Wealth is not the good we are seeking ---- it is merely useful for the sake of something else”. He distinguished a good political arrangement from a bad one in terms of its success in enabling people to lead “flourishing lives”. Immanuel Kant continued the tradition of treating human beings as the ends of all activities. Adam Smith advocated a model of economic development that would allow a person to mix freely with others “without being ashamed to appear in public” ---- a concept of poverty that gave weight to human dignity above and beyond income. Similar concerns are reflected in the works of thinkers and economists such as Karl Marx and John Stuart Mill.

The Human Development approach contains two central theses about people and development ---- that improvements in human lives should be an explicit development objective, and that human achievements can be used as key indicators of progress.

To understand these key elements of the Human Development Approach and their relevance for development policy and strategy, it helps to compare it with other approaches that have influenced public policy debates, such as the dominant neo-liberal paradigm and a predecessor to the Human Development Approach, the Basic Needs Approach. Not only do the philosophical underpinnings of neo-liberalism and the basic needs approach differ from those of the Human Development approach, but they are also less explicit. Although all three

approaches are ultimately concerned with human well-being, they understand concept differently. Neo-liberalism defines well-being as utility maximization. The most significant limitation of this approach is the neglect of rights, freedoms and human agency. The basic needs approach places people at the centre of development, but the emphasis on specifying “basic needs” in terms of supplying services and commodities points to a commodities basis rather than a capabilities basis in defining human well being. Although many of the proponents of the basic needs approach emphasized people’s participation and political constraints, the absence of a strong and explicit philosophical foundation left the approach open to translation into policy that focused mainly on meeting people’s material needs, or “count, cost, and deliver”, rather than on the human rights, freedoms, and agency emphasized in the human development approach.

2.1 Human Development Theory

Human Development is a theory and a methodology of integrated economic, social and political development. It encompasses a moral, or philosophical stand, a rigorous social science analysis, and a specific perspective on practical or policy issues. Human Development is different from the major prevailing approaches to development, and should not be confused with some parallel concepts. Hence Human Development is a new “paradigm”, or an alternative “lens” to “see” development issues and strategies.

Figures are not ends in themselves and no data ---- no matter how sophisticated ---- could ever grasp the whole complexity of human choices. Economists have largely forgotten these truths, so Human Development introduces indicators of development going beyond per capita income, the time-honoured yardstick in this field.

Once one thinks of development as a matter of ends rather than means, it seems but natural to assert that it “truly” consists in more

people having better chances to lead a better life. This simple but powerful idea inspires the common definition of human development as “the process of enlarging people’s choices”.

“Choices” are the many things human beings have a good reason to value and to desire. Choice need to be grounded in a reasonable and reasoned moral argument. But even valid “Choice” do vary from one society, one period, or one person to the next. Human Development is then an open, continuous, and theoretically endless process. For different purposes, how-ever one may need to be more or less specific in describing the “choices” in Human Development.

At a very basic level, these choices would be ---- a healthy and long lasting existence, access to knowledge in its different expressions, material resources for a decent standard of living, and free participation in community life and collective affairs. For analytical purposes, Amartya Sen (1999)¹⁸ has elaborated the idea of “Choices” in terms of “functionings” and “capabilities”. A human life may be seen as a set of interrelated “functionings”, a set of beings and doings contributing to her or his personal welfare : being well nourished, being respected, avoiding escapable disease, and participating in political decisions are among some such “beings” or “doings”. Capabilities are the various combinations of functionings a person can achieve in exercising his or her freedom to select a life style. Development is the process of providing new functionings and enlarging the capabilities of people.

¹⁸ Sen, Amartya (1999). *Development as Freedom*, Oxford University Press, Oxford.

2.2 What Human Development is Not

Even from its initial definition, it is clear that Human Development differs from other major contemporary theories of economic, political and social development :

- a) First and foremost, Human Development differs from the prevailing economic theory, development is not the same as economic growth. Economic growth is a necessary but not a sufficient condition for Human Development. It is one of the most important means to enlarge human choices, yet it is not the only means, nor should it be regarded as a goal in itself.
- b) Human Development also differs from the most influential theory among orthodox sociologists, who do not refer to development but to “modernization”. This is the process of functional differentiation and of growing structural complexity taking place in many “developing” countries. Modernization unfreezes people’s minds and opens new opportunities, thereby contributing to Human Development. But it is a means, and some believe, not always leading towards valuable choices.
- c) Human Development differs from the Marxist paradigm, where history is seen as the dialectical interplay between social forces and social relationships of production, which dictate the passage of humankind through different “modes of production”, in recent times, from feudalism to capitalism to socialism and, eventually to communism. Human Development shares in values such as the quest for justice or the creativity of human labour, yet it stands for pluralism, political democracy, and conceptual undogmatism.

2.3 The Specificity of Human Development

Human Development is often confused with, or reduced to, some more specific notions in the field of development. It should therefore be

noted that Human Development is conceptually related but clearly different from notions such as :

- Human capital
- Human resources
- Social development
- Satisfaction of “basic human needs”
- Poverty eradication programmes
- Adjustment with human face
- Human rights

One of the most common misconceptions is to treat human development as being synonymous with human capital and human resource development. Human capital is a term coined by Schultz in 1960s to refer to the stock of skills and productive knowledge embodied in people. Just as physical capital (machines, equipment, assets and so on) make a contribution to the national income, Schultz argued that individuals, through the human capital embodied in them, also make contribution to national income. Thus, human capital and the human resource development framework that is based on the concept of human capital, consider human beings mainly as a means to the end which is higher national income. The investment made in people in terms of education, health, nutrition is justified in terms of the ‘rate of return’ it yields to the individual as well as to the family and society.

The human development paradigm, on the other hand, regards people as ends in themselves, and not as means to an end. Thus, the education, health, nutrition that are embodied in people are valuable in themselves not because they enable people to contribute to the national income. Investment in individuals is not justified in terms of rates of return logic but because it enhances their capabilities. Having distinguished between the two concepts, it is necessary to recognize that the two concepts are linked. Human development provides the foundations for human resources to contribute better to national income. For example, the

returns to education are higher when the bulk of the population has a minimum level of learning rather than a few individuals acquiring higher levels of learning while the majority is illiterate.

The Human Development Approach strives to simultaneously achieve the three basic developmental values of efficiency, equity, and freedom.

- a) **Efficiency** is defined as the optimal use of existing resources. From an Human Development perspective, it is the maximum enlargement of the material base for the satisfaction of human choices. The value of efficiency is crucial to the Human Development paradigm because, as any other theory of development, it must deal with how to increase the availability of goods and services to satisfy human needs.
- b) **Equity** corresponds to commutative and distributive justice, particularly to the apportionment of opportunities among different human beings. Equity is the main value underlined by critics of the prevailing or “neo-liberal” model, and enters the Human Development paradigm from these socially based criticisms.
- c) **Freedom** that is, the possibility of choosing, comes to be the bridge laid by the Human Development approach between efficiency and equity. As Sen puts it, freedom has a “constitutive” and an “instrumental” value; freedom is valuable in itself and valuable as a means both to potentiate human energies (efficiency) and for everybody’s needs and preferences to impinge upon the apportionment of opportunities (equity)¹⁹.

Human Development thus advocates for a new synthesis among the three cardinal development values of our time. It is “pluralist” and “holistic” in that it pursues efficiency, equity and freedom simultaneously, and in that it strives to find out the “synergies” or virtuous circles leading from each of these values to the others. The redistribution of social opportunities widens the market and increases

¹⁹ Sen, Amartya (1999). *Development as Freedom*, Oxford University Press, Oxford.

the productivity of workers, equity bringing about efficiency. The existence of liberties allows for creativity to flourish and thus enhances efficiency. Or, a prosperous economy provides more opportunities for personal fulfillment, whereby efficiency contributes to the stability of democratic freedoms.

Equity makes public deliberations among equals possible for human beings; hence freedom grows along with equality.

Human Development is defined as “a process of enlarging people’s choices”. The main values/ethics included in this concept and in any human development policy are :

- Ensuring security of life and secure livelihoods for all;
- Equity in opportunities and capabilities;
- Equality between men and women;
- Distributive justice and sharing of national by all region/ethnic groups;
- Democratic governance and participatory development;
- Pursuit of sustainable development and conservation of nature;
- Human rights protection;
- Upholding human dignity and self- respect;
- Acceptance and accommodation of divergent cultures, ethnic minorities;
- Peace and non-violence.

2.4 Why Did the Human Development Paradigm Arise ?

Human Development has generated worldwide interest and controversy, both in the academic community and among policy makers and planners. To quote Mahbub-ul-Haq, “the obvious is often the most difficult to see”. It is obvious--but difficult to see--development in terms of enlarging people’s choices. Thanks to the internal evolution of both political philosophy and the theory of economic development, such as obvious fact was “discovered” during the last two decades or so. But

besides this internal reason, there were some external circumstances that help explain the emergence of the new paradigm.

- a) The notion of “human development” served to unify the many voices unsatisfied with the prevailing reduction of development to economic growth. All those unsatisfied with conventional economic models, those concerned with social justice, the environmentalists, and the excluded minorities found in Human Development a solid and coherent formulation of their basic intuitions.
- b) The Human Development paradigm appeared simultaneously with the “knowledge revolution”, which many see as the defining characteristic of our time. It is of course quite difficult to measure the advancement of knowledge. It is estimated that 95 per cent of all accumulated knowledge dates from the 20th century. In the last 25 years, we have learned three times as much as all throughout the previous millennia.
- c) A third impulse to the Human Development paradigm came from the “discovery” of yet another obvious point : that the key to economic growth is not to be found in any of the three classic “factors of production”-- natural resources, capital, and non-qualified labour; the key is in the human brain.
- d) The revolution of knowledge is closely associated with an extraordinary increase of richness. It has been estimated that the value of goods and services produced by humankind after World War II is equivalent to that of whatever was produced during the previous half million years. The current generation has as much wealth as that of all the previous generations combined. This yields an extraordinary opportunity to enhance the standard of living and to enlarge the choices for everyone. Today we are in condition to deal with the problem of ensuring an extended, educated and worthy life for all human beings.
- e) Lastly, Human Development coincides with the spreading recognition that, regardless of nationality, race or ethnic origin, language,

religion, gender, or any other consideration, we all have civil, political, economic, social, and cultural inalienable rights. This new consciousness is a major endorsement to Human Development, an endorsement reinforced by legislation and public actions in many countries, as well as by a host of international conventions.

2.5 Objectives and Methodology

Following the UNDP's Human Development Framework, the **National Human Development Report (2001)**²⁰ prepared by Planning Commission has put together indicators and composite indices to evaluate development process in terms of 'ex-post outcomes' rather than only in terms of available 'means' or 'inputs'. The Report, recognizing the broad based consensus that exists on the three critical dimensions of well-being, focuses on identifying the various contextually relevant indicators on each of them. These dimensions of well-being are related to:

- Longevity ----- the ability to live long and healthy life;
- Education ----- the ability to read, write and acquire knowledge; and
- Command over resources ----- the ability to enjoy a decent standard of living and have a socially meaningful life.

A long and healthy life, as measured by life expectancy at birth. **Knowledge**, as measured by the adult literacy rate and the combined primary, secondary and tertiary gross enrolment ratio. **A decent standard of living**, as measured by estimated earned income (PPP in US\$).

An index is created for each of the above three dimensions and from the three indices then a simple average is calculated to arrive at the Human Development Index (HDI). To calculate the dimensions indices ---

²⁰ Government of India (2002). *National Human Development Report 2001*, Planning Commission, New Delhi.

--- minimum and maximum values (goalposts) are chosen for each underlying indicator. Performance in each dimension is expressed as a value between 0 and 1 by applying the general formula:

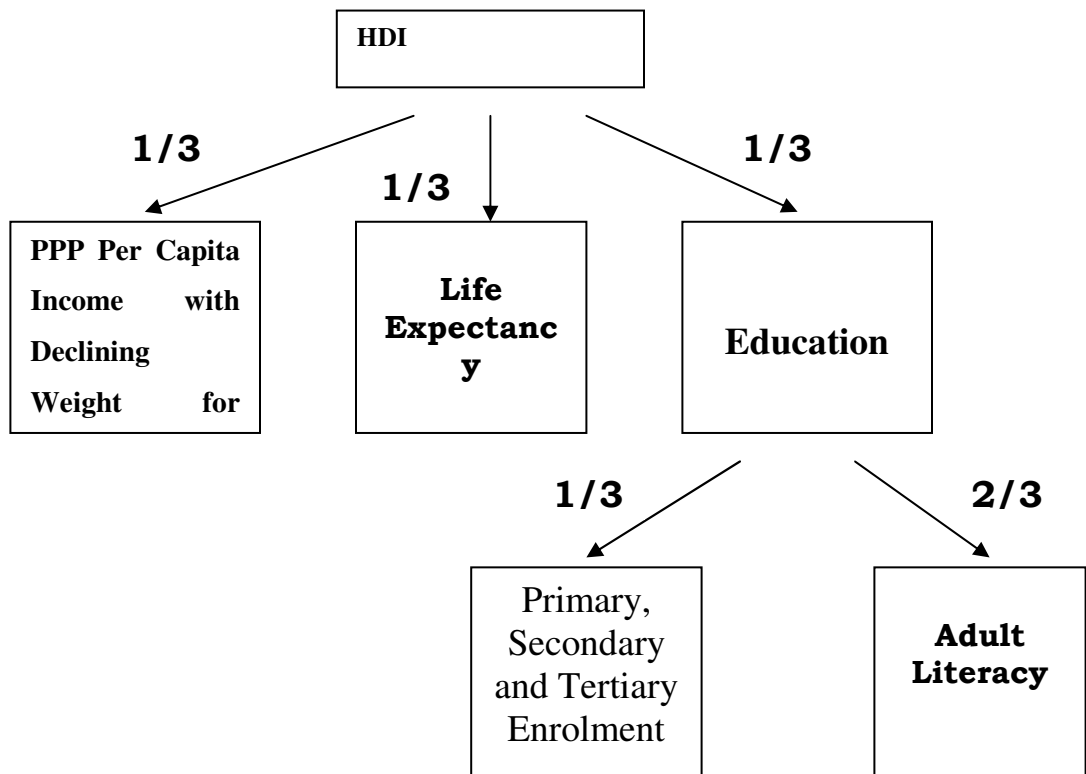
$$\text{Dimension Index} = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

For most individuals the choice to live a healthy life, free from illness and ailments, and of a reasonable life span are critical attributes in the notion of personal well-being. Longevity and a life free of morbidity is, thus, a valued end in itself and moreover, it is crucial for other valued human attainments. Similarly, apart from its intrinsic value, education in the present day context, is perhaps among the most important means for individuals to improve personal endowments, build capability levels, overcome constraints and in the process enlarge their available set of opportunities and choices for a sustained improvement in well-being. It is a critical means to empowerment and to bring about a social, economic and political inclusion of the marginalised segments in the mainstream of society. An individual's command over resources determines his/her sustenance, attainments on other aspects of well-being and the opportunities that these attainments facilitate.

The various indicators of these attainments and composite indices that they support could capture the process of development and well-being of people from two perspectives. The 'conglomerative perspective' – captures advances made by the society as a whole ----- and the 'deprivational perspective' assesses status of the deprived in a society. Both these perspectives are needed to adequately understand the process of development in any society. In National Human Development Report, the compilation of indicators extends beyond the indicators on economic attainment; educational attainment; and health attainment and demographic concerns of the society to indicators on such aspects of social environment that has a direct bearing on individual and collective well-being. This includes indicators on the state of the elderly; the

working children; the disabled; and violence and crime against women. Besides the social context, the physical environment also has a bearing on the well-being of people.

CALCULATING THE HDI



GOALPOSTS FOR CALCULATING HDI

INDICATOR	MINIMUM VALUE	MAXIMUM VALUE
Life expectancy	25 Years	85 Years
Adult Literacy	0%	100%
Gross Enrolment	0%	100%
GDP Per Capita	100 (PPP US \$)	40,000 (PPP US \$)

At the same time, the development process, as it unfolds, impacts the physical environment one way or the other, almost continuously. Attempt has, therefore, been made to include selected indicators to briefly highlight aspects of the physical environment having a direct bearing on the well-being of people.

The starting point of this Report has been the preparation of an extensive database. An important concern in building the data base has been to also identify indicators that are readily available at sub-state level of disaggregation. This has prompted an extensive use of Census of India data. In addition, data from alternative sources, including the National Sample Survey Organization (NSSO), National Family Health Surveys (NFHS) and other official and some independent sources has also been used. The data has been presented for all States and Union Territories. This, in some cases, has necessitated recourse to estimating data to fill-up gaps for a few States.

2.6 State Human Development Reports (SHDRs)

Human Development Reports can be defined as “tools for action”, as they help in focusing on human development issues and influencing interventions. In a large country as India, where regional disparities have long persisted, it is essential to focus human development analysis at a more disaggregated level.

In India, due to the social and economic diversity amongst Indian States, and as mandated by the Indian Constitution, the responsibility for implementing social sector programmes rest with the State Governments. India has pioneered sub-national State Human Development Reports (SHDRs), with Madhya Pradesh being the first State to produce one in 1995. These reports serve as platforms for public accountability and action. The reports ensure that the human development agenda comes to the forefront of the State’s developmental

priorities and its vision for the future. Virtually every State and Union Territory has prepared or is in the process of preparing these reports.

The SHDRs serve to draw attention to development indicators at the district level in areas such as education and health attainments that are critical for capacity building of the community. Thus the report helps the Government, NGOs and donor agencies streamline their development priorities in order to be more effective. The recommendations emerging from SHDRs are meant to leverage public policy and resources in a focussed manner on sustainable human development. Many of the State Government have used the SHDRs as a framework for making contextually relevant social sector interventions.

The guiding principles followed by the UNDP in its cooperation with the governments for SHDRs preparation are:

- a) Government ownership;
- b) Editorial autonomy;
- c) Analysis and contents of the HDR should be undertaken by an independent team of experts at the behest of the state government;
- d) Integrity and coherence in the contents of the HDRs and addition of value to users of the HDR;
- e) Commitment to widespread dissemination and discussion of the State HDRs making use of a variety of method ; and
- f) Cost – effectiveness in the preparation of HDRs.

2.7 Impact of SHDRs So Far in India

The State of Madhya Pradesh in India has the distinction of releasing the first sub-national State HDR in 1995. Since then, the state has published its SHDRs twice, in 1998 and 2002. Twelve other States of Assam, Tamilnadu, Himachal Pradesh, Karnataka, Sikkim, Maharashtra, Rajasthan, West Bengal, Punjab, Nagaland, Orissa and Gujarat have lunched their SHDRs. Reports for 9 others states are at various stages of preparation.

Being a tool for action, SHDRs have helped in increasing attention to human development issues, including human development indicators in intra-state/inter-district evaluations, influencing programmes and projects, increasing resource allocations to the social sectors.

The Madhya Pradesh Human Development Report 1995, helped in leveraging a greater amount of resources to be allocated to the social sectors. From the Eighth Five Year Plan Period (1992-97) to the Ninth Five Year Plan Period (1997-2002), the resources allocated to the social sector increased from 19 per cent to 42 per cent. Another outstanding illustration of policy impact facilitated by the State HDR is the Education Guarantee Scheme (EGS), which the State Government introduced in January 1997 after the first State HDR with a view to universalizing access to primary education in the State.

The Karnataka HDR 1999 helped in streamlining evaluation mechanisms to get a better insight into programmes implementation. Further task forces important to human development, such as health and education, have been constituted. These task forces have submitted their reports to the state government, which is examining for implementation.

In Sikkim, upon the recommendation of the Sikkam HDR, the State Government has conducted comprehensive household surveys with a view to determine the exact nature and extent of poverty and income disparities in the districts.

Having reliable and comparable district-wise data is one of the prerequisites for the preparation of SHDRs. But, availability of data is one of the key constraints in the preparation of SHDRs. Some of the key data constraints faced are:

- Lack of data for the districts during a comparable time frame.
- Difference in data between departments, and districts and state level.

- Data may not be available for some districts (for instance if new districts are carved from existing districts).

The SHDRs have attempted to circumvent these issues by using various data sources in conjunction.

2.8 Human Development Scenario in Himachal Pradesh

District level Human Development Indices (HDIs) in Himachal Pradesh were worked out for the first time in the **Himachal Pradesh Human Development Report 2002**. Basic indicators required to calculate HDI are per capita income of the State/Districts, Infant Mortality Rate (IMR) of the State/Districts, gross enrolment ratio (primary, secondary, higher levels) and literacy rate of the state and the districts. The Human Development Report-2002 presented the District, level HDIs based on the data available for the latest years for the above mentioned indicators. However, the IMR for the Districts is published by the Registrar General of India and the latest year for which these figures were available was 1991. An analysis based upon the indicators required for the calculation of HDIs for the latest years was attempted and is summarized as below. However, there are limitations in terms of data availability. The latest years for which district-wise enrolment ratio were provided by the Department of Education, Government of Himachal Pradesh was 1997. Therefore, per capita income for the districts of Himachal Pradesh has also been taken for the year 1997-98. However, IMRs for all the districts have been taken for the year 1991 only. Comparability between the HDIs for 1991 and 1997 may seem to be meaningless in the first instance; however, with the availability of data relating to income and education for the year 1997-98 the analysis does indicate progress made by districts in the field of human development.

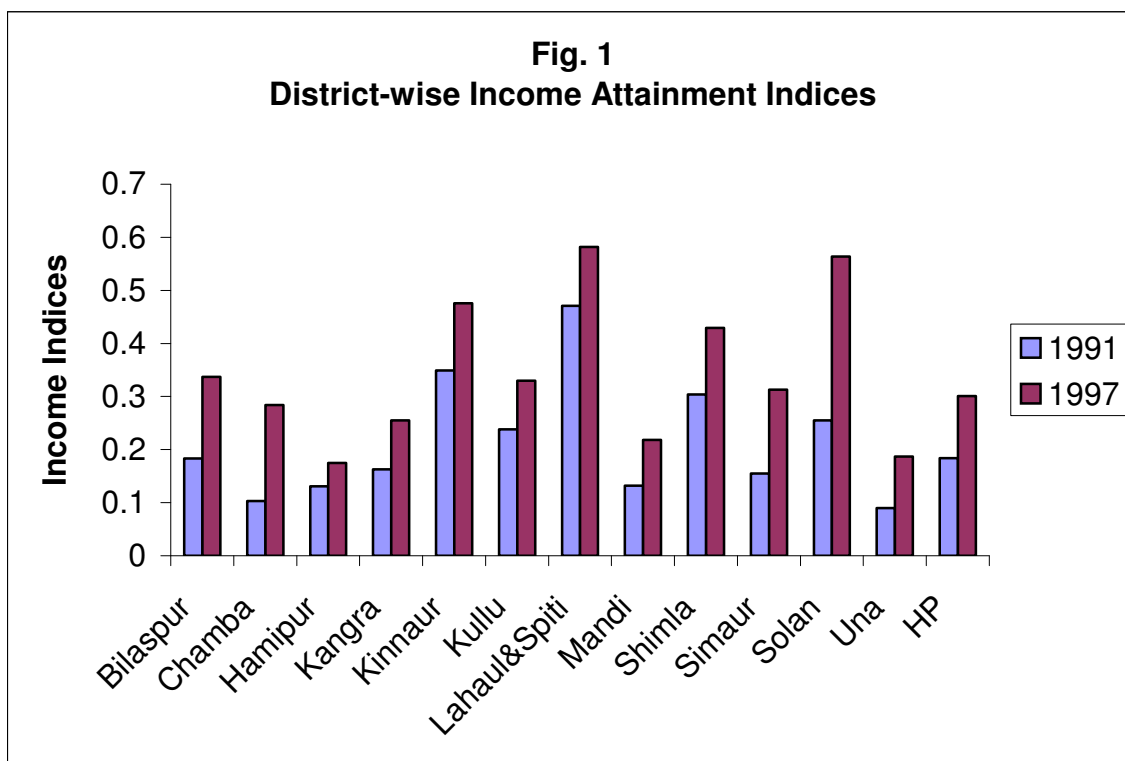
Tables 2.1, 2.2, and 2.3 exhibit life/health index, education attainment index and income index respectively. The indices in tables 2.1

and 2.2 are for the years 1991 and 1997 whereas those contained in table 2.3 are for the year 1991 only.

Table- 2.1
Income Indices for Districts of Himachal Pradesh

District	1991	Rank	1997	Rank
Bilaspur	0.183	VI	0.337	V
Chamba	0.103	XI	0.284	VIII
Hamipur	0.131	X	0.175	XII
Kangra	0.163	VII	0.255	IX
Kinnaur	0.349	II	0.476	III
Kullu	0.238	V	0.33	VI
Lahaul&Spiti	0.471	I	0.582	I
Mandi	0.132	IX	0.218	X
Shimla	0.304	III	0.429	IV
Simaur	0.155	VIII	0.313	VII
Solan	0.255	IV	0.564	II
Una	0.090	XII	0.187	XI
HP	0.184		0.301	

Source : *Computed by the Department of Planning, Government of Himachal Pradesh.*



District-wise comparison of income Indices as given in Table 2.1 clearly show that Bilaspur, Chamba, Sirmour, Solan and Una have registered improvement over the period between 1991 and 1997. District of Lahaul and Spiti has maintained its position at number one whereas all other districts have deteriorated in terms of income index.

Achievements made by the Districts of Himachal Pradesh in terms of education attainment has been captured in Table 2.2 in the form of Education attainment indices. It can be easily inferred from the table that in a period of six years between 1991 and 1997 all the districts of Himachal Pradesh have performed remarkably well in terms of education attainment. This index constitutes of indicators in terms of enrolment ratio and literacy rate. District of Bilaspur, Kangra, Kinnaur, Kullu and Shimla have improved their ranks interms of education attainment. Hamirpur district has retained its rank whereas all other districts have deteriorated their ranks in 1997 if compared with those in 1991.

Table 2.2

Education Attainment Indices for Districts of Himachal Pradesh

District	1991	Rank	1997	Rank
Bilaspur	0.747	IV	0.789	IV
Chamba	0.510	XII	0.601	XII
Hamirpur	0.810	I	0.834	I
Kangra	0.752	III	0.833	II
Kinnaur	0.626	X	0.737	VII
Kullu	0.663	IX	0.734	VIII
Lahaul & Spiti	0.678	VII	0.703	X
Mandi	0.711	V	0.757	VI
Shimla	0.681	VI	0.720	V
Sirmaur	0.571	XI	0.720	XI
Solan	0.676	VIII	0.720	IX
Una	0.759	II	0.800	III
HP	0.697		0.762	

Source : *Computed by the Department of Planning, Government of Himachal Pradesh.*

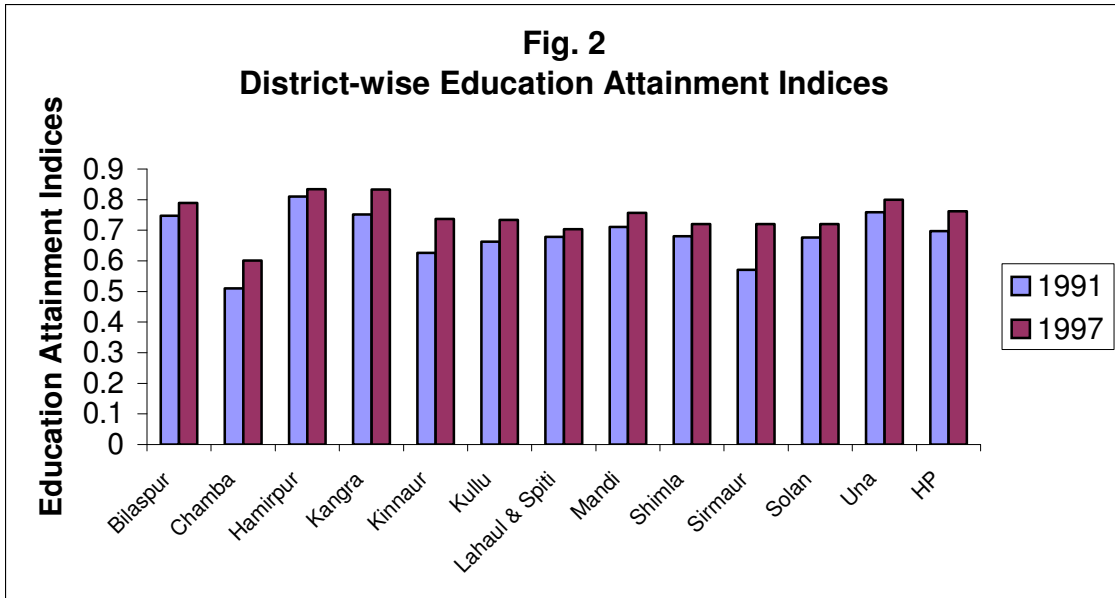


Table 2.3 contains Health/life indices for the year 1991 and are same as contained in the Himachal Pradesh Human Development Report 2002, meaning thereby, the performance of districts in terms of health facilities cannot be measured for the period between 1991 and 1997.

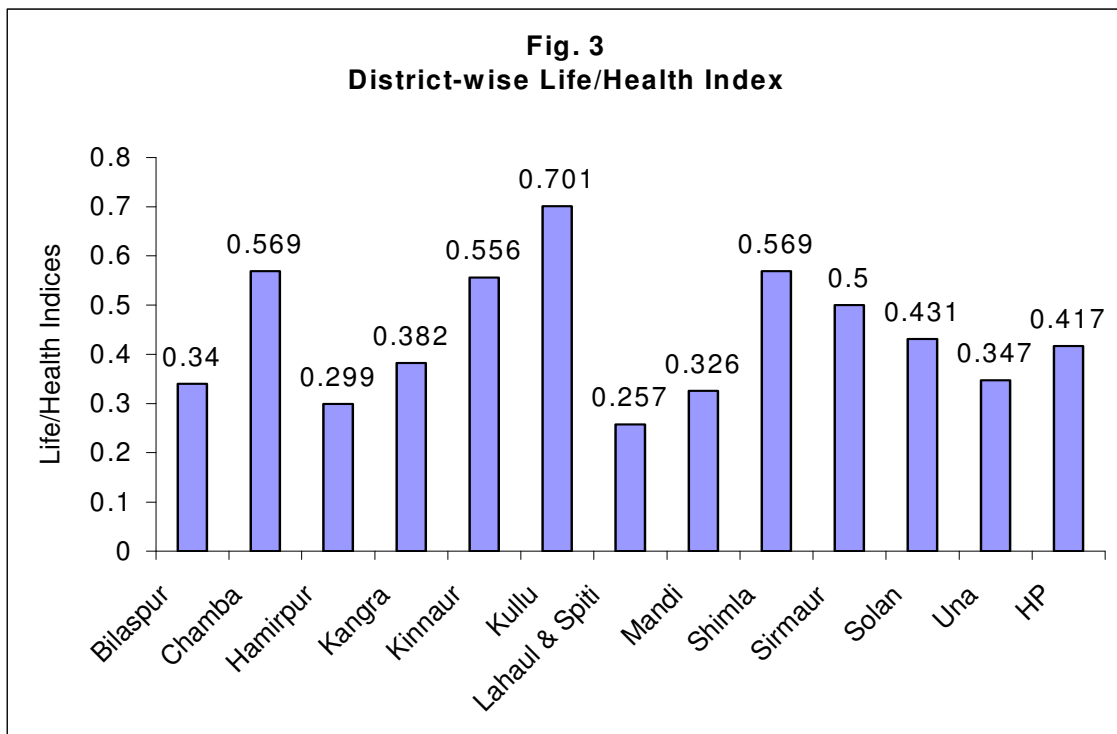


Table 2.3
District-wise Life/Health Index (1991) for Himachal Pradesh

District	Life Index 1991	Rank
Bilaspur	0.340	IX
Chamba	0.569	II
Hamirpur	0.299	XI
Kangra	0.382	VII
Kinnaur	0.556	IV
Kullu	0.701	I
Lahaul & Spiti	0.257	XII
Mandi	0.326	X
Shimla	0.569	III
Sirmaur	0.500	V
Solan	0.431	VI
Una	0.347	VIII
HP	0.417	

Source : *Computed by the Department of Planning, Government of Himachal Pradesh*

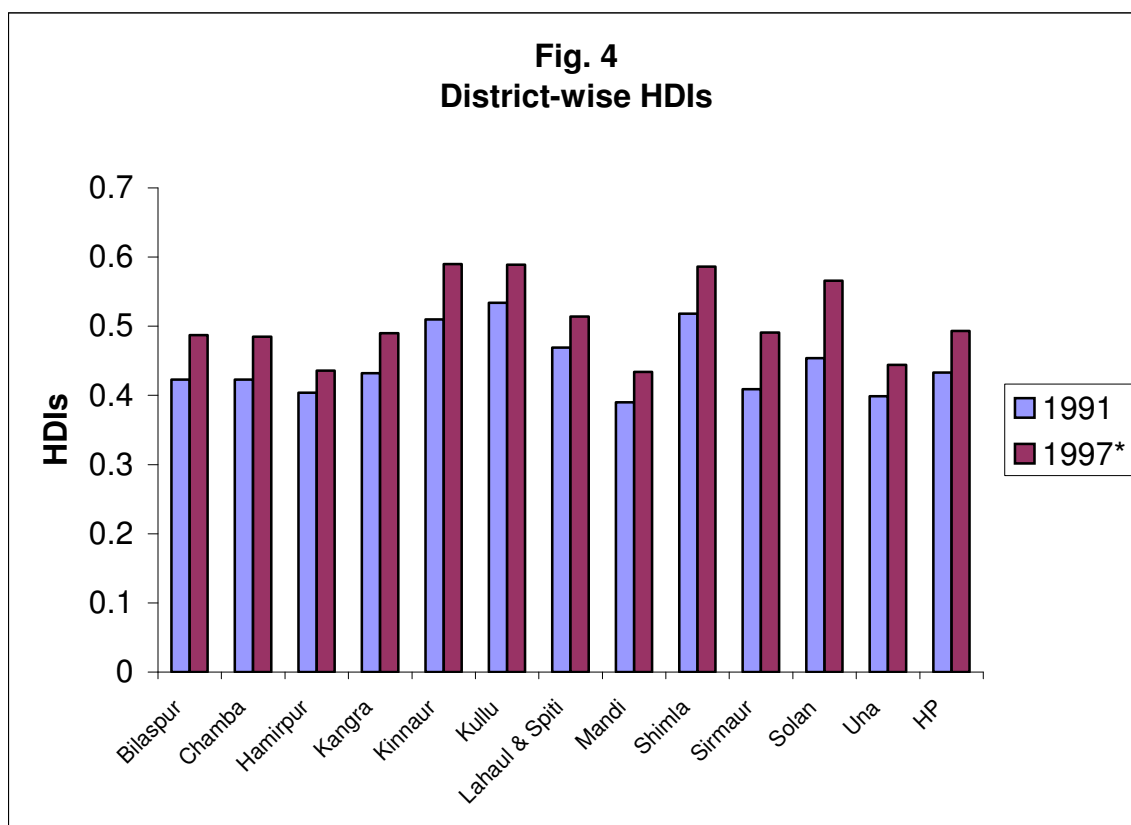
Table 2.4 shows district-wise HDIs for the years 1991 and 1997 and facilities adjudging performance of districts in terms of Human Development. A cursory look at the table reveals that Una is the only district which has retained its rank. The ranks of majority of the districts like Bilaspur, Chamba, Hamirpur, Kangra, Kullu, Lahaul and Spiti, Mandi and Shimla have fallen down from what they were in the earlier analysis. Kinnaur, Sirmaur and Solan are the only districts which have improved their ranks.

Table 2.4
District-wise HDIs for the Years 1991 and 1997

District	1991	Rank	1997*	Rank
Bilaspur	0.423	VI	0.487	VIII
Chamba	0.423	VII	0.485	IX
Hamirpur	0.404	IX	0.436	XI
Kangra	0.432	VI	0.490	VII
Kinnaur	0.510	III	0.590	I
Kullu	0.534	I	0.589	II
Lahaul & Spiti	0.469	IV	0.514	V
Mandi	0.390	XI	0.434	XII
Shimla	0.518	II	0.586	III
Sirmaur	0.409	VIII	0.491	VI
Solan	0.454	V	0.566	IV
Una	0.399	X	0.444	X
HP	0.433		0.493	

**HDIs calculated for the year 1997 are based on Life Indices calculated for the year 1991*

Source : *Computed by the Department of Planning, Government of Himachal Pradesh*



However, these rankings are provisional and only indicative of the shift in the position of districts due to variable impacts of the pace of development in the State and exact rankings of the districts would only be known and compared with those in 1991 when the health indices for 1997 are worked out.

2.9 District Human Development Reports In Himachal Pradesh

As a follow up to the first ever Human Development Report of Himachal Pradesh brought out in the year 2002, the Government of Himachal Pradesh signed a tripartite MOU with the UNDP and the Planning Commission, Government of India to implement the UNDP assisted project “Strengthening of State Plans for Human Development”. Himachal Pradesh is one of the eight States covered under the project

initially. A Human Development Research and Coordination Unit (HDRCU) was established in the Planning Department of Himachal Pradesh to ensure smooth implementation for the project immediately after the MOU was signed. One of the activities envisaged under the project is to prepare Human Development Reports for at least three districts on pilot basis.

Districts Identified

The three districts which have been selected for preparation of District Human Development Reports are :

- Kangra
- Mandi
- Shimla

These districts have been selected due to the social and economic diversity amongst these districts which represents the different geographic, climatic and livelihood patterns in the state. These three districts are not necessarily the districts with low Human Development Indices but have been identified in view of their large size, different demographic features and other features representative of the contiguous districts.

Coverage and Scope of the DHDRs

The DHDRs will cover the following areas by listing different indicators pertaining to these fields at the Development Block level :

- Economic Growth
- Education
- Health
- Physical Infrastructure
 - i) Means of communication
 - ii) Drinking water
 - iii) Electricity
 - iv) Irrigation

A tentative list of indicators covering the above mentioned areas was drawn. These indicators pertaining to each development block in three districts will provide not only inter-district but also inter-development block comparison. The qualitative aspects related to health, education and social sector as a whole which could not be quantified otherwise had also been covered. Apart from the quantitative and qualitative analysis in terms of various indicators pertaining to above fields, the DHDRs will also attempt to analyze, qualitatively, the evolution of decentralized planning in each district and its effectiveness in each district with special reference to extent of people's participation, enabling environment and institutional setup.

Based on the indicators related to economic growth, education and health three indices. i.e. income index, education index and health index which are the basic constituents of the Human Development Index will be worked out for each of the Development Block in all the three districts. An attempt will be made to cover the following in each of the sectors mentioned above with special emphasis on the gender issues :

- The development status and trends (challenges and progress)
- The constraints and enabling factors
- Coordination issues
- The inequalities (Gender, Rural/Urban, Social Group, Regional etc.)
- Mapping of Schemes (Central as well as State)
- Delivery Mechanism
- Impact of Policies

2.10 Computation of Human Development Index (HDI)

Slight deviation from the standard methodology for calculating Human Development Indices for the districts and for the State has been adopted. The methodology for calculating HDI as adopted by the UNDP covers three indicators viz. i) Longevity Index measured by the Life

Expectancy at birth, ii) Educational Attainment Index measured as the combination of adult literacy rate and combined enrolment ratio (primary and secondary) and iii) the Standard of Living Index measured by the real GDP per capita expressed in Purchasing Power Parity in dollars (US) i.e. PPP\$. The methodology for obtaining indicators ii) and iii) has been identical with that used by the UNDP in various Global and Regional Human Development Reports. There is a deviation from the standard methodology in calculating Health Index. Infant Mortality Rate in place of Life Expectancy at Birth has been used to arrive at Health Index as data on life expectancy at birth by districts is not available. Construction of life tables was also not possible as the Census data on district wise population by single year of age has not been made available by the Registrar General of India.

A. Health/Life Index

Infant Mortality Index has been arrived at by using actual, maximum and minimum values of Infant Mortality Rate which then, has been converted into life index by taking former's distance from unity.

Steps for calculating Health/Life index :

$$\text{Infant Mortality Rate Index} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

Where

X_i = Infant Mortality Rate

X_{\max} = 166

X_{\min} = 22

Health Index or Life Index = 1 – Infant Mortality Rate Index.

Maximum and Minimum values for Infant Mortality Rate have been taken as 166 (Damoh, Madhya Pradesh) and 22 (Hyderabad, Andhra Pradesh) respectively.

B. Educational Attainment Index

Educational attainment index has been worked out by combining adult literacy rate and combined enrolment ratio for primary and secondary levels of education (Standards I to X). Enrolment ratios for tertiary level of education could not be incorporated because of non-availability of the same. Enrolment ratios for primary and secondary have been worked out by the Planning Department, Himachal Pradesh based on the enrolment figures provided by the Directorates of Primary and Secondary Education, Government of Himachal Pradesh. Actual enrolments have been divided by the population in that particular age group to arrive at enrolment ratios.

Steps for Calculating Educational Attainment Index

$$\text{i) Adult Literacy Rate Index} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

Where

X_i = Adult literacy Rate

X_{\min} = 0

X_{\max} = 100

$$\text{ii) Combined Enrolment Ratio Index} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

Where

X_i = Combined Enrolment Ratio (I to X)

X_{\min} = 0

X_{\max} = 100

iii) Educational Attainment Index =

$2/3 \times (\text{Adult literacy rate index}) + 1/3 \times (\text{Combined enrolment ratio index})$

Maximum and minimum values for both adult literacy rate and combined enrolment ratio have been taken as 100 and 0 respectively.

C. Income Index

As a first step to arrive at income index, per capita district domestic product has been converted into its Purchasing Power Parity in dollars by taking the ratio of per capita district GDP to that of the country in rupees and multiplying this by the per Capita GDP for the country in PPP\$ (1220 for 1991). The maximum income level of 40,000 PPP\$ has been discounted using Atkinson's formula to 5385 PPP\$. As per capita GDP of no district of Himachal exceeds threshold income i.e. per Capita GDP of the World, no adjustment following Atkinson's formula was required.

Income index then has been calculated by using the following formula :

$$\frac{[(DDP/GDP) \times 1220] - X_{\min}}{X_{\max} - X_{\min}}$$

Where

DDP = Per Capita GDP of the district

GDP = Per Capita GDP of India (5427)

X_{\max} = 5385 PPP\$

X_{\min} = 100 PPP\$

D. Human Development Index (HDI)

HDI = 1/3x (Income Index + Health/Life Index + Educational Attainment Index)

2.11 Computing Gender Related Development Index (GDI)

While computing GDI, all the three components of the HDI have been adjusted for the average achievement of each district in accordance with the disparities in achievement of men and women. In fact GDI is HDI discounted for Gender inequality. Methodology for calculating GDI also deviates from the standard methodology to the extent that IMR in place of LEB has been used to work out Health/Life Index. Following indicators are required to calculate GDI :

- i) Percentage shares of males and females in total population.
- ii) Infant Mortality rate for male and female child.
- iii) Adult literacy rate for males and females.
- iv) Combined primary and secondary enrolment ratio for males and females.
- v) Share of males and females in economically active population.
- vi) Agricultural wage rate for males and females.

Extent of Inequality Aversion Adopted

The Gender Equity Sensitive Indicator (GESI) methodology has been used, utilizing the $1 - \epsilon$ averaging. The value of $\epsilon = 2$. In the context of the Gender based index, this is a measure that indicates the contribution of a one-unit increase in *female achievement* to the X_{ede} i.e. to the equally distributed equivalent achievement. *Female achievement*, because their achievement values are lower than those of men, the implication is that in conditions where male achievement is lower than that of females, ϵ will measure the contribution of a unit increase of male achievement to the X_{ede} . It (ϵ) indicates social preference for equality because it is the elasticity of the marginal social valuation of achievement (Anand and Sen, 1995)²¹.

²¹ Anand, Sudhir and Amartya Sen (1995). *Human Development Index : Methodology and Measurement*, Human Development Report Office, Occasional Papers No.12, UNDP, New York.

Following are the steps for calculating GDI :

A. Equally Distributed Health/Life Index

$$i) \quad \text{Female Health/Life Index} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

$$ii) \quad \text{Male Health/Life Index} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

$$iii) \quad \text{Equally Distributed Health/Life Index} = [(\text{Female Population Share}) \times (\text{Female Life Index})^{1-\epsilon} + (\text{Male population Share}) \times (\text{Male Life Index})^{1-\epsilon}]^{1/1-\epsilon}$$

B. Equally Distributed Educational Attainment Index

i) Adult Literacy Rate Index

$$\text{Males} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

$$\text{Females} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

ii) Combined Gross Enrolment Ratio Index

$$\text{Males} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

$$\text{Females} = \frac{X_i - X_{\min}}{X_{\max} - X_{\min}}$$

iii) Educational Attainment Index

Males = $2/3 \times (\text{Male Adult Literacy Index}) + 1/3 \times (\text{Male Combined Enrolment Index})$

Females = $2/3 \times (\text{Female Adult Literacy Index}) + 1/3 \times (\text{Female Combined Enrolment Index})$

iv) Equally Distributed Educational Attainment Index

$[(\text{Female Population Share}) \times (\text{Female Educational Attainment Index})^{1-\epsilon} + (\text{Male Population Share}) \times (\text{Male Educational Attainment Index})^{1-\epsilon}]^{1/1-\epsilon}$

C. Equally Distributed Income Index

Proportional Income Share :

i) **Average Wage (w)** = $[(\text{Female Share of Economically Active Population}) \times (\text{Ratio of Female Wage to Male Wage}) + (\text{Male Share of Economically Active Population}) \times 1]$

ii) **Female Wage to Average Wage** = $\text{Ratio of Female Wage to Male Wage} / \text{Average Wage (w)}$

iii) **Male Wage to Average Wage** = $1 / \text{Average Wage (w)}$

iv) **Female Share of Earned Income** =

$(\text{Female Wage Rate to Average Wage}) \times (\text{Percentage Share of the Female Economically Active Population})$

v) **Male Share of Earned Income** =

$(\text{Male Wage to Average Wage}) \times (\text{Percentage Share of the Male Economically Active Population})$

vi) **Female Proportional Income Share** =

(Female Share of Earned Income) / (Female Population Share)

vii) Male Proportional Income Share =

(Male Share of Earned Income) / (Male Population Share)

Equally Distributed Income Index

i) Equally Distributed Proportional Income Share =

$[(\text{Female Population Share}) \times (\text{Female Proportional Income Share})^{1-\epsilon} + (\text{Male Population Share}) \times (\text{Male Proportional Income Share})^{1-\epsilon}]^{1/1-\epsilon}$

ii) Equally Distributed Proportional Income PPP\$ =

[Equally Distributed Proportional Income Share] x [Adjusted GDP Per Capita PPP\$]
(Per Capita GDP for Himachal PPP\$ Equivalent is 1038)
Equally Distributed Income Index =

$$\frac{\text{Equally Distributed Proportional Incomes PPP\$} - X_{\min}}{X_{\max} - X_{\min}}$$

Where

$$X_{\max} = 5385 \text{ PPP\$}$$

$$X_{\min} = 100 \text{ PPP\$}$$

D. Gender Related Development Index

Gender Related Development Index =

1/3 x (Equally Distributed Health Index + Equally Distributed Educational Attainment Index + Equally Distributed Income Index).

2.12 Problems in Computation of HDIs for Districts

Indices help us in knowing the status of individual development units (Country, State, District, Block) in relation to similar units. Indices also give us opportunity to compare development across units and present to the policy makers perspectives for prioritization in initiating further development action. But computation of Health/Life Index, Educational Attainment Index, Income Index and finally Human

Development Index, Gender Related Development Index at Block Level is not very easy task.

The major problems faced at block are :

- Block-wise data on Life Expectancy at birth are not available.
- Block-wise data on GDP/Per Capita Income are not available.
- Only the data set for measuring knowledge deprivation (both literacy rate and gross enrolment ratio) for Primary and Secondary level are available block-wise. Tertiary enrolment figures are not available. Therefore, enrolment age group gets reduced to 6-14 years of age.
- Block-wise data on Infant Mortality Rate are not available.

There were wide ranging consultation at each stage of preparation of the DHDR with key stakeholders like, District Administration, Block Development Officers, State Planning Department, NGOs, Academia, Media, Civil Society Members, Panchayat Pradhans, Chairperson and Secretary of Zila Parishad and District level officials of various government departments by holding the brainstorming workshops.

It was decided at the brainstorming workshop (given the data availability and reliability of block level data), not to prepare Human Development Indices in DHDR. However, the District Human Development Report (DHDR) must present data at the district and sub-district level for the key Human Development Indicators. For the sectors analysed in the DHDR, reliable and verified data must be presented, particularly related to outcome, access to services and utilization of services. To the extent possible, disaggregated data (gender, social groups) should be provided without compromising on the quality of data.

2.13 Sources of Data Used for DHDR

The main sources of data used for preparing DHDR of Shimla district are:

- i) Census of India 1991 and 2001 and Sample Registration System (SRS).
- ii) National Sample Survey (NSS).

- iii) National Family Health Surveys (NFHS) 1 and 2 and Quick Results of NFHS-3, RCH Survey.
- iv) Directorate of Economics and Statistics provided the relevant data and supported the District Statistical Office in Compilation of Block-level data.
- v) District Information System for Education (DISE) and State Project Office, Sarva Shiksha Abhiyan, Himachal Pradesh.
- vi) Directorates and District Level Offices of various Government Departments (Agriculture, Horticulture, Health, Animal Husbandry, Rural Development and Panchayati Raj, Social Welfare, PWD, Land Records, Labour and Employment), District Planning Office, District Project Office (DRDA), District Programme Office, Zila Parishad Office and Block Offices of all Blocks of Shimla District.
- vii) With the help of State Council for Science, Technology and Environment, Shimla, Resource Mapping of Natural Endowments in Different Blocks of District Shimla was done.

Development Block-wise information was available with respect to General Indicators, Educational Attainments, Health Attainments, Infrastructure and other facilities but Block-wise Income and Poverty, and Urban Amenities data was not available. There were some constraints like BPL Census 2002 data of number of families below poverty line has so far not been released, Economic Census 2005 Report is not yet out. There is no estimation of Child Labour for District Shimla and Tertiary Enrolment data is not compiled by the Directorate of Education.

However, efforts have been made to draw a comparative picture of the Blocks of Shimla district with respect to the aforesaid indicators in the subsequent chapters of this Report.

CHAPTER – III

EDUCATIONAL ATTAINMENTS OF DISTRICT SHIMLA

3.10 Introduction

For any region and its people, educational attainments are an important factor determining its pace of economic growth as well as its level of human development. It is widely recognised that reasonable educational attainments lead to the creation of human capital, which in turn promotes economic growth. So far as human development is concerned, the originator of this concept of development, the UNDP, recognised that one of the components of the composite human development index is “Knowledge”²² which necessarily depend on educational attainments.

While dealing with the educational attainments of Shimla district it is important to notice which indicators of this phenomenon are going to be used in this chapter to assess the degree of success achieved by this district in this respect. In fact, the choice of these indicators depends on the availability of data development block level wise for the district. Depending on this data facility for Shimla district, the following indicators of educational attainments of the district at a disaggregated level shall be used in this chapter:-

- (a) Literacy ratios, including gender gap in literacy.
- (b) Student enrolment situation.
- (c) Teacher-public ratios.
- (d) Number of schools/colleges per 100sq. km. of area.
- (e) Access to educational facilities in terms of distance of educational institutions from habitations.

²² UNDP. *Human Development Report* 1998, Oxford University Press, New York, p. 15.

As would be noted from the statistical tables given in this chapter, there are nine development blocks in Shimla District. Analysis in this chapter shall proceed in respect of these development blocks. However, it may also be noted in passing that the District Information System for Education (DISE) created for each district of Himachal Pradesh by the government has divided Shimla district into 17 education blocks, and a publication of the DISE has provided information on educational attainments for the district based on this classification.²³

The development block levelwise analysis of educational attainments of Shimla district, based on the indicators mentioned above, follows in the ensuing sections of this chapter.

3.11 Literacy Ratios

Literacy and education are considered by recognised authors and academics as factors promoting economic growth as well as enhancement of human development. According to Amartya Sen and Jean Dreze, “ The elimination of ignorance, of illiteracy and of needless inequalities in opportunities (are) objectives that are valued for their own sake. They expand the freedom to lead the lives we have reason to value and those elementary capabilities are of importance on their own.” Similarly, Mehboobul Haq and Khadija Haq seem to be equally enthusiastic about the value of literacy and education in promoting economic growth when they observe that “ Education is the passport to accelerated economic growth (it) is the key to building human capital and human capital is the vital ingredient in building a nation”.²⁴ Thus, it is very important to analyse the status of literacy and education in a particular region to notice the current and potential state of its human development and economic

²³ DISE, *DISE Data Analysis in Respect of Distt. Shimla for the year 2005-06*.

²⁴ Quoted in Government of Karnatka, *Human Development in Karnatka 1999*, p. 47.

growth as far as these are determined by the achievements registered by the region and its people in the matter of literacy and education.

This section of the chapter focuses on the attunement of different development blocks of Shimla district in the matter of literacy. Based on the availability of data, the different facets of literacy that are analysed here are: the overall gender-based literacy rates as well as those according to the place of residence, i.e. rural and urban areas; literacy rates of the scheduled castes and scheduled tribes, again noted separately in respect of their males and females as also based on their rural and urban places of residence; and in respect of the foregoing categories, gender gap in literacy would also be analysed.

Data in Table 3.1 depicts the position of different development blocks of Shimla district in the matter of various facets of literacy in the year 1991. These data show that in that year, Mashobra development block had the highest overall literacy rate, while Chhohara had the lowest. Further, it is seen that, unfortunately, the female literacy rate of overall population in 1991 was less than 50 per cent in as many as six out of nine development blocks of the district. Among the disadvantaged groups of SCs and STs, Basantpur development block had the highest literacy rate, while again, Chhohara (along with Chopal) had the lowest literacy rates. It is rather agonising to notice that in a State like Himachal Pradesh, which has taken rapid strides in recording a high rate of growth of literacy in the country the female literacy rate among SCs was just 10.71 per cent in the Chhohara development block, and the female literacy rate among this disadvantaged group was less than 40 per cent in as many as six development block. However, the literacy position of the other disadvantaged group, viz. STs was relatively.

Table 3.1**Literacy Rates (%) of Overall Population, SCs and STs in Shimla District-Gender-based and according to place of Residence (Rural/Urban) in the year 1991**

Sr. No.	Development Block	Overall Population			Scheduled Castes			Scheduled Tribes			Gender-based and according to place of residence		
		Overall Population			Scheduled Castes			Scheduled Tribes			Overall Population (Rural)		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1.	Mashobra	89.27	98.40	78.08	60.96	72.82	48.18	85.73	89.83	79.14	69.46	81.26	57.11
2.	Basantpur	84.75	90.81	78.51	74.36	83.58	64.77	100.00	100.00	100.00	-	-	-
3.	Theog	62.05	73.88	49.61	47.90	58.41	36.94	75.38	70.37	78.95	61.11	73.30	48.53
4.	Narkanda	67.96	78.33	56.69	58.86	71.40	45.88	53.71	66.69	43.10	67.82	78.22	56.65
5.	Rampur	58.41	73.11	42.12	51.24	62.33	30.41	66.09	84.16	57.17	56.79	71.79	40.59
6.	Jubbal & Kotkhai	62.07	73.61	49.06	50.52	64.93	35.69	57.27	63.41	49.52	61.39	73.12	48.29
7.	Chhohara	40.19	56.40	23.25	25.36	37.77	10.71	20.68	30.77	12.50	40.20	56.40	23.25
8.	Rohru	57.94	73.07	42.07	43.12	59.90	25.59	49.61	61.90	37.50	56.22	71.62	40.19
9	Chopal	45.31	57.67	31.72	30.08	42.65	16.26	19.55	26.51	11.85	44.74	57.08	31.30

Contd...

Table 3.1
Literacy Rates (%) of Overall Population, SCs and STs in Shimla District-Gender-based and according to place of Residence (Rural/Urban) in the year 1991

Sr. No.	Development Block	Gender-based and according to place of residence			Gender-based and according to place of residence											
		Overall Population (Urban)			Scheduled Casts						Scheduled Tribes					
					Rural			Urban			Rural			Urban		
		T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
1.	Mashobra	87.53	90.67	83.10	58.53	70.90	45.50	76.98	84.00	67.47	81.58	85.33	76.72	90.71	94.19	83.09
2.	Basantpur	84.75	90.81	74.34	-	-	-	74.36	83.58	64.77	-	-	-	100.00	100.00	100.00
3.	Theog	86.33	90.39	80.23	47.27	57.70	36.50	72.82	82.80	24.05	56.25	42.86	66.66	93.17	100.00	90.00
4.	Narkanda	76.06	83.25	60.85	58.84	71.43	45.86	62.19	69.81	40.27	49.21	62.82	27.08	65.31	80.00	50.00
5.	Rampur	84.70	90.80	74.34	45.84	61.30	29.48	72.38	83.88	56.11	59.10	70.23	45.48	83.65	78.88	69.66
6.	Jubbal & Kotkhai	81.95	86.11	75.76	49.83	64.31	35.01	67.21	79.12	53.33	55.36	62.10	47.56	64.00	67.86	59.01
7.	Chhohara	-	-	-	24.36	37.77	10.71	-	-	-	20.68	30.77	12.50	-	-	-
8.	Rohru	81.14	89.95	68.45	42.40	59.25	24.87	58.07	72.69	41.35	49.12	61.82	37.29	53.84	62.50	40.00
9	Chopal	78.47	84.24	66.12	29.35	41.78	15.78	71.98	83.53	51.61	18.77	25.73	11.37	87.50	100.00	66.66

Source : Compiled from District Census Handbook (Village and Town-wise Primary Census Abstract) Shimla District, Himachal Pradesh Series-9, Director of Census Operations, Himachal Pradesh 1991.

Fig. 3.1 (a)
Literacy Rate of Overall, SCs, STs (Male and Female) in 1991

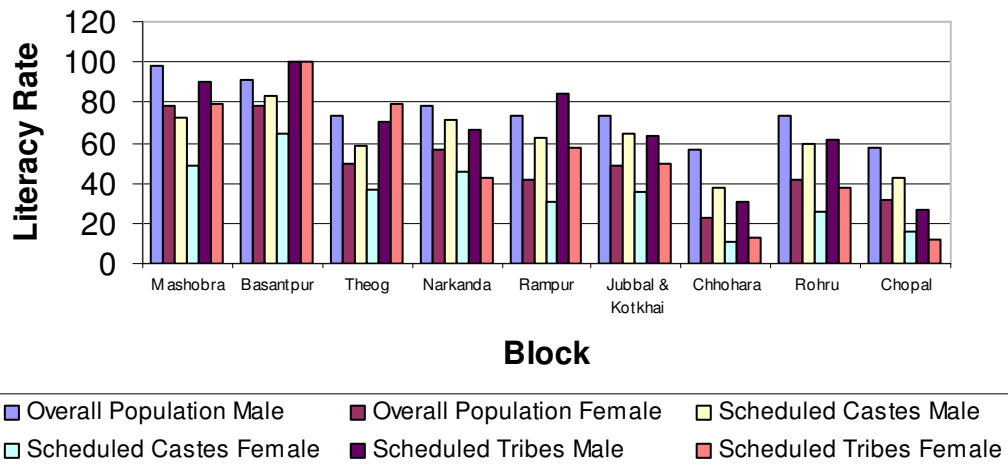
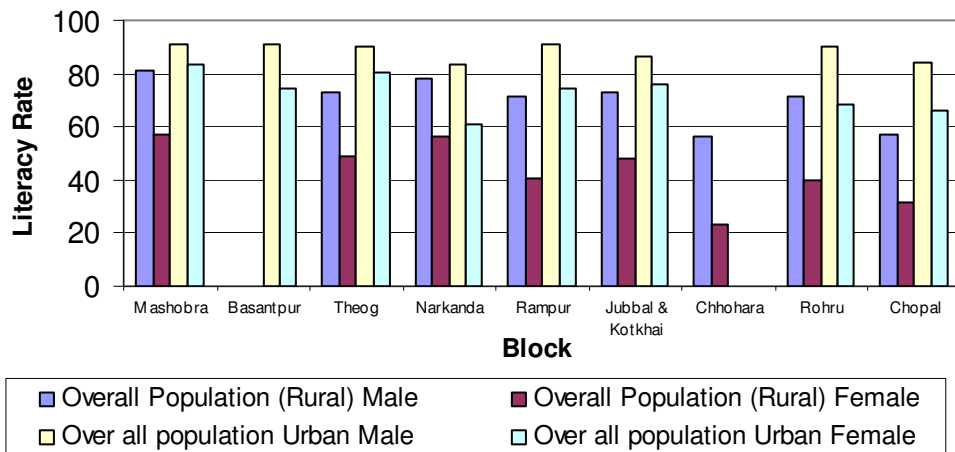
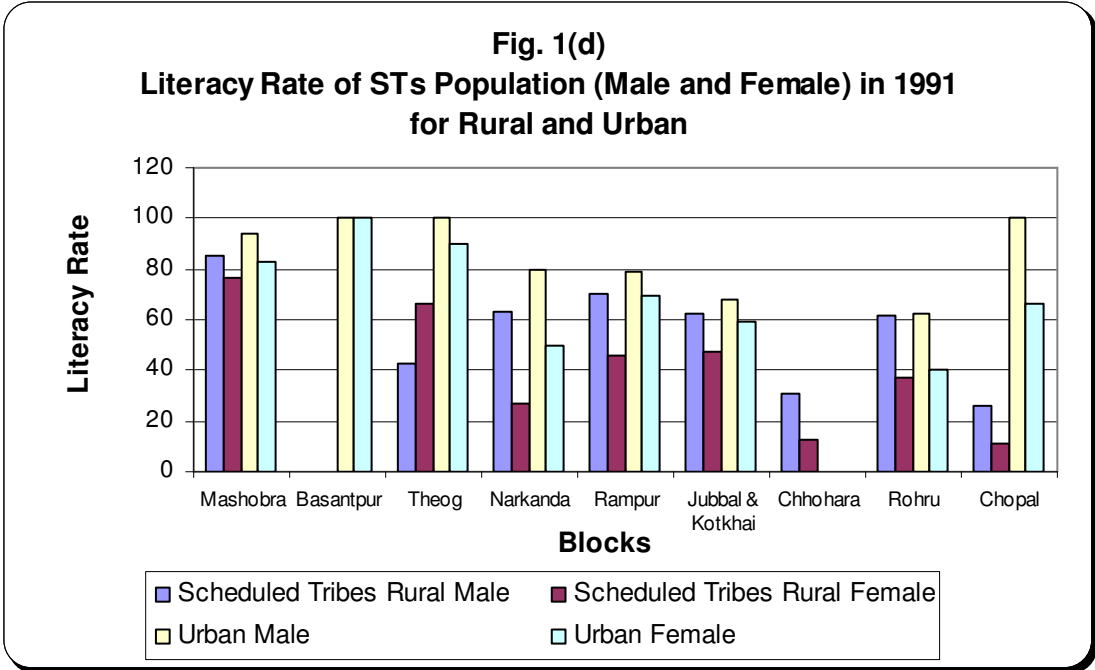
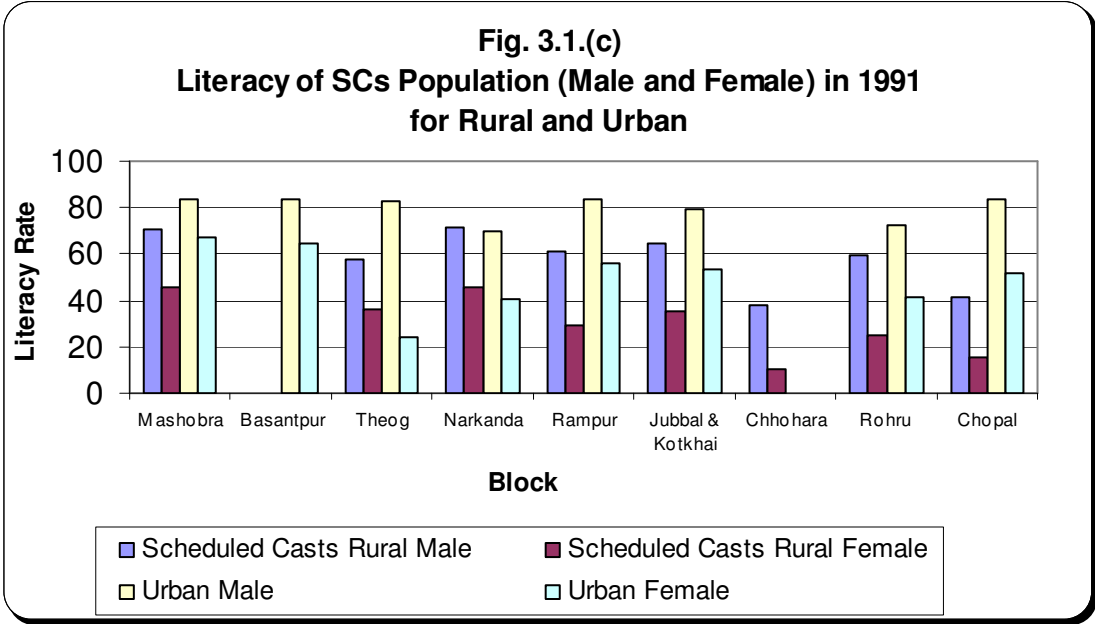


Fig. 3.1 (b)
Literacy Rate of Overall Population (Male and Female) in 1991 for Rural and Urban





happier, except in Chhohara and Chopal development blocks. Whether one takes the overall population, or that of the SCs and STs, the literacy rates of the urban residents are much higher than those of the rural population.

The state of literacy of these development blocks in the year 2001 is shown in Table 3.2. These data in the Table, depicting the position according to the latest population census, bring out a rather much improved state of literacy in nearly all the development blocks of Shimla District compared to that in the year 1991. Taking, first of all, the overall population, the leading development blocks in literacy rate in 1991, viz. Mashobra and Basantpur, have shown hardly any improvement in this respect in 2001. However, the remaining development blocks of the district have recorded impressive gains. And even female literacy rate is no where less than 60 per cent, except in Chhohara block. Male literacy rate has exceeded 84 per cent in all the development blocks, except Chhohara and Chopal blocks. Overall, the state of literacy in Shimla District, according to the 2001 population census, seems to be quite creditable.

The foregoing assertion is also supported by data in Table 3.2 on the state of literacy of disadvantaged groups SCs and STs in different development blocks of Shimla district. Taking the SCs first of all. Among the males of the SCs, the literacy rate exceeds 80 per cent in six out of nine development blocks. So far as females of SCs are concerned, their literacy rate exceeded 60 per cent only in one development block in the year 1991. But in 2001, four development blocks had female literacy more than 60 per cent, and 3 blocks had this literacy rate more than 55 per cent. Chhohara and Rohru blocks were doing very poorly in this respect in 1991, and even in 2001, these were lagging far behind the rest of the development blocks.

Table 3.2

Literacy Rates (%) of Overall Population, SCs and STs in Shimla District-Gender-Based and According to Place of Residence (Rural/Urban) in the Year 2001

Sr. No.	Development Block	Overall Population			Scheduled Castes			Scheduled Tribes			Gender-based and according to place of residence		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Overall Population (Rural)		
											Total	Male	Female
1.	Mashobra	89.41	93.00	84.84	76.79	86.62	69.32	86.85	93.17	78.91	84.20	90.86	76.68
2.	Basantpur	83.68	89.27	71.36	72.54	81.55	63.75	94.12	85.17	100.00	79.57	89.05	70.74
3.	Theog	79.81	87.82	71.39	73.44	81.72	64.86	100.00	100.00	100.00	79.27	87.55	70.68
4.	Narkanda	79.88	88.90	70.55	74.36	85.08	63.45	81.48	90.00	66.66	79.70	88.79	70.39
5.	Rampur	76.31	86.19	65.22	69.07	80.18	57.51	85.23	91.42	78.01	75.26	85.55	63.90
6.	Jubbal & Kotkhai	75.52	85.94	64.48	69.25	81.29	57.06	63.08	60.43	69.23	74.92	85.64	63.69
7.	Chhohara	58.10	73.22	46.79	50.30	63.14	37.00	42.86	40.00	50.00	60.39	73.22	46.79
8.	Rohru	72.76	84.35	60.21	63.52	76.91	49.63	68.27	80.35	54.17	70.97	83.47	57.90
9	Chopal	69.35	78.41	59.70	64.20	72.40	55.21	84.03	85.24	82.76	68.97	78.13	59.26

Contd.....

Table 3.2

Literacy Rates (%) of Overall Population, SCs and STs in Shimla District-Gender-Based and According to Place of Residence (Rural/Urban) in the Year 2001

Sr. No.	Development Block	Gender-based and according to place of residence			Gender-based and according to place of residence											
		Overall Population (Urban)			Scheduled Casts						Scheduled Tribes					
		Total	Male	Female	Rural			Urban			Rural			Urban		
					Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1.	Mashobra	92.02	93.99	89.36	78.31	87.03	69.16	85.00	89.81	77.93	86.85	93.17	78.90	92.00	94.92	88.15
2.	Basantpur	90.75	94.43	87.15	71.95	81.83	62.91	85.08	92.27	77.51	100.00	100.00	100.00	83.33	75.00	100.00
3.	Theog	90.46	92.68	87.49	73.12	81.47	64.52	85.56	90.80	79.05	100.00	100.00	100.00	100.00	100.00	100.00
4.	Narkanda	90.61	93.88	84.65	74.28	85.05	63.36	86.76	88.37	84.00	90.24	92.75	76.90	64.00	66.67	60.00
5.	Rampur	92.84	95.37	89.22	63.45	79.69	56.82	87.20	93.03	79.74	83.11	90.72	74.76	94.00	94.57	93.04
6.	Jubbal & Kotkhai	91.04	92.76	88.59	47.67	80.81	56.14	89.18	93.79	85.11	62.71	60.71	67.65	66.67	57.17	80.00
7.	Chhohara	-	-	-	50.30	63.14	37.00	-	-	-	42.85	40.00	50.00	-	-	-
8.	Rohru	86.84	90.33	81.82	62.52	76.22	48.45	80.18	87.47	71.21	64.44	76.59	51.00	92.86	100.00	80.00
9	Chopal	87.99	89.95	85.12	61.65	70.03	52.44	86.89	91.58	80.54	84.03	85.24	82.76	-	-	-

Source : Compiled from

- (i) *Primary Census Abstract, H.P Series 3, Census of India 2001, Directorate of Census Operations, H.P.*
- (ii) *Primary Census Abstract, (Community Development Block-wise), Census of India 2001, Directorate of Census Operations, H.P*

Fig. 3.2 (a)
Literacy Rate Overall, SC, STs (Male and Female) 2001

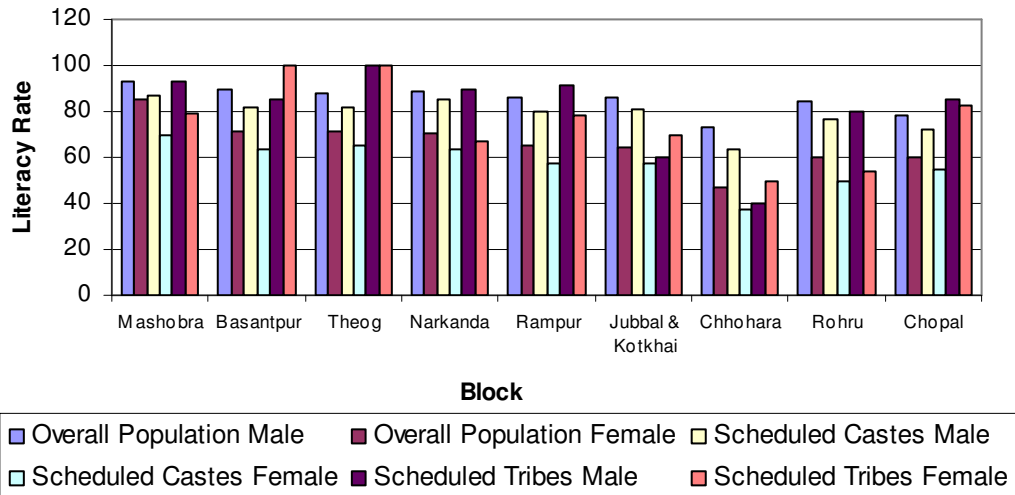


Fig. 3.2 (b)
Literacy Rate of Overall Population (Male and Female) in 2001 for Rural and Urban

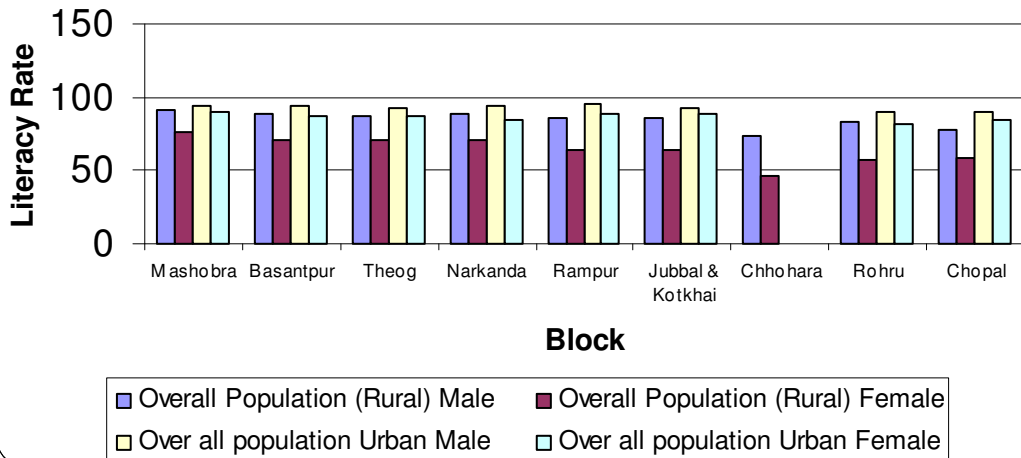


Fig. 3.2(c)
Literacy Rate of SCs Population (Male and Female) in 2001
for Rural and Urban

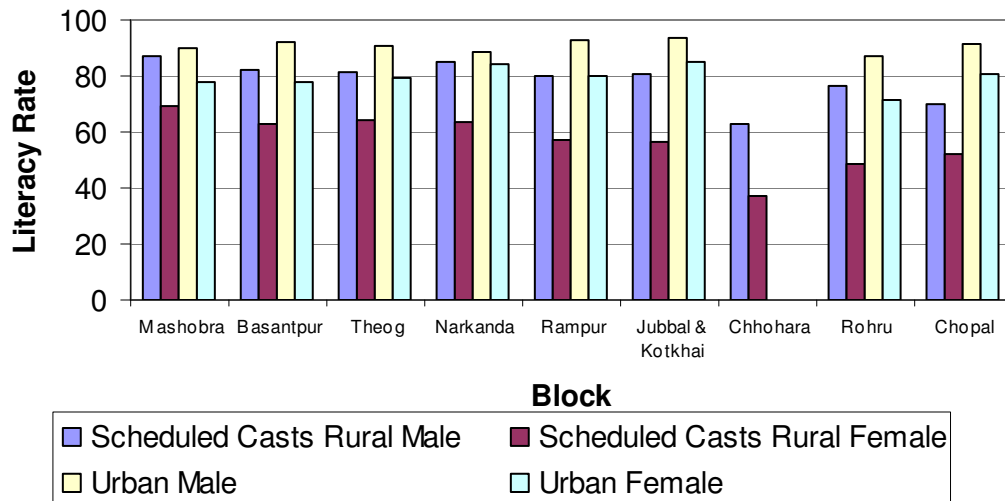
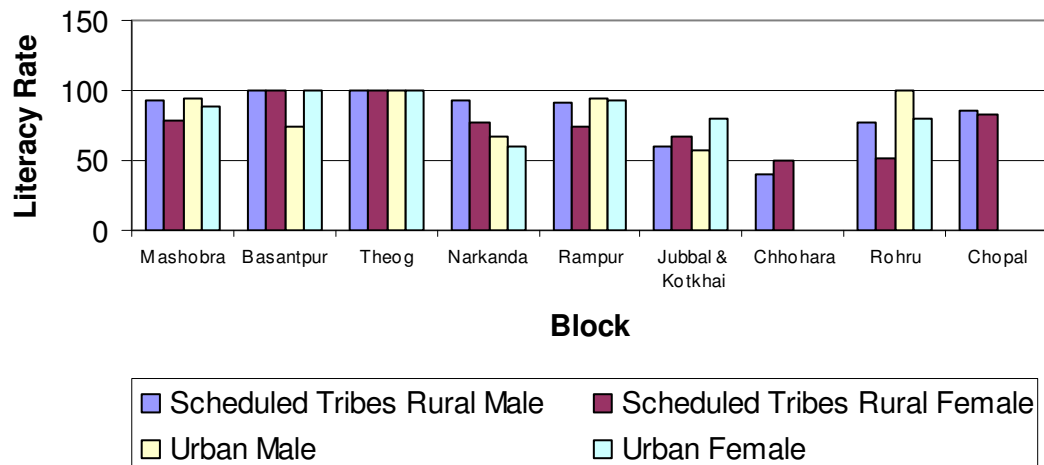


Fig. 3.2 (d)
Literacy Rate of STs Population (Male and Female) in 2001
for Rural and Urban



Interestingly, in 2001 the STs had higher literacy rates than the overall population in 5 out of 9 development blocks, though the absolute number of the former group of people in Shimla District is relating small. Another interesting thing to be noted here is that in 4 development blocks, the ST female literacy rate exceeded the male literacy rate. Even in the rest of the blocks, the female literacy rate was no where less than 50 per cent.

Coming now to the place of residence. i.e. rural and urban, and taking the overall population first of all, it would be noted in Table 3.2 that the literacy rates in rural and urban areas are not significantly different from each other. Rural males have a literacy rate of more than 73 per cent in all the development blocks. Even rural females have not lagged far behind in this respect. In six blocks, their literacy rate exceeded 60 per cent. The urban overall population has of course higher literacy rate, with male literacy rate being 90 per cent or more. The urban females did not lag much behind. Their literacy rate ranges between 82 and 89 per cent.

It is creditable that the SCs are closing the literacy gap with overall population both in the rural and the urban areas. Even their females seem to be acquiring literacy in increasing numbers as that even their literacy gap with the females of overall population is narrowing.

The STs have done better than the overall population in this respect in both rural and urban areas of the of the development blocks. Even their female literacy rate in both rural and urban areas is much higher in nearly all the development blocks than that of the females of the overall population.

The foregoing is overall a rather happy picture of literacy situation in different development blocks of Shimla district, particularly in the year 2001. Of course, in order to further improve this situation, some of the

still persisting negative features of literacy in some blocks, some disadvantaged groups and place of residence need to be removed. In the first place, it may be noted in Table 3.2 that in the case of overall population, Chhohara development block has the lowest literacy rate of 58.10 per cent, and this is as much as 31.31 percentage point behind that of the highest literacy rate of Mashobra development block. Even Chopal block has been lagging behind the rest of them in this respect. In Chhohara development block the literacy rate of SCs and STs too was the lowest. Secondly, it would be noted in Table 3.2 that the growth rate of female literacy of overall as well as SC population in all development blocks needs to be accelerated so as to narrow down, if not close, the gap with that of the males. Thirdly, the rural literacy rate of overall and SC population needs to be accelerated so as to further narrow down the gap with that of the urban population in nearly all the development blocks.

3.12 Gender Gap in Literacy

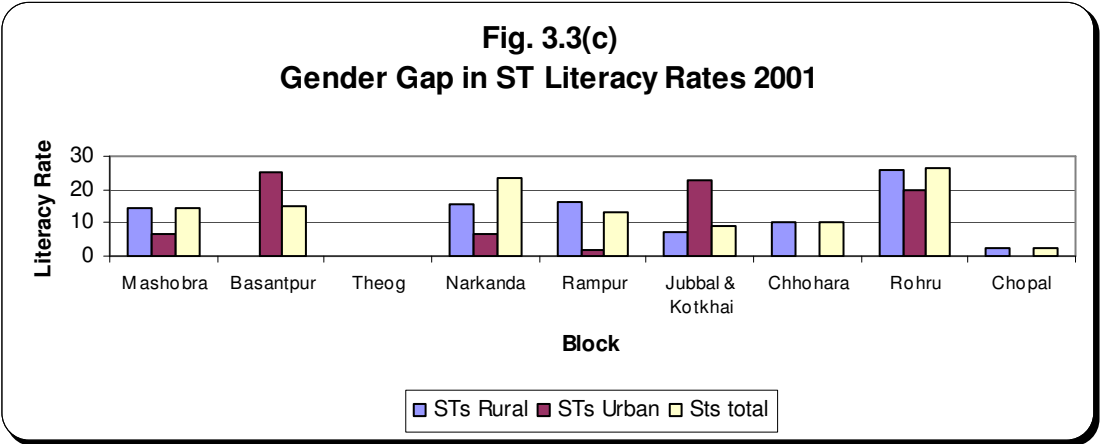
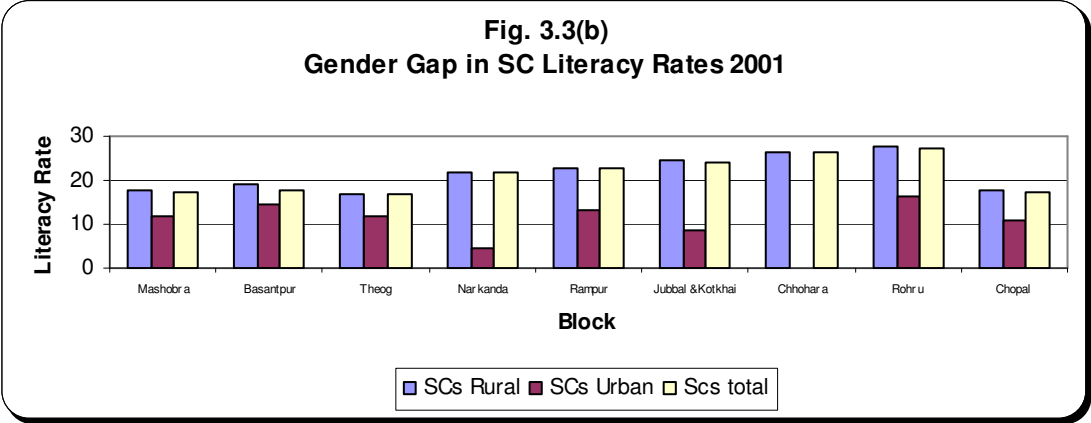
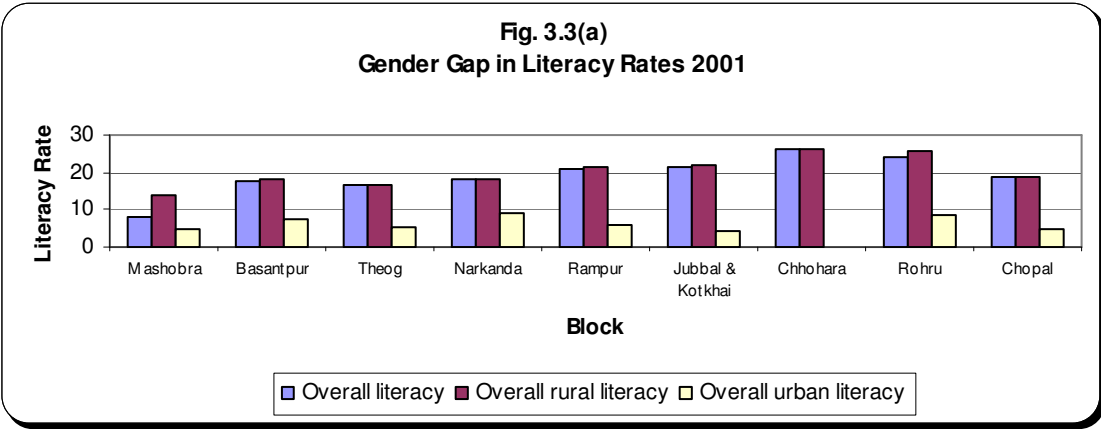
A gender gap in literacy is the shortfall in female literacy rate in comparison to the male literacy rate. Thus, the data in this respect provided in Table 3.3 is derived by deducting the female literacy rate from the male literacy rate in each development block under respective categories. The gender gap is one of the indicators of gender discrimination. Since literacy opens the door for acquiring education and the latter amounts to human capital formation, literacy gap would be a disadvantage at the micro as well as the macro levels.

Data in Table 3.3 brings out the degree of shortfall of literacy rate of females compared to that of the males. It would be seen in the Table that the overall literacy gap is quite high in all development blocks of Shimla District, except the Mashobra block. As between the rural and urban areas, the overall literacy gap is much higher in the rural areas.

Table 3.3
Gender Gap in Literacy Rates: 2001

Gender gap in										
Sr. No	Development Block	Overall literacy	Overall rural literacy	Overall urban literacy	SCs			STs		
					Total	Rural	Urban	Total	Rural	Urban
1	Mashobra	8.16	14.18	4.63	17.30	17.87	11.88	14.26	14.27	6.77
2	Basantpur	17.91	18.31	7.28	17.80	18.92	14.76	14.83	0.00	25.00
3	Theog	16.43	16.87	5.19	16.86	16.95	11.75	0.00	0.00	0.00
4	Narkanda	18.35	18.40	9.23	21.63	21.69	4.37	23.34	15.85	6.67
5	Rampur	20.97	21.65	6.15	22.67	22.87	13.29	13.41	15.96	1.53
6	Jubbal & Kotkhai	21.46	21.95	4.17	24.23	24.67	8.68	8.80	6.94	22.83
7	Chhohara	26.43	26.43	-	26.14	26.14	-	10.00	10.00	-
8	Rohru	24.14	25.57	8.51	27.28	27.77	16.26	26.18	25.59	20.00
9	Chopal	18.71	18.87	4.83	17.19	17.59	11.04	2.48	2.48	-

Source : As per Table 3.2



Whether it is total literacy gap or that of rural areas, the gap is exceedingly high in Chhohara and Rohru development blocks. Even Rampur and Jubbal-Kotkhai blocks have fairly high literacy gaps.

Among the disadvantaged groups, total literacy gap is higher among SCs compared to the STs, except in the Narkanda block. Among SCs, the total literacy gap is very high in all the development blocks. It is the result of this gap being high in the rural areas. Among STs, there is a large variation in the literacy gap between one development block and the other. While the Theog block has a zero gap, it is as high Rs. 23.34 and 26.18 in the Narkanda and the Rohru development blocks respectively. Such large variation in the literacy gap is to be seen in the case of STs in both the rural and the urban areas.

The foregoing literacy gaps, as the indicator of gender discrimination, need to be removed at the earliest because these dilute the reputation of Himachal Pradesh as a state having made rapid strides in the growth of literacy in the country. Secondly, gender discrimination is an evil which does harm to social and economic progress and, therefore, needs to be removed as soon as possible.

3.13 Enrolment Situation

The state of enrolment of pupils in schools, colleges and training institutes is another important component of educational attainments of a region. If the requisite rate are available, enrolment situation has to be looked into from different angles. For example, enrolment ratio is an important aspect, which assesses the proportion of children in a given age group, which gets enrolled in educational institutions. Another aspect is the drop out rate which shows the proportion of pupils enrolled in such institutions which tend to drop out before reaching a certain class. Then there is the proportion of those children who never got themselves enrolled in primary schools. Such proportion of left-outs also

shows how far the educational system has failed to enroll the potential pupils in the first place.

3.14 Enrolment in Schools

The UNDP, in its estimation the human developments index, uses the state of enrolment of students in schools as one of the indices of 'knowledge.' It in fact uses enrolment ratio---the percentage of boys and girls of school going age actually seeking enrolment in schools---for this purpose.

In the present context, we were unable to get the requisite data of enrolment ratios for the different development blocks of Shimla district. Such information in fact does not exist with the official agencies of Himachal Pradesh Government. For some data on the state of enrolment of students in schools, we had to depend on information published in this regard by the District Information system for education (DISE).²⁵ It must be stressed here that the educational blocks, for which data have been published by the DISE, are different from the development blocks that figure in other sections of this chapter.

The enrolment data available from the DISE are shown in Table 3.4. These data in respect of the primary and middle schools (the latter are referred to as upper primary schools by the DISE) include the absolute number of total enrolment during the year 2005-06, the percentage of boys and girls enrolled, as well as the percentage of SC and ST students enrolled, in each of the educational blocks.

²⁵ DISE, *DISE Data Analysis in Respect of District Shimla for the year 2005-06*.

Table 3.4

**Gender-wise Enrolment in Primary and Middle Schools in
Different Blocks of Shimla Distt.–Overall , SCs and STs Population (Year 2005-06)**

Block Name	Total Enrolment (Primary & Middle)	Primary Level Enrolment								
		Boys	Girls	Total	Schedule Castes Enrolment			Schedule Tribes Enrolment		
					Boys	Girls	Total	Boys	Girls	Total
Chhohara	7899	2514	2414	4928	930	916	1846	2	1	3
Chopal	5371	1678	1691	3369	671	708	1379	2	4	6
Deha	3762	1216	1170	2386	448	418	866	0	0	0
Dodra-Kawar	1171	387	401	788	139	134	273	0	0	0
Jubbal	5842	2046	1928	3974	746	704	1450	5	1	6
Kasumpati	5101	1659	1600	3259	552	559	1111	13	13	26
Kotkhai	5511	1762	1764	3526	522	544	1066	2	0	2
Kumarsain	6358	2067	1866	3933	690	639	1329	4	4	8
Mashobra	6326	2012	1883	3895	770	708	1478	13	9	22
Matiana	4154	1222	1364	2583	335	400	755	0	0	0
Nankhari	4299	1374	1231	2605	413	422	835	6	3	9
Nerwa	10910	3700	3814	7514	1286	1346	2632	44	21	65
Rampur	12055	3781	3592	7373	1631	1611	3242	94	86	180
Rohru	8977	2979	2797	5776	1246	1210	2456	4	4	8
Shimla	15422	4547	3959	8506	1340	1309	2649	74	54	128
Suni	5584	1635	1661	3296	529	564	1093	8	2	10
Theog	6263	1898	1845	3743	576	554	1130	6	4	10
Total	115005	36477	34980	71454	12824	12746	25590	277	206	483
Percentage		51.05	48.95	100	35.21	36.44	35.81	0.76	0.59	0.68

Contd.....

Table 3.4
Gender-wise Enrolment in Primary and Middle Schools in
Different Blocks of Shimla Distt. Overall , SCs and STs Population (Year 2005-06)

Block Name	Middle Level Enrolment								
	Boys	Girls	Total	Schedule Castes Enrolment			Schedule Tribes Enrolment		
				Boys	Girls	Total	Boys	Girls	Total
Chhohara	1478	1493	2971	511	459	970	1	0	1
Chopal	998	1004	2002	301	331	632	0	2	2
Deha	670	706	1376	225	219	444	1	0	1
Dodra-Kawar	209	174	383	44	28	72	0	0	0
Jubbal	944	924	1838	349	318	667	13	3	16
Kasumpati	970	872	1842	326	296	622	10	7	17
Kotkhai	995	990	1985	336	324	660	5	1	6
Kumarsain	1258	1167	2425	446	432	878	0	0	0
Mashobra	1278	1153	2431	467	432	899	15	22	37
Matiana	750	818	1568	233	265	498	0	0	0
Nankhari	869	825	1694	269	272	541	1	0	1
Nerwa	1822	1574	3396	505	429	934	1	0	1
Rampur	2330	2352	4682	952	957	1909	62	62	124
Rohru	1604	1597	3201	598	641	1239	1	1	2
Shimla	3760	3156	6916	1140	988	2128	118	40	158
Suni	1158	1130	2288	346	312	658	7	3	10
Theog	1334	1186	2520	359	335	694	13	6	19
Total	22427	21121	43518	7407	7038	14445	248	147	395
Percentage	51.50	48.50	100	33.03	33.32	33.17	1.11	0.70	0.91

Source: Compiled from DISE DATA Analysis in Respect of District Shimla for the year 2005-06, H.P. Primary Education Society-Cum-Sarva Shiksha Abhiyan - State Mission Authority, Shimla..

Fig 3.4 (a)
Gender-wise Enrolment in Primary Schools (Year 2005-06)

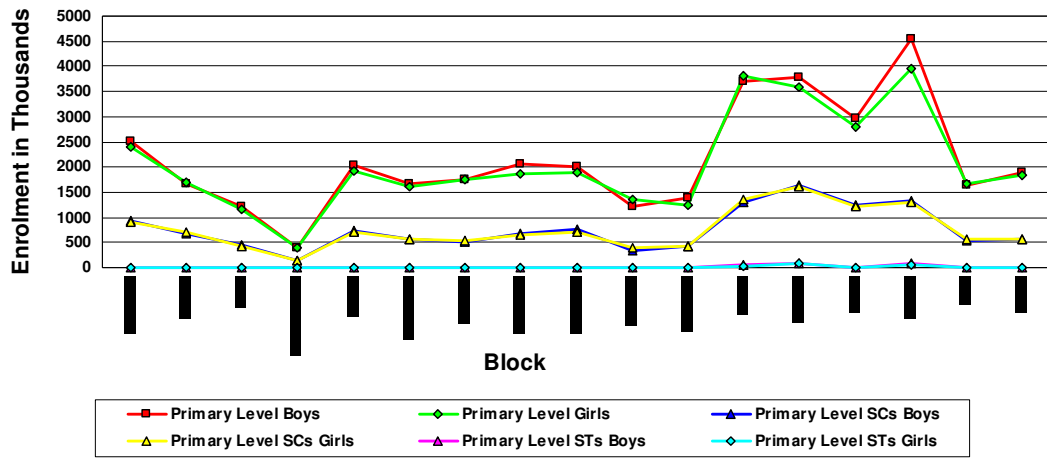
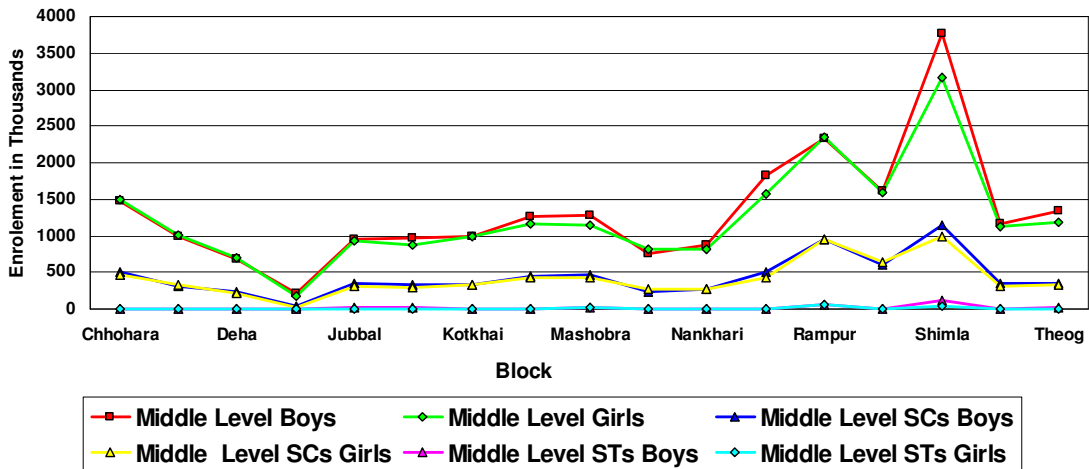


Fig. 3.4(b)
Gender-wise Enrolment in Middle Schools (Year 2005-06)



It would be seen in column 1 of Table 3.4 that the total number of students enrolled in primary and middle schools varies greatly from block to block. Such variation is determined by a variety of factors such as the absolute size of population of each block, the number of children of school-going age in each one of them, the nature of their topography and average distance between villages and the schools, parents' motivation to have their children educated, and so on and so forth. What is perhaps more significant to notice among these data is the proportion of the boys and girls enrolled in schools. In the case of primary schools, the percentage of girls enrolled more than the boys is noted to be in 6 out of the 17 blocks. Thus, overall the position is not very happy in this regard in Shimla district. Out of the total enrolment of 71,457 students in primary schools in the district, that of boys is 51.05 per cent and that of girls 48.95 per cent.

In the case of middle schools, the enrolled girls outnumber the boys only in 5 blocks. So, in this case too, out of a total number of 43,548 students enrolled, the percentage of boys is 51.5 per cent and that of girls 48.5 per cent. It is thus clear that the state government, with the assistance of local bodies, must put pressure on parents to get all girls enrolled in schools along with the boys. It is necessary to do so in order to remove all causes of gender discrimination in the matter of imparting education.

Figures in Table 3.4 also show the percentage of SC and ST students in total enrolments. So far as the SCs are concerned, their share in the total population of Shimla district is 26.13 per cent according to the 2001 census.⁵ And that of the STs in the total population of the District is just 0.57 per cent.²⁶ It would be seen from data in Table 3.4

²⁶ Calculated from figures in Economics & Statistics Department, H.P., *Statistical Outline of Himachal Pradesh 2003-04*, pp. 39, 42 and 43.

that the share of the SC and ST students in total enrolment, both at the primary and middle school levels, is much higher than the share of these two categories of people in the total population. From the equity point of view this is a very welcome evidence that the available data yield. At the educational block level, in both primary and middle school enrolments, it is only in Dodra-kwar middle school enrolment that the share of the SC students is quite low. In other blocks, their share is much higher than their share in the total population of Shimla district. In the case of ST students' enrolment, their share in the total enrolment is mainly concentrated in a few educational blocks. This may be due to a negligible number of ST households being located in most of the blocks.

3.15 Number of Schools and Colleges

It is obvious that educational attainments in a region will significantly depend on the number of educational institutions set up there. Here, depending on the nature of data available in this regard for all the development blocks of Shimla district, the number of schools, category-wise and arts and science colleges, per 100 square kilometers of area of each block shall be considered. The necessary data in this regard are given in Table 3.5.

These data show that the Mashobra block leads the rest of them in the matter of educational institutions of different categories in relation to its geographical area. Even Narkanda, Rohru and Jubbal-Kotkhai development blocks have a fairly high number of primary, middle and high schools. Rohru block has even more senior secondary schools and colleges in relation to its geographical area.

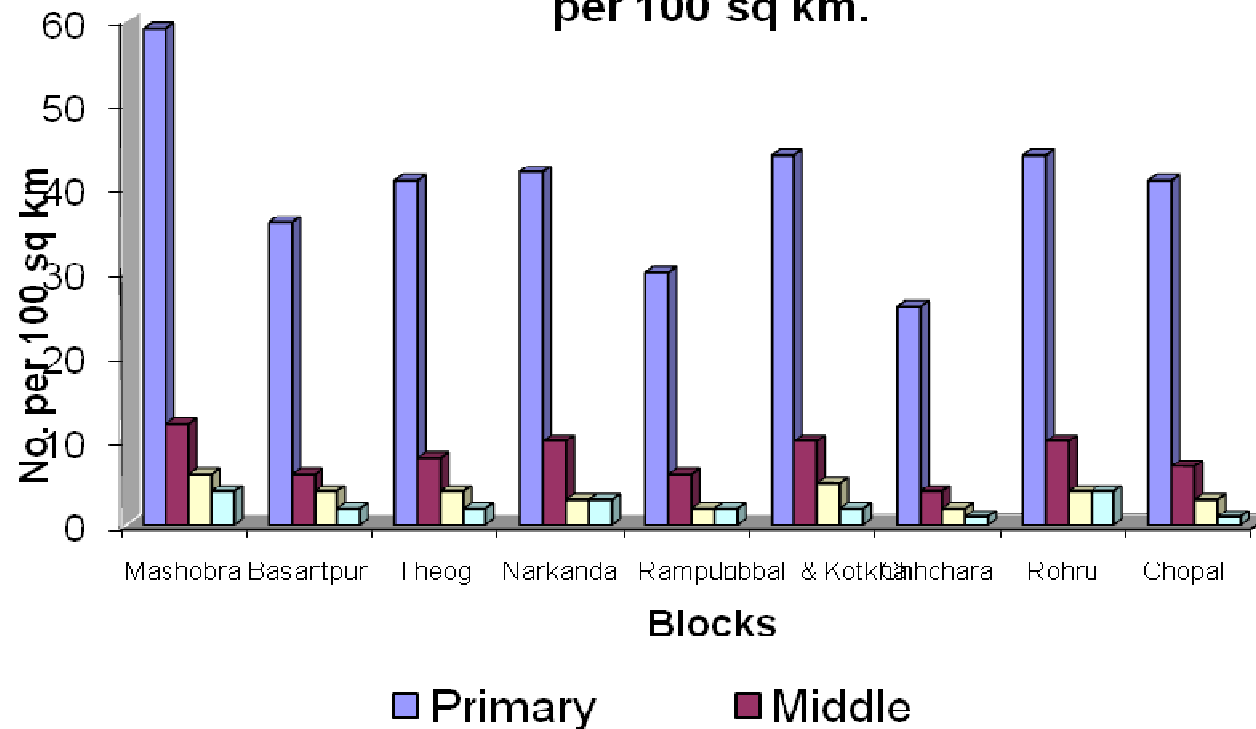
Table 3.5
Number of Primary, Middle, High and Senior Secondary
Schools, Arts and Science Colleges per 100 Sqr. Km.
of Area - Year 2001

Sr. No.	Development Block	No. of Schools per 100 sq. km. of area				Arts and Science Colleges
		Primary	Middle	High	Senior Secondary	
1	Mashobra	59	12	6	4	0.90
2	Basantpur	36	6	4	2	0.35
3	Theog	41	8	4	2	0.21
4	Narkanda	42	10	3	3	-
5	Rampur	30	6	2	2	0.11
6	Jubbal & Kotkhai	44	10	5	2	0.22
7	Chhohara	26	4	2	1	-
8	Rohru	44	10	4	4	0.33
9	Chopal	41	7	3	1	0.17

Source : *Compiled from District Census Handbook, Record Structure : Village Directory, Amenities Data, Census of India--2001.*

As noted in the preceding sections, Chhohara development block is perhaps the most lagging area of Shimla district in the matter of educational attainments. This is supported by data in Table 3.5 as well. This block has the lowest number of different categories of educational institutions in relation to its geographical area. Rampur block also falls in the same category. The policy makers of the state must set up more educational institutions in these development blocks so as to make educational attainments of different blocks as equitable as possible.

Fig. 3.5
Number of Primary, Middle, High and S.Secondary
Schools
per 100 sq km.



3.16 Distance of Educational Institutions from Villages

The foregoing information regarding the number of educational institutions in relation to the geographical area of each development block is important in itself. However, what is also equally, if not more, important in the access of boys and girls of villages to each category of these institutions, which is shown by the distance between the village and the different types of schools information regarding this is available for the years 1991 and 2001. This is shown in table 3.6.

It is seen in the Table that the information in this respect for the year 1991 is more complete than for the year 2001. For the latter year, there are a large number of villages (shown under 0) about most of which the information is not available, or they also include those villages which are uninhabited. Taking the year 1991 first of all, it is seen that Mashobra development block had the largest number of village which had primary as well as high/senior secondary schools at a comfortable distance of less than 5 km. However, so far as middle schools are concerned, these were located at such a comfortable distance of less than 5 km. in Theog and Jubbal-Kotkhai development blocks. On the other hand, Rampur block had 4 villages with even primary schools at a distance of 10 km. or more. This block too had a village with a high / senior secondary school located at such a large distance. Mashobra and Theog blocks had 10 and 5 villages respectively with primary schools located at a distance of between 5 and 10 km.

In the year 2001, as noted above, there are a large number of habitations about which the information about the nature of access to educational institutions is not available. It appears that, with the passage of time, more and more schools have been opened, but the distance from habitations to them has also increased. For example, figures in Table 3.6 show that Chopal development block, as many as 31 villages had primary schools at a distance of between 5 to 10 km. Similarly, Narkanda, Theog, Basantpur and Rampur blocks too had more than one village with primary schools at an identical distance.

Table 3.6
Distance of Different Categories of Schools from Villages

Sr. No.	Development Block	Primary							Middle							High/Sr. Secondary						
		1991			2001				1991			2001				1991			2001			
		1	2	3	0	1	2	3	1	2	3	0	1	2	3	1	2	3	0	1	2	3
1	Mashobra	541	10	0	218	307	1	0	56	2	0	87	377	50	12	56	1	0	518	8	0	0
2	Basantpur	196	2	1	168	142	4	0	48	0	0	71	201	42	0	32	0	0	306	6	2	0
3	Theog	367	5	0	220	210	5	0	107	2	0	89	321	24	1	49	2	0	431	4	0	0
4	Narkanda	156	0	0	123	56	7	0	39	0	0	51	100	29	6	15	0	0	180	6	0	0
5	Rampur	206	1	4	269	52	3	0	57	0	0	161	140	23	0	35	0	1	309	1/5	0	0
6	Jubbal & Kotkhai	269	0	0	210	146	1	3	105	0	0	117	212	31	0	39	0	0	353	6	1	0
7	Chhohara	82	0	0	146	32	0	0	20	0	0	82	83	12	1	10	0	0	174	4	0	0
8	Rohru	164	1	0	125	62	0	0	52	0	0	67	110	10	0	21	0	0	172	1/5	0	0
9	Chopal	287	1	0	241	145	31	0	81	6	0	116	191	92	18	26	0	0	411	6	0	0

Codes of Distance :-

- 0. - Information not available
- 1. - less than 5 km.
- 2. - 5 to 10 km.
- 3. - 10 km and more.

Source : Village Directory, Amenities and Land Use, Census of India, 2001.

And Jubbal–Kotkhai block had 3 habitations with primary schools located at a distance of 10 or more km. Strangely, a very large number of villages in different development blocks had middle schools at a distance of between 5 and 10 km. For example, Chopal block had 92 such villages, Mashobra block 50 villages, Basantpur block 42 villages and so on. Chopal block had even 18 villages with middle schools located at a distance of 10 or more km.

In this context again, it would be more reasonable for the government to ensure location of different categories of schools as near the villages as possible. In the hilly region, it is very tortuous for boys and girls of small ages to walk long distances for attending schools.

3.17 Teacher-Pupil Ratio

The teacher-pupil ratio is the last indicator of educational attainment of different development blocks of Shimla district that would be discussed here. These ratios would be considered in respect of primary, middle, high and senior secondary schools. The necessary data are provided in Table 3.7.

As is clear, a figure of teacher-pupil ratio shows the average number of students per teacher in each category of schools. Obviously, a smaller teacher–pupil ratio is more desirable for better education system since each teacher has then to teach a smaller number of students and personal attention of the teacher to the requirements and potential of every student can thus be ensured.

Table 3.7
Teacher-Pupil Ratios in Different Categories of Schools

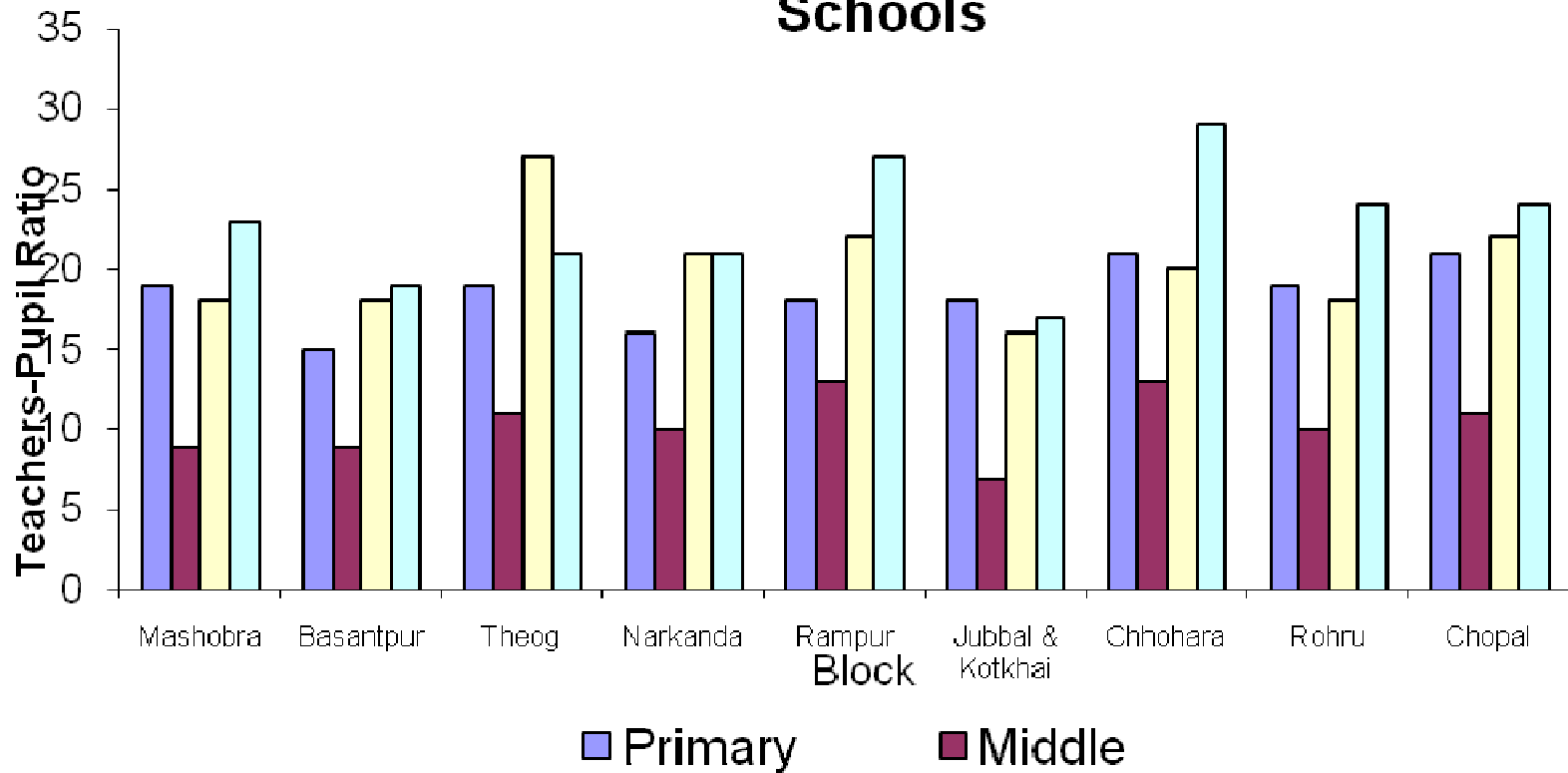
Sr. No.	Development Block	Teacher-pupil ratios in schools				
		Primary	Middle	High	S. Secondary	Total
1	Mashobra	19	9	18	23	19
2	Basantpur	15	9	18	19	16
3	Theog	19	11	27	21	19
4	Narkanda	16	10	21	21	16
5	Rampur	18	13	22	27	20
6	Jubbal & Kotkhai	18	7	16	17	15
7	Chhohara	21	13	20	29	21
8	Rohru	19	10	18	24	19
9	Chopal	21	11	22	24	20

Source : *Compiled from the data provided by Directorate of Education, Govt. of Himachal Pradesh, Shimla.*

Now, coming to the data in Table 3.7, it would be noted that in primary schools, the teacher-pupil ratio was the lowest, i.e. 15 in Basantpur development block, while on the other hand, the highest ratio, i.e. 21, was in two development blocks, viz. Chhohara and Chopal. In middle schools, the credit of having the lowest ratio goes to Jubbal-Kotkhai development block, while the highest was in two blocks, viz. Rampur and Chhohara. It is to be noted here that among all categories of schools, the middle schools had the lowest average teacher-pupil ratio.

Next, take the high schools. In this category (along with the senior secondary schools), the average teacher-pupil ratio is relatively higher, perhaps because the number of such schools is smaller and, therefore, more and more students, after passing class 8, congregate to them. So, among the high schools, the teacher-pupil ratio was the lowest, i.e. 16 in Jubbal-Kotkhai development block. The highest ratio of 27 was in Theog development block. As many as five blocks had this ratio exceeding the figure of 20.

Fig. 3.7
Teacher-Pupil Ratios in Different Categories of Schools



The senior secondary schools have even higher teacher-pupil ratios, with Jubbal-Kotkhair development block again having the lowest ratio of 17. On the other hand, Chhohara block had the highest ratio of 29. As many as seven development blocks had a teacher-pupil ratio exceeding the figure of 20.

The last column of Table 3.7 gives the average teacher pupil ratio of all categories of schools in each development block. Looking at data in this column, one can roughly say that the overall picture of teacher-pupil ratio in different parts of Shimla district is some-what encouraging in that the average teacher-pupil ratio in the schools is not very high. Rather, a ratio of around 28 students per teacher is academically quite desirable. Thus, Jubbal-Kotkhair and Basantpur development block have the lowest total teacher-pupil ratio of 15 and 16 respectively. Chhohara block, having the highest total teacher-pupil ratio of 21, does not have this ratio as being very high.

It is of course true that a relatively low teacher-pupil ratio would produce desirable results only if the teachers perform their duties efficiently, and the educational infrastructure in the concerned schools in also quite adequate. The state government should ensure that these requirements are fulfilled so that a relatively low teacher-pupil ratio would produce the most desirable results in different categories of schools.

3.18 Relative Educational Attainment of Different Development Blocks

In the preceding sections, we have discussed the relative attainments of different development blocks in terms of each of its indicators. In this final section, we shall rank each block in its educational attainment in respect of separate indicators and thus come to a conclusion as to which blocks have done better in majority of the indicators, and which have lagged behind in respect of most of the dimensions of educational attainments.

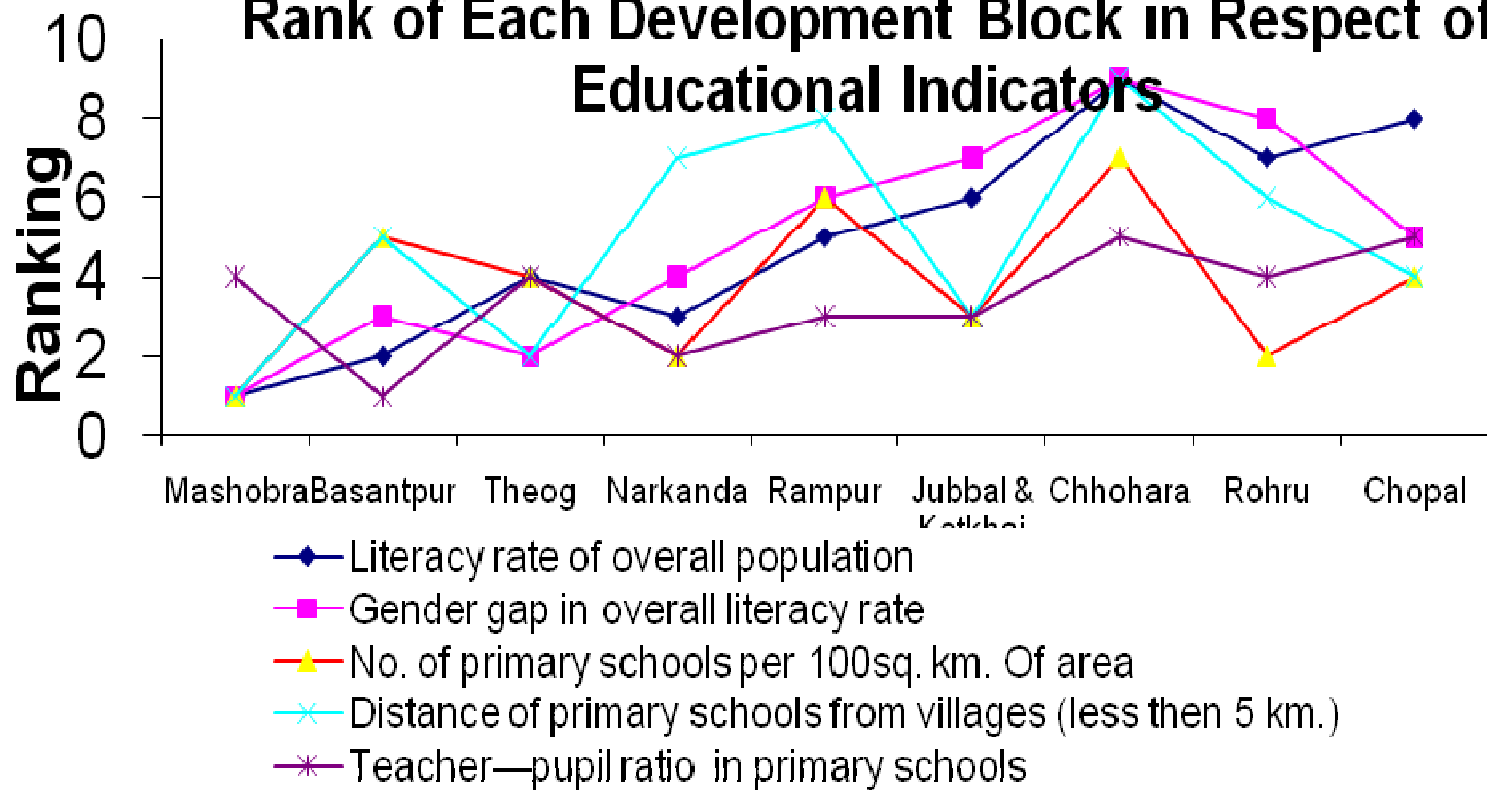
Table 3.8**Rank of Development Block In Respect of Each Separate Indicator of Educational Attainment**

Sr. No	Development Block	Literacy rate of overall population	Gender gap in overall literacy rate	No. of primary schools per 100sq. km. Of area	Distance of primary schools from villages (less then 5 km.)	Teacher—pupil ratio in primary schools
1	Mashobra	1	1	1	1	4
2	Basantpur	2	3	5	5	1
3	Theog	4	2	4	2	4
4	Narkanda	3	4	2	7	2
5	Rampur	5	6	6	8	3
6	Jubbal & Kotkhai	6	7	3	3	3
7	Chhohara	9	9	7	9	5
8	Rohru	7	8	2	6	4
9	Chopal	8	5	4	4	5

Source : *Compiled on the basis of earlier Tables.*

Fig. 3.8

Rank of Each Development Block in Respect of Educational Indicators



It would be seen in Table 3.8 that Mashobra development block has performed the best in terms of all except one of the indicators of educational attainment included in the Table. This best performing developments block of the district is followed by the Theog and Basantpur blocks which thus attain the second position in this respect. On the other hand, the development blocks with a poor performance in educational attainments are Chhohara, Rampur, Chopal and Rohru. Among the development blocks, the position of Jubbal-Kotkhai is rather ambiguous because in terms of three indicators its performance (shown by its rank) is somewhat better but in terms of the remaining two indicators, its rank is near the bottom.

The foregoing performance assessment of the different development blocks of Shimla district should help the state government and the district administration to identify the aspects of educational attainments in which more focused educational policy formulation and implementation need to be directed. The development blocks that are lagging behind need greater attention in this respect so that in a couple of years these blocks move forward so as to be counted among the best performing blocks in the matter of educational attainments.

CHAPTER – IV

STATUS OF HEALTH AND CHALLENGES IN DISTRICT SHIMLA

Health is important for welfare. As a Gujarati proverb says ‘the first happiness is health, the second is a full stomach’. One can’t enjoy food if one is not healthy. To lead a productive life, one needs good health. As Viner (1953)²⁷ observed ‘the first requirement of high labour productivity under modern conditions are that the masses of the population shall be literate, healthy and sufficiently well-fed to be strong and energetic’. Health, like education, is desirable in itself.

Sickness or ill-health, imposes a burden on other member of the family and also on society. Absenteeism can result in a loss of production and productivity. Thus, to emerge as a wealthy nation, a healthy society is desirable. Health, however, can not be ensured simply by individual efforts. Social action is needed for sanitation, water supply, clean air, waste disposal and an environment which does not breed diseases or result in epidemics. Public policy is critical in ensuring adequate infrastructure for a healthy society. Public action is particularly important for the health of the poor, as they are not able to take care of themselves to the same extend as the rich.

Health is increasingly being recognized as a critical human capital component, which contributes significantly towards the development of a nation. Only a healthy and educated population can contribute to productivity, economic growth and human development. Health is both an end of development and a means to it. It is the primary responsibility of any welfare state to provide health care to its people in which the

²⁷ Viner, J. (1953). *International Trade and Economic Development*, Oxford University Press, Oxford.

concept of 'health security' assumes importance. Health security could perhaps be taken as an overriding objective of the health policy; and viewed in the wider context, it implies ensuring a minimum level of health care to people in general and to the vulnerable groups comprising of the poor, the workers in the unorganised sector, the aged, women and children in particular.

In India, there is a considerable difference in the level of attainments of people on various aspects of well-being, depending on their place of residence (i.e. whether the area is rural or urban), the sex of the person and the social group or the segment of the population (i.e. Scheduled Castes/Tribes and others) that the person belongs to. In general, most indicators show a lower level of attainments for women and for people residing in rural areas. The attainment levels for the Scheduled Castes and the Scheduled Tribes are also lower than others on the available indicators. This aspect of the development process has been captured in the individual indicators. Depending upon the availability of data, for most indicators, the 'Gender Gap' and the 'Rural – Urban Gap', reflecting the differences in the male–female and the rural–urban attainments respectively have been estimated.

This chapter is dealt in 5 sections

Section 1 gives brief description of the district, focusing on health related information.

Section 2 deals with the status of health in the district.

Section 3 describes health infrastructure in the district.

Section 4 provides detailed information about health services in blocks.

Section 5 describes implementation of national programme in the district.

4.1 Profile of District

Shimla district is located in north east region of Himachal Pradesh. The district is surrounded by districts of Kullu, Kinnaur, Sirmour, Solan, Mandi and Dehradun district of Uttarakhand. Administratively, Shimla district is divided into 7 Sub divisions, 9 Blocks, 12 tehsils and 7 sub tehsils and 363 Gram Panchayats. Total number of revenue villages are 2597 out of which 2311 are inhabited and 286 are not inhabited.

RELEVANT INFORMATION INFLUENCING HEALTH OF THE PEOPLE

GROWTH OF POPULATION

As per 2001 census, district has population of 722502, out of which 555269 are rural and 167233 are urban. Rural population is 76.85 per cent and Urban population is 23.15 per cent. Predominantly the district is rural. Sex wise, male population is 380996 and female population is 341506 as shown in Table 4.1. Sex ratio is 896 females per 1000 males. Density of population is 141 persons per sq. km. Percentage decadal growth rate for the decade 1991-2000 is 17.02, which compares favourably with the DGR of HP at 17.54 per cent. As per census 1991 report, 0-6 sex ratio for Shimlas district was 958, which declined to 903 in the census year 2001. This decline is more evident in urban areas where it declined by 77 points i.e. from 909 to 832 during this period. This decline was quite less in rural areas i.e. 15 points from 968 to 953 during the same period. This clearly reflects urban bias in sex selection because of sex selection facilities being available in these areas.

Table 4.1
Growth of Population in District Shimla

Years	Total Pop	Rural Pop	Urban Pop	Males	Females	Sex Ratio	0-6 Sex Ratio	Density of pop	DGR
Census 1991	617404	491272	126132	325897	291507	894	958	120	23.72
Census 2001	722502	555269	167233 23.1%	380996	341506	896	903	141	17.02

Sources:

- (i) *District Census Handbook-HP, Census of India 1991 and Census 2001, Director of Census Operations, Himachal Pradesh.*
- (ii) *Primary Census Abstract, Total Population :Table A-5, India, Series-1, Census of India-2001, Registrar General and Census Commissioner, India.*

SOCIO-ECONOMIC PROFILE

(i) Literacy

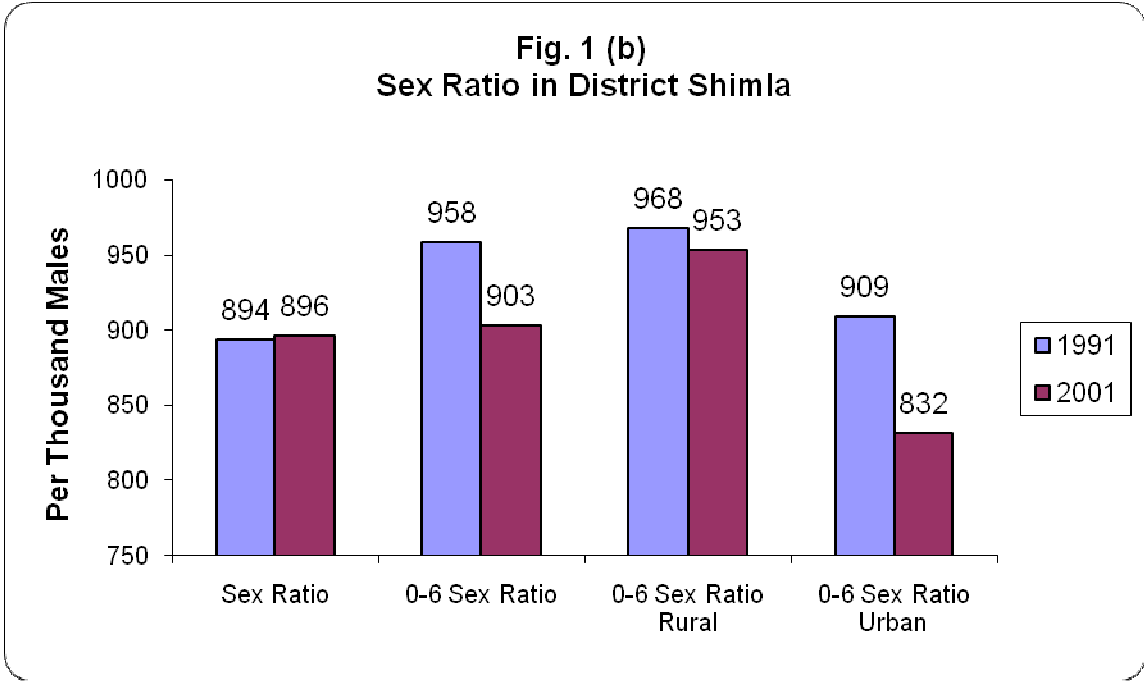
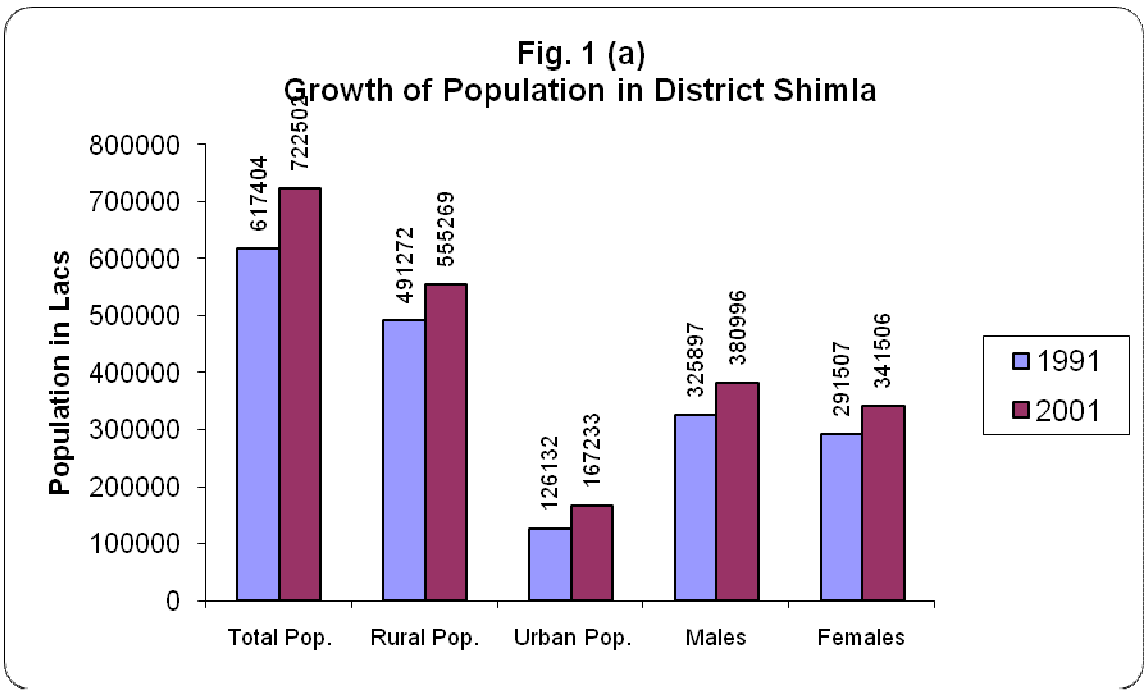
Literacy rate for the district is 79.68 per cent (64.61 per cent in 1991). While the literacy rate for males is 87.72per cent, it is 70.68per cent for females (51.77per cent in 1991). Figures for literacy rate are much higher as compared to state literacy rates. High literacy rates, especially for women, affect the status of health and utilization of health services.

(ii) Economy

Number of below poverty line families are 33.39 percent. Per capita income of the state is Rs. 33600. Being predominant grower of cash crops, per capita income of the district should be more.

(iii) Agriculture and Horticulture

Agriculture is the main occupation of the people. Apple cultivation is of special significance for the economic emancipation of the people living in the district. Stone fruits and citrus fruits are grown. Crops like wheat, maize, potato and pulses are also grown in some parts. Some areas in the district have taken to the initiative of producing off-season vegetables. Agriculture and horticulture being major activities in the district, the use of insecticides and pesticides has increased tremendously. Number of organo-phosphorus poisoning has increased significantly in the district.



(iv) Physiography and Climate

The district belongs to humid sub-temperate zone. The annual rainfall is about 1252 mms. Temperature ranges from sub zero to 33.3 C. Viewing from health service delivery point of view, the terrain is difficult and rough with interlocking spurs, narrow and rugged. Climatic conditions vary from very cold season extending from December to March, with snowfall in upper heights of areas of Theog, Narkanda, Rohru and Chopal areas, and rainy season extending from July to September. Both seasons influence accessibility of health care as well as disease pattern. In rest of months the climate is moderate. Some areas experience summer heat from May to June.

(v) Rural Roads and Communication System

Total motorable road in the district is 4171 kms out of which 4010 is motorable. 2048 kms is metalled and 1172 kms kutcha. In absolute terms road length works out to be 78.15 kms per 100 sq. kms against the state average of 46.64. Distance from a health institution, travel time, means of transport have an effect on the utilization of services in health facilities and also affect the timely referral of emergencies. Telephone density is 74.5 per 2000 population but telecommunication revolution in the state has increased the communication to a great extent. It has helped in quick response to disasters and emergencies. Rapid communication prevented any loss of life during flash floods in Satluj river caused by breach of Parechu lake in Tibet in 2005.

(vi) Water Supply in Rural Areas

Availability of piped and potable water supply affects the health of people. As on December 2006, number of partially covered villages was 479 and number of fully covered villages was 6031. None of the villages in the district remains uncovered. In addition, 938 hand pumps were functional in the district. By and large piped water supply is ensured but quality of water is still question mark. Water borne diseases constitute single largest group of all diseases.

(vii) Electrification

Cent per cent rural electrification has been achieved in the district.

(viii) Status of Women

Status of women is quite high as revealed by indicators like overall sex ratio, female literacy, and life expectancy. **National family Health Survey 1998** reveals that about 90 per cent women can take independent decision about moving outside their homes, seek treatment, buy jewellery and go to their parents without seeking permission of their husbands or in-laws.

4.2 State of Health in the District

Himachal Pradesh has attained commendable levels of health care in the country and is considered to be a role model for the hill states in the country. Recently the State has been acknowledged and awarded for its achievements in social sectors, particularly education and health. While significant achievements on demographic front have been recorded, status of health as indicated by expectancy of life at birth has also shown an upward trend. A quick perusal of some indicators would reveal the facts (Table 4.2).

Table 4.2
Comparison of Health Indicators, India and HP

Sr. No	Indicator	India 2001	Himachal Pradesh 2001
1	Crude Birth Rate	25	20.7
2	Crude Death Rate	8.1	7.5
3	Infant Mortality Rate	60	50
4	Maternal Mortality Rate	< 300	NA*
5	Total Fertility Rate	2.8	2.1.
6	Contraceptive Prevalence Rate	54%	70 %
7	Life Expectancy	Male 62.36 years Female 63.39 years Total 62.50 years	Male 65.1 years Female 65.8 years Total 64.45 years
8	Sex ratio	933	970

* MMR is about 170 as estimated by RGI by applying RHIME method

Source : Primary Census Abstract Series-3, H.P., Census of India, 2001, Directorate of Census Operations, H.P.

Above mentioned table clearly shows that Himachal Pradesh is performing well in population control as well as provision of health care services as the state is far ahead in terms of health and fertility control indicators.

State of Health

The health scenario of District Shimla shall have to be looked in the backdrop of state scenario. Though data about various health indicators is not collected routinely, one survey, **District Level Household Survey (DLHS)**, carried out by IIPS Mumbai in 2002 has provided very valuable data, based on which it can be said that the status of health in the district is far better than for the state. Description given below will justify the statement :

(i) Expectancy of Life and Death Rates

Life expectancy at birth is the most comprehensive indicator of health. A better health status can be safely assumed to give a better life expectancy to people. The latest estimates for life expectancy at birth for India and HP are 63 and 64 years, which shows that people expect to live more than 65 years. Within the state, figures for districts are not available for life expectancy. Though female life expectancy is higher than for males, but the difference is what it should be i.e. five years. It shows that there are no gender differences in health status and both enjoy near equal status of health.

Crude Death rate for India and Himachal Pradesh are 8.7 and 7.1 respectively. However CDR for the district has been estimated at 3.84, which is significantly lower than that of state. The low CDR is indicative of the fact that level of health care services is good in the district, the fact easily substantiated by the wide network of health facilities, including tertiary care institutions and private hospitals.

(ii) Infant Mortality and Child Mortality

State of infant and child mortality is the best indicator of basic health care, quality and reach of health delivery, and overall socio economic development of the region. SRS estimates of IMR for the country at 60 and for the state at 50 are higher whereas NFHS 2 estimated IMR for the state at 35 per thousand. IMR estimated for the district stands at 18.4 per thousand live births. Neo-natal mortality rate

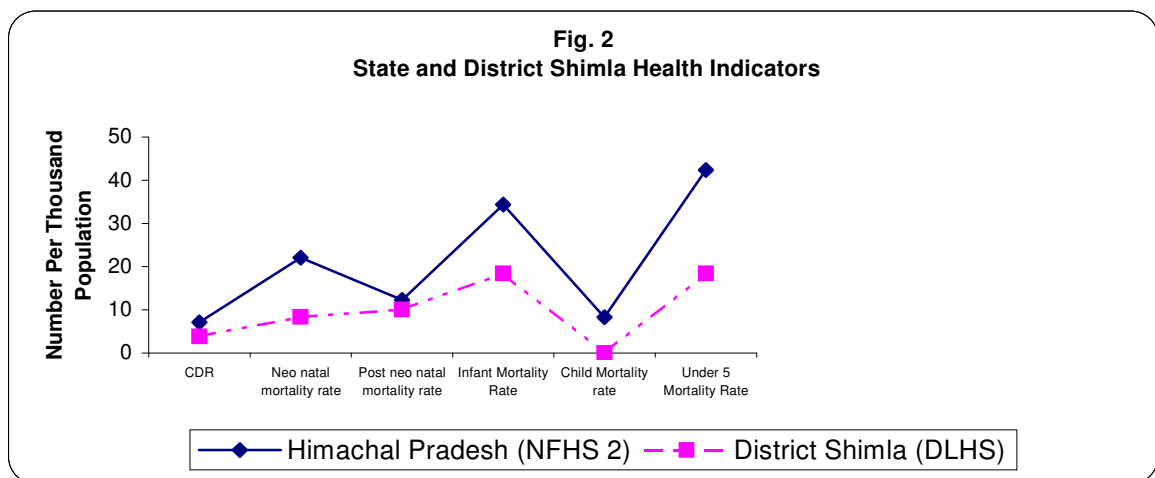
is 8.4 per thousand live births and post-neonatal mortality rate is 10.1. These figures are far less than the state and national figures and compares with the best in the country.

Child mortality rate as 14.1 for India, 8.3 for the state and for the district is nil as evident from Table 4.3. Under 5 mortality rate for the state is 42.4 while the same for the district is 18.4 per thousand live births.

Table 4.3
Comparison of State and District Health Indicators Related to Children's Health

Indicator	Himachal Pradesh (NFHS 2)	District Shimla (DLHS)
CDR	7.1	3.84
Neo natal mortality rate	22.1	8.39
Post neo natal mortality rate	12.3	10.05
Infant Mortality Rate	34.4	18.44
Child Mortality rate	8.3	0.00
Under 5 Mortality Rate	42.4	18.44

Source : (i) National Family Health Survey-2, 1998-99, Himachal Pradesh, I.I.P.S. Mumbai, July, 2001.
(ii) District Level Household Survey (DLHS), I.I.P.S. Mumbai, 2002.



Mortality indicators for children are indicative of good child care services available in the district. However it is influenced by relatively higher urban population of the district, high literacy rates, especially of women, very high immunization coverage levels, low fertility and availability of specialised care in the district. Let us have a look at child care services coverage as reported by DLHS.

(iii) Child CARE

a) Breastfeeding

In Shimla district, 72 per cent newborns were breastfed within 24 hours, 42 per cent within 2 hours and 31 per cent after two hours. Whereas 17 per cent were breastfed within 1 to 3 days, 7 per cent after three days and 2 per cent were never breastfed. Exclusive Breast feeding for 4 months was 70 per cent and for 6 months only 9 per cent. Exclusive Breast Feeding requires a sustained campaign in the light of observations that breastfeeding is not popular with modern young mothers

b) Immunization

Shimla district is heading towards universal immunization. Zero poliomyelitis drops were administered to 66 per cent newborns in the health institutions. BCG coverage was 96 per cent while DT coverage was 92 per cent. Measles vaccine was administered to 89 per cent infants. Number of fully immunized was 83 per cent (82 per cent female, 84 per cent male children) and 3 per cent children had no vaccination. In all 30 per cent received Hepatitis B, 7 per cent received IFA tablets or syrup and 18 per cent children did not receive Vitamin A.

c) Diarrhoea management

During DLHS survey of Shimla district, it was found that 80 per cent mothers were aware of diarrhea management and 70 per cent were aware of ORS. During the survey, 10.5 per cent children had diarrhea and 59 per cent mothers gave ORS to these children.

d) Pneumonia

It was observed that only 16 per cent mothers were aware of danger sign of pneumonia, which is one of the major killers of children and responsible for large number of infant deaths.

Fig. 3 (a)
Number of CHs in Each Block of Shimla District

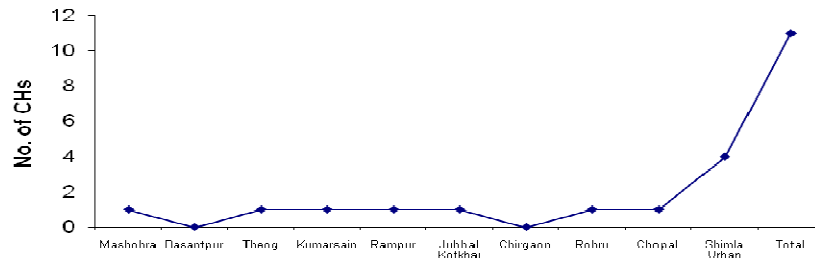


Fig. 3 (b)
Number of CHCs in Each Block of Shimla District

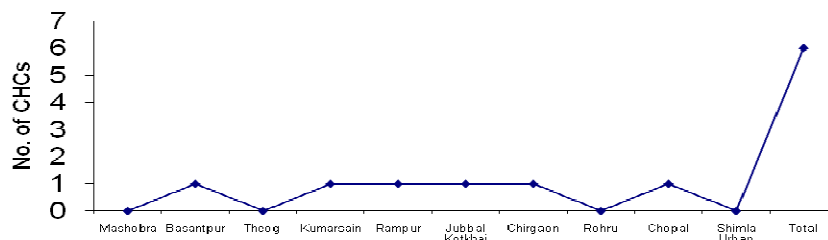


Fig. 3 (c)
Number of PHCs in Each Block of Shimla District

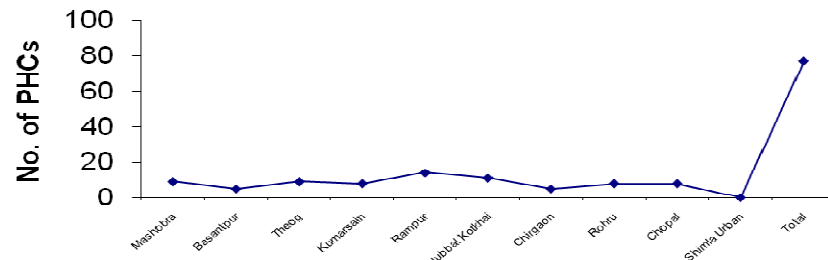


Fig. 3 (d)
Number of SHCs in Each Block of Shimla District

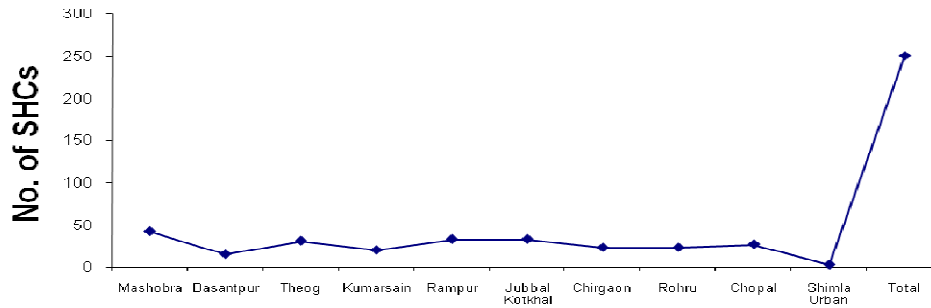


Fig. 3 (e)
Number of AHCs in Each Block of Shimla District

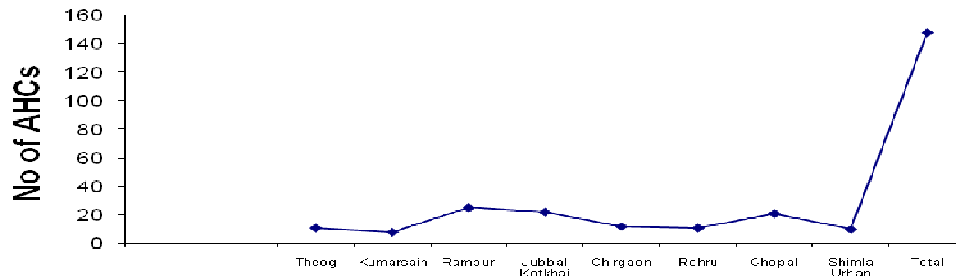
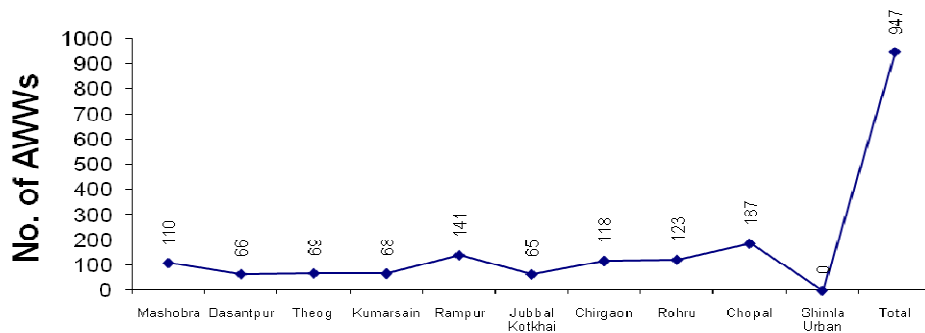


Fig. 3 (f)
Number of AWWs in Each Block of Shimla District



(iv) Maternal Mortality Rate

There are no reliable estimates for maternal mortality available either for state or district. However the findings of a recent study released by RGI and MoHFW on MMR by applying RHIME method of estimation reveal that MMR for the country stands at 301. The state of Himachal Pradesh was not included in the study. Rates for neighbouring states of Haryana and Punjab have been estimated at 162 and 178 respectively. Since level of health care and health indicators are almost similar to Punjab, it can be safely concluded that MMR for Himachal Pradesh could be around 170.

The fact that female age at marriage is 21.3 years, percentage of institutional deliveries is about 45 per cent, number of safe deliveries is more than 70 per cent and TFR is near replacement level of fertility (2.1), the above mentioned presumption would not be off the mark. Since these indicators for the district are much better than those for state, it can be concluded that MMR for the district would be less than 170. Health services for maternal care have improved considerably in the district. DLHS survey revealed the following figures :

a) Antenatal care

ANC check up coverage was 86 per cent and 70 per cent women attended 3 visits. 57 per cent made first visit in first trimester which is indicative of emphasis on quality on maternal care. 84 per cent pregnant women received IFA but 37 per cent women received less than 100 tablets. 68 per cent pregnant women received two doses while 17 per cent received only one injection and 11 per cent received no TT injection. What is noteworthy that district has not had a case of tetanus for many years. Weight was recorded in 70 per cent pregnant women and height was measured in 45 per cent of the pregnant women. Blood pressure was recorded in 79 per cent pregnant women. But only 32 per cent women received full package of Anti Natal Care. This requires the attention of district health authorities.

b) Institutional deliveries

Another significant improvement has been in institutional deliveries which has shot up to 62 per cent, against the state figure of 45 per cent. Out of these, 60 per cent were carried out in government

institutions and 3 per cent in private institutions. 74 per cent deliveries were safe. 26 per cent deliveries were conducted at home by untrained dais. 24 per cent experienced pregnancy related complications of which 72 per cent sought treatment. 25 per cent had delivery complications and 19 per cent had after delivery complications and out of them 58 per cent sought treatment.

(v) Fertility and Birth Rates

Significant decline in the fertility levels has been achieved in the state. TFR is nearing replacement level i.e. TFR at 2. However, estimates of TFR for district Shimla is quite low i.e. 1.369 which is indicative of people having accepted small family norm, having one or two children. It augurs well not only from demographic point of view but also for improved maternal and child health. The low TFR is commensurate to low Crude Birth Rate which is estimated at 12.78 per thousand population, corresponding figures for state and country being 20 and 25 respectively. Very heartening is the fact that after 1st January 1999, the mean age at marriage for boys was 26.3 years and for girls it was 22.2 years. Only 4 per cent boys got married before 21 and only 3.8 per cent girls got married before 18 years of age.

Family planning

People are well versed with family planning and 99 per cent women knew of any modern method of contraception, 79 per cent knew all methods and 55 per cent husbands knew of NSV. Contraceptive prevalence rate was 79 per cent which included 2 per cent with traditional methods. Majority of couples i.e. 80 per cent were using female methods while only 20 per cent used male methods. It clearly brings out that family planning programme is still women dependant. The concept of male responsibility is still a distant dream. Total unmet need was 6 per cent, 1 per cent for spacing methods and 5 per cent for limiting methods

(vi) The Disease Burden

Exact status of morbidity pattern of the state and district is not known. This is a sad story for the state which has good information system for national programme. Due priority has not been accorded to

this important aspect, which forms the basis of future strategies of disease control.

Realising this weakness fully well, the department got a study done by **PGI Chandigarh** in the year 2002 on **Burden of Diseases Under European Commission Sector Reforms Programme**. Given below are the two tables of major diseases age wise among males and females.

THE PRINCIPAL DISEASES OF HIMACHAL PRADESH

Table 4.4

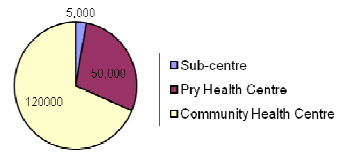
Top Ten Causes of Burden of Diseases (DALYs)* Among Males of H.P.

Rank	0-4 yrs	5-14 yrs	15-44 yrs	45-59 yrs	60+ yrs
1.	Lower Respiratory Infections	Iron-deficiency anaemia	Road accidents	Chronic Obstructive Pulmonary Disease	Chronic Obstructive Pulmonary Disease
2.	Diarrhoeal diseases	Asthma	Other unintentional injuries	Tuberculosis	Ischaemic heart diseases
3.	Other maternal conditions	Other unintentional injuries	Iron-deficiency anaemia	Other unintentional injuries	Asthma
4.	Perinatal conditions	Diarrhoeal diseases	Chronic Obstructive Pulmonary diseases	Ischaemic heart disease	Tuberculosis
5.	Other infectious diseases	Otitis Media	Self-inflicted injury	Iron-deficiency anaemia	Other unintentional injuries
6.	Road accidents	Dental caries	Ischaemic heart disease	Asthma	Other infectious diseases
7.	Iron-deficiency anaemia	Lower Respiratory Infections	Asthma	Dental caries	Iron-deficiency anaemia
8.	Birth Asphyxia and birth trauma	Upper Respiratory Infections	Upper Respiratory Infections	Road accidents	Diarrhoeal diseases
9.	Dental caries	Other infectious diseases	Dental caries	Peptic ulcer	Cataracts
10.	Falls	Falls	Diarrhoeal diseases	Cataracts	Dental caries

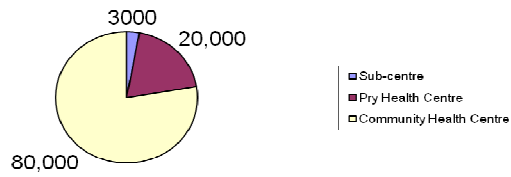
* (DALYs) - Disability Adjusted Life Years

Source : Burden of Diseases, Study Undertaken by PGI Chandigarh, 2002.

**Fig. 4 (a)
National Norms of Health Institutions**



**Fig. 4 (b)
State Norms of Health Institutions**



**Fig. 4 (c)
Number of Health Institutions in the District**



**Fig. 4 (d)
Population Covered by Each Health Institution in the District**



Table 4.5
Top Ten Causes of Burden of Diseases (DALYs) Among
Females of H.P.

Rank	0-4 yrs	5-14 yrs	15-44 yrs	45-59 yrs	60+ yrs
1.	Lower Respiratory Infections	Iron-deficiency anaemia	Iron-deficiency anaemia	Chronic Obstructive Pulmonary Disease	Chronic Obstructive Pulmonary Disease
2.	Diarrhoeal diseases	Diarrhoeal diseases	Other maternal conditions	Other maternal conditions	Asthma
3.	Other infectious diseases	Other unintentional injuries	Other unintentional injuries	Iron-deficiency anaemia	Ischaemic heart disease
4.	Other maternal conditions	Otitis Media	Maternal hemorrhage	Other unintentional injuries	Other infectious diseases
5.	Perinatal conditions	Asthma	Chronic Obstructive Pulmonary diseases	Tuberculoses	Tuberculoses
6.	Birth Asphyxia and birth trauma	Dental caries	Asthma	Dental caries	Cataracts
7.	Iron-deficiency anaemia	Lower Respiratory Infections	Road accidents	Ischaemic heart disease	Iron-deficiency anaemia
8.	Measles	Upper Respiratory Infections	Dental caries	Other cardiac diseases	Diarrhoeal diseases
9.	Falls	Falls	Upper Respiratory Infections	Diarrhoeal diseases	Other unintentional injuries
10.	Low birth weight	Other infectious diseases	Abortion	Other infectious diseases	Dental caries

Source : *Burden of Diseases, Study Undertaken by PGI Chandigarh, 2002.*

On perusal of the tables shown above, the major diseases which affect the adults are COPD, Accidents, Anaemia. Ischemic Heart Disease and Tuberculosis. Major diseases affecting children are Respiratory system diseases, diarrhea, other infections, malnutrition, and perinatal conditions

However the DLHS 2002, estimated the following rates of prevalence per one lakh persons in the district.

Fig. 5 (a)
Block Wise Status of PHCs

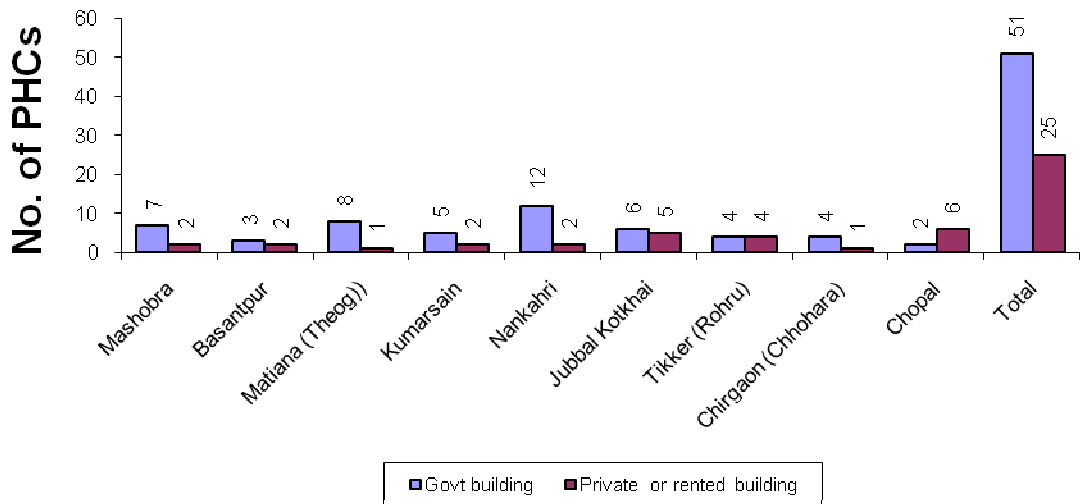
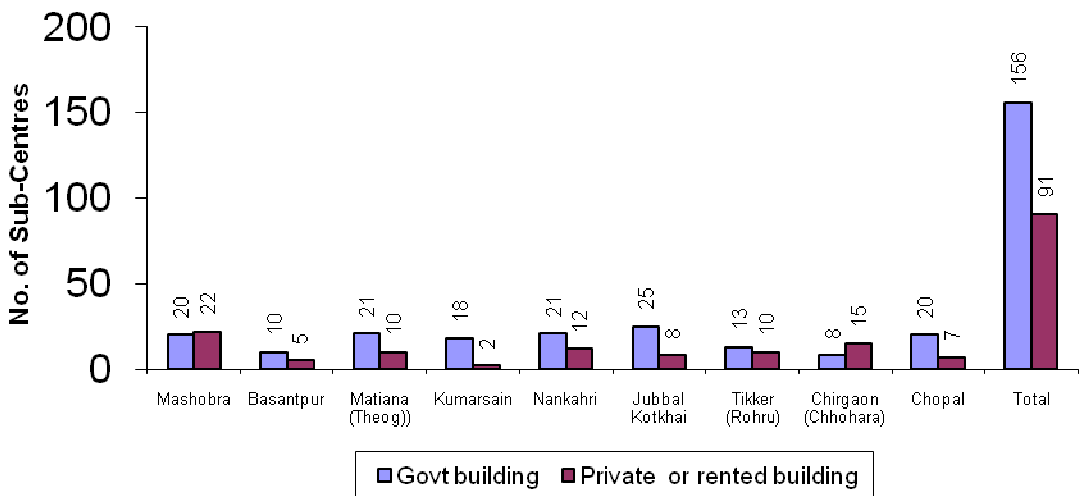


Fig. 5 (b)
Block-Wise Status of Sub-Centres



Prevalence of complete blindness	---	857	per one lakh population
Prevalence of partial blindness	---	2798	per one lakh population
Prevalence of tuberculosis	---	581	per one lakh population
Prevalence of malaria	---	435	per one lakh population

(vii) Utilization of Government Health services

DLHS estimated the pattern of utilization of health services in the district, though findings are mainly related to RCH services. Percentage of women who utilized government health facility for antenatal care was 81.8. For treatment of complications during pregnancy it was 92.8 per cent. A high percentage of women i.e. 90.2 per cent women availed services for treatment of post delivery complications. For treatment of complications due to contraceptive use i.e. after female sterilization 80.2 per cent, after IUD insertion cent per cent and for Oral pills also cent per cent women availed the services. For treatment for RTIs, 78.1per cent women availed the services.

4.3 Health Services in the District

The district is at a great advantage for having the state capital located at Shimla, which is also district headquarter. Shimla has tertiary level medicare facilities with one medical college, one dental college, one specialized hospital for women and children, one mental hospital, one zonal level hospital, private hospitals, and number of day care allopathic and ISM institutions.

(i) Role of Indian System of Medicines (ISM)

There is a 150 bedded Regional Ayurvedic Hospital in Shimla. In addition, there are two Ayurvedic Hospitals at Rampur and Rohru with 10 beds each. The day care facilities are available in 144 Ayurvedic Health Centres, one Unani dispensary and one Homeopathic dispensary. ISM institutions in addition to curative services provide some preventive services also. Under a reform process, functional integration with mainstream allopathic department has taken place and ISM institutions take part in national programmes like RCH, TB, HIV / AIDS, Malaria, IDSP, Blindness control, school health etc. Thus ISM system contributes to primary health care significantly. Total bed strength is 170.

(ii) Role of Private Sector

Four private hospitals in Shimla town provide curative care. These are Sanatorium Hospital with 60 beds, Indus Hospital with 100 beds, Tara Hospital with 20 beds and Shriram Hospital with 25 beds. In addition there are large number of day care clinics. Number of private clinics have come up in the interior of the district. Sanatorium Hospital Shimla has been providing out reach services under RCH Programme under public private partnership.

(iii) Health Institutions in the District

Block-wise distribution of Health Institutions in Shimla, district is depicted in Table 4.6.

Table 4.6
Block-wise Health Institutions in Shimla District

Sr No	Block	Pop 2001	CHs	CHCs	PHCs	CDs	SHCs	AHCs (ISM)	AWWs
1	Mashobra	85943	1	-	9	-	42	19	110
2	Basantpur	31425	-	1	5	-	15	9	66
3	Theog	77954	1	-	9	-	31	11	69
4	Narkanda	40577	1	1	8	-	20	8	68
5	Rampur	97180	1	1	14	-	33	1+ 24	141
6	Jubbal Kotkhai	67804	1	1	11	-	33	22	65
7	Chhohara	45177	-	1	5	-	23	12	118
8	Rohru	57477	1	-	8	-	23	1+10	123
9	Chopal	76410	1	1	8	-	27	21	187
10	Shimla Urban	91859	4	-	-		3	1+9	---
	Total	722502	11	6	77	-	250	3+145	947

Source : Official Records of C.M.O. Office, Shimla.

Total number of beds available in health institutions of Shimla district are 2428.

(iv) Coverage by Health Institutions

Coverage norms for opening primary health care institutions fixed by Government of India have by and large been achieved as revealed by the table given below :

Table 4.7

Coverage by Primary Health Care institutions in the District

Institution	National Norm	State Norm	Number in the district	Population Covered by each
Sub-centre	5,000	3000	247	2243
Primary Health Centre	50,000	20,000	77	7206
Community Health Centre	1.20 Lakh	80,000	6	91,000

Source : *Department of Health and Family Welfare, Govt. of H.P.*

The two tables given above present apparently a satisfactory situation of health facilities and population covered by each institution. But further analysis of this situation would reveal that scenario is not as rosy as it looks.

a) Sub-Centres

On an average, one Sub-Centre covers population of 2243, which is less than state norm. It ensures better coverage of basic services, as it has to serve less rural population. On perusal of availability of manpower in Sub-Centres, it is revealed that not all Sub-Centres are functional and not all have the staff component of two Health Workers. In all 17 Sub-Centres are non-functional and 23 Sub-Centres are without Female Health Workers.

b) Primary Health Centres

On the other hand, population served by one Primary Health Centre is 7206, against the norm of 20,000. This situation has resulted due to a decision of the State government, in the year 2001, to upgrade all Civil Dispensaries in rural areas of the state to the level of PHCs, thereby increasing the number of PHCs from 55 to 77. Though the institutions is designated as PHC but functionally the upgraded PHCs may not provide expected facilities and services.

Fig. 6 (a)
Block-Wise Position of Medical Officers in Shimla District

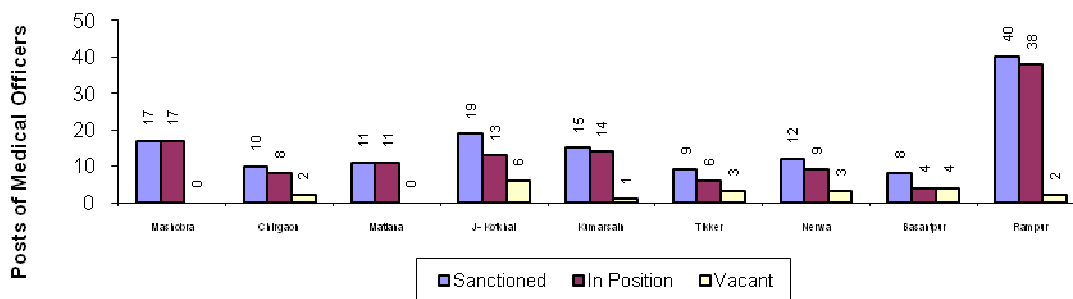


Fig. 6 (b)
Block-Wise Position of Male Health Workers in Shimla District

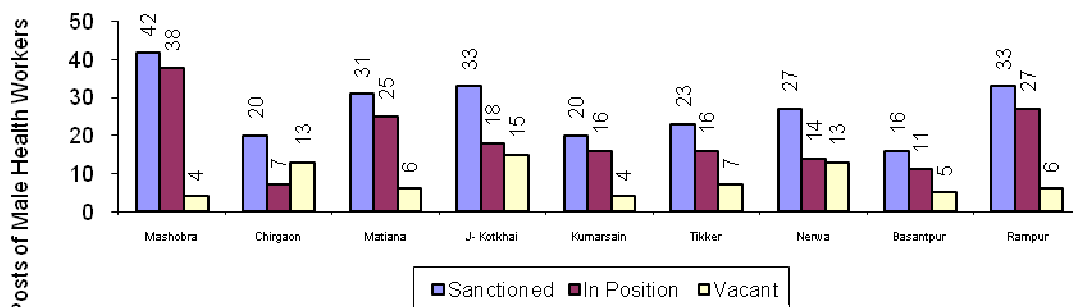
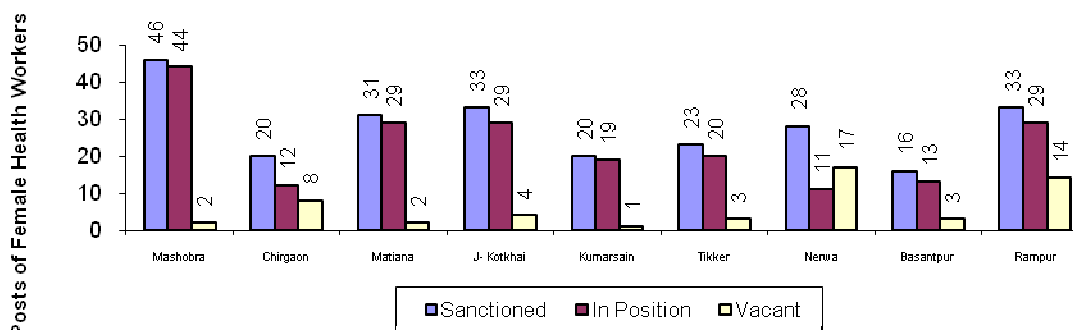


Fig. 6 (c)
Block-Wise Position of Female Health Workers in Shimla District



c) Community Health Centres

Number of CHCs in the district is six. Implication would be that out of 9 blocks, six have CHCs and 3 Blocks are bereft of CHCs. But due to an anomalous situation, one block (Narkanda with a population of approx. 40,000) has two CHCs and 4 blocks namely Theog, Tikker (Rohur), Mashobra and Chopal, are without CHCs. Further analysis regarding the facilities available in the CHCs would reveal not so happy picture. None of the CHCs provide expected package of services.

d) Buildings

All Civil Hospitals and Community Health Centres are housed in buildings constructed as per standard design. But the same is not applicable to PHCs and Sub-Centres. A large number of PHCs and Sub-Centres are functioning in donated or rented buildings. PHCs which were upgraded from Sub-Centres are still functioning in Sub-Centre buildings.

Table 4.8
Block-wise Status of Buildings

Sr No	Block	PHCs		Sub Centres	
		Govt building	Private or rented building	Govt building	Private or rented building
1	Mashobra	7	2	20	22
2	Basantpur	3	2	10	5
3	Matiana (Theog)	8	1	21	10
4	Kumarsain (Narkanda)	5	2	18	2
5	Nankahri (Rampur)	12	2	21	12
6	Jubbal-Kotkhai	6	5	25	8
7	Tikker (Rohru)	4	4	13	10
8	Chirgaon (Chhohara)	4	1	8	15
9	Chopal	2	6	20	7
	Total	51	25	156	91

Source : Primary Census Abstract, Series-3, H.P. Census of India, 2001, Directorate of Census Operations, H.P.

It is quite evident from Table 4.8 that 50 per cent of the PHCs are functioning from private or rented buildings. In Rohru block, 4 PHCs are functioning in government buildings and an equal number in private and rented buildings. Further 40 per cent of Sub-Centres are functioning in private oriented buildings. It is seen that rented or private buildings don't have physical facilities similar to government buildings.

THE HEALTH PROBLEMS OF DISTRICT SHIMLA

1. Strengths

- Tertiary and Secondary level health care services exist in the district. Two Medical College hospitals, One Zonal Level hospital, 7 Civil Hospitals, out of which 2 hospitals provide specialized services equivalent to district level hospital, and has blood bank facility. These hospitals not only provide referral facilities but also provide primary health care services to the population residing in the catchment areas.
- Availability of manpower is adequate. No institution is without doctor. Very few (15 only) vacancies of doctors exist. Out of 247 Sub-Centres in rural areas, only 17 are not functional although stop gap arrangements has been made to provide MCH services by deployment on deputation, though 23 Sub-Centres are without female health workers.
- All ISM institutions are coordinating with Health and Family Welfare Department in implementing national programmes (Functional integration). Anganwadi workers lend a very useful contribution for maternal and child care services
- Diagnostic facilities especially X-ray facilities exist in all blocks. Some PHCs have been equipped with X-rays units.
- Population coverage by primary health care institutions is much less as compared to state or national norms, thereby ensuring better outreach of service delivery.
- People's participation and response to the programmes is very good as is evident by near universal immunisation of children and increasing trend of institutional deliveries.
- Communicable diseases like Malaria, Leprosy, IDD, Vaccine preventable diseases are under control.

- High female literacy rates contribute towards good health status of women and families.

2. Weaknesses

- Due to shortage of specialist in the State, specialists are not available in all CHs and CHCs. Hence specialized services are lacking. This is likely to pose a serious problem in making FRUs operational under NRHM
- Though institutional deliveries are increasing, not all PHCs and CHCs provide delivery services. Women prefer to get themselves attended in far off hospitals, rather than in nearby PHCs, which is not cost effective.
- Geographical and climatic conditions pose serious problems in referral, especially in rainy and winter season.
- District has well known tourist destinations which exposes local population to risk associated with tourism.
- Migrant labour working in Hydro electric projects in the district brings in new communicable diseases. Example is **Cutaneous Leishmaniasis** which has been imported by Bihari labourers.
- Being a predominantly agro-horticultural district, large number of workforce comes from Nepal which work under sub normal living conditions. .
- Lack of quality educational facilities and lack of residential accommodation in remote and rural areas deter the medical and paramedical staff to serve in institutions in those areas.
- **District has an endemic focus of Plague, which extends in three blocks, Jubbal Kotkhai, Tikker (Rohru) and Chirgaon (Chhohara). First outbreak of plague was in 1983 and last outbreak was in February 2002.**
- Due to rugged and hilly terrain and majority of roads being narrow and unmettalled, road accidents have become very common.

3. Challenges

Providing health coverage to distantly located rural and remote villages in the district remains the biggest challenge. In spite of having more than normative requirement of institutions, not all villages are uniformly covered. Though there are 565 primary health institutions,

including ISM institutions, not all 363 Gram Panchayats has one institution in their area. **34 Gram Panchayats are without any facility. It clearly brings out uneven distribution of health institutions as some gram panchayats have more than one institution.**

Of the 90 odd institutions, only 24 institutions out side Shimla town provide delivery services. It compels pregnant women to travel to distantly located institutions and spend considerable amount of money and time also.

Trauma is quite common in the district, due to road accidents and being predominantly agro horticultural community. Trauma care is provided by only three hospitals at Shimla, Rohru and Rampur. Majority of cases need referral to Shimla which is costly affair.

Normatively every block should have on Community Health Centre, with provision of specialized services. Out of 9 blocks, only 5 blocks have CHCs and none provides specialized services. In the district, 4 blocks, Theog, Mashobra, Tikker, and Chopal are without CHCs. Interestingly Chopal block has two Civil Hospitals and Narkanda block has two CHCs. It would be a challenge to attain Indian Public Health Standards for CHCs.

ROLE OF NON GOVERNMENT ORGANISATIONS (NGOs) IN HEALTH CARE

There are number of non government organizations in the district participating in health care. While most of the NGOs are field level small NGOs and cover few villages or gram panchayats, some of them are well established and provide range of services like curative, preventive and promotive.

1. Himachal Pradesh Voluntary Health Association Shimla

HP VHA, state level federation of voluntary organizations, one of the biggest NGO in the district, is engaged in health and development activities. Being a Mother NGO under RCH programme, it not only implements RCH projects but also supports small NGOs in Mandi and Bilaspur district. In addition, it is involved in ISM, prevention and control of HIV / AIDS / STDs. Other areas in which HPVHA is involved are disability, child health and their rights, capacity building of NGOs,

advocacy and information dissemination. HPVHA is member of various state and district level government committees. It runs Interactive Voice Response System (IVRS) having Telephone Number - 1097 on HIV / AIDS/STDs and two counseling centres.

2. SNS Foundation at Parwanu

SNS foundation is mother NGO for the district. It supports smaller NGOs in RCH programme in district Shimla.

3. Himachal Gyan Vigyan Samiti Shimla

HGVS is state level organization which works on various issues like literacy campaign, social issues like dowry, declining sex ratio, agriculture, total rural sanitation etc.

4. HRD (Institution for Integrated Rural Development)

Located in village Shanan, near Shimla works in health and other social sectors. Community participation is their focus.

5. Other Smaller NGOs in District Shimla are :

- i) Lok Kalyan Mandal Theog
- ii) SAHYOG Theog
- iii) Maharana Pratap Jan Kalyan Sansthan Jubbal
- iv) USHA, Shimla
- v) Association for Social Health in India, (ASHI) Shimla
- vi) YMCA Shimla

Manpower Position

All sectioned posts of Medical Officers were filled in Mashobra and Matiana (Theog) Block, whereas in Basantpur block 50 per cent of the sanctioned posts of Medical Officers vacant. With respect to Male Health Workers, the situation was quite bad in Chirgaon, Jubbal-kotkhai and Chopal Blocks where 13, 15 and 13 posts were vacant out of 20, 33, and 27 sanctioned posts respectively. Mashobra was better placed block where only 4 posts were vacant out of 42 sanctioned posts. As per as Female Health Workers are concerned, the worst block were Chopal and Chirgaon (Chhohara), where 17 and 8 posts were vacant out of 28 and 20 sanctioned posts respectively. Again Mashobra, Matiana (Theog) and Narkanda were better place blocks where only 2,2, and 1 posts were vacant against the sanctioned strength as evident from Table 4.9.

Table 4.9
Block-wise Manpower Position in Shimla District

Sr No	Block (BMO)	Medical Officers			Health Workers Male			Health Worker Female		
		S	IP	V	S	IP	V	S	IP	V
1	Mashobra	17	17	-	42	38	4	46	44	2
2	Chirgaon	10	8	2	20	7	13	20	12	8
3	Matiana	11	11	-	31	25	6	31	29	2
4	Jubbal- Kotkhai	19	13	6	33	18	15	33	29	4
5	Kumarsain	15	14	1	20	16	4	20	19	1
6	Tikker	9	6	3	23	16	7	23	20	3
7	Nerwa	12	9	3	27	14	13	28	11	17
8	Basantpur	8	4	4	16	11	5	16	13	3
9	Rampur	40	38	2	33	27	6	33	29	4

Source : Information Collected from CMO Office, Shimla.

S = Sanctioned IP = In position V = vacant

Number of institutions without Doctors = nil

Number of Sub-Centres with only Male Health Worker = 23

Number of Sub-Centres with no Health Worker = 17

4.4 Health Services in the Blocks

Availability and accessibility of good health facilities to people is a sign of good social development and it helps in providing them a healthy and long life. It is therefore, important to analysis the availability of medical facilities existing in different blocks of Shimla district. The analysis indicated that the availability of Primary Health Centres (PHCs) facilities in the villages was not upto the desired level as shown in Table 4.10. In majority of the blocks namely Mashobra, Theog, Rampur and Chhohara, there are less than 30 percent villages having PHCs within a range of 5km. There are only 3 blocks namely Chhohara, Narkanda and Mashobra where PHCs range between 5 to 10km. distance in more than 30 per cent of the villages. Further 3 more blocks namely Basantpur, Theog and Chopal are having PHCs at a distance of more than 10kms in more than 30 per cent of the villages. This distance was as low as 11.29 per cent villages in Narkanda block and the maximum was in Chopal block where about 50.36 per cent villages followed by Theog (50.11per cent) and Basantpur block (49.68 per cent) were having PHCs at a distance of more than 10kms.

Table 4.10**PERCENTAGE OF VILLAGES HAVING HEALTH FACILITY WITH DISTANCE**

NA = Information not available, 1 <5 KMS 2= 5-10 Kms , 3=>10Kms

Block	Range	Range PHC	Range all	Range MCH
Mashobra	NA	7.22	5.70	7.79
	1	29.66	20.75	11.79
	2	29.09	9.32	14.83
	3	34.03	64.23	65.59
Basantpur	NA	12.74	12.10	12.10
	1	16.24	12.26	8.28
	2	21.34	15.13	8.92
	3	49.68	60.51	70.70
Theog (Matiana)	NA	8.05	8.05	9.05
	1	22.30	12.18	9.66
	2	19.54	11.26	11.72
	3	50.11	68.51	70.57
Narkanda (Kumarsain)	NA	14.52	10.22	11.29
	1	32.26	22.31	12.37
	2	41.93	35.75	29.57
	3	11.29	31.72	46.77
Nankhari(Rampur)	NA	29.50	39.75	31.37
	1	29.81	19.25	8.69
	2	23.29	17.64	15.22
	3	17.40	23.36	44.72
Jubbal-Kotkhai	NA	16.67	15.83	17.50
	1	36.94	12.50	12.78
	2	24.17	18.89	19.72
	3	22.22	52.78	50.00
Chhohara (Chirgaon)	NA	25.84	25.28	25.28
	1	24.72	19.38	14.04
	2	33.15	2.81	24.16
	3	16.29	52.53	36.52
Rohru (Tikker)	NA	14.43	10.70	11.23
	1	33.16	5.35	14.97
	2	19.25	11.76	12.83
	3	33.16	72.19	60.97
Chopal (Nerwa)	NA	16.55	16.07	15.11
	1	13.19	1.92	19.18
	2	19.90	3.36	8.88
	3	50.36	78.65	56.83
TOTAL	NA	14.94	15.01	14.63
	1	25.78	4.24	12.31
	2	24.72	7.25	14.91
	3	34.56	73.50	58.15

Source : Compiled from District Census Hand Book, Record Structure : Village Directory, Amenities Data, Census of India, 2001.

Out of nine blocks of Shimla district, only Basantpur, Rampur and Theog are having MCH facilities with in a radius of 5kms in 8.28, 8.69 and 9.66 per cent of villages. However there are blocks like Mashbora, Narkanda Jubad-Kotkhai, Chhohara and Rohroo where the percentages of villages having MCH facilities within this range lies between 10 to15 per cent. On the other hand there are two blocks namely Chopal and Basantpur where medical facilities at a distance of 5 to 10kms are available in 8.88 and 8.92 per cent villages respectively. Narkanda block

has maximum villages i.e. 29.57 per cent having MCH within the range of 5 to 10 kms. There are still blocks where MCH facilities are available at a distance of more than 10 kms. The percentages of these villages is 70.70 per cent in Basantpur, 70.57 per cent in Theog, 65.59 per cent in Mashobra and 60.97 per cent in Rohru block.

There are blocks where all types of medical facilities within a range of 5 kms are available to very few villages. The percentage of such villages is 1.92 per cent in Chopal and 5.35 per cent in Rohru. On the other hand, there are blocks like Theog, Jubal-Kotkhai and Basantpur having such facilities in the range of 5 kms in 12.18, 12.50 and 12.26 per cent of villages respectively. Narkanda is the single block in which maximum number of villages i.e. 35.75 per cent are having all medical facilities like PHCs and MCH between the range of 5 to 10 kms. This is because the block has 41.93 per cent of villages having PHCs and 29.57 per cent of villages having MCH facilities within this range (5 to 10 kms).

As far as all health facilities at a distance of more than 10 kms is concerned, Chopal is the single block which is having maximum number of villages i.e. 78.65 per cent, followed by Rohru (72.19 per cent), Theog (68.51 per cent) and Mashobra (64.23 per cent). As evident from Table 4.10, Chopal block is having PHCs and MCH at a distance of more than 10 kms in 50.36 and 56.63 per cent of villages. On the other hand the lowest percentage of such villages is in Rampur block i.e. 23.36 per cent.

Important Block-wise Indicators

In addition to long distance connectivity, it is also important to study the profile of the physical infrastructure which indicates the level of development in a given block. As far as population covered by doctors in PHC is concerned, the highest in this respects is in Mashabra blocks followed by Jubbal-Kotkhai, Chopal, Rohroo and Basantpur (Table 4.11). Population covered per-sub-centre and population covered by ICDS Aganwardi workers is also maximum in Mashabra block. On the other hand Narkanda block is covering minimum population by doctor in PHC and para medical staff i.e. 5072 and 507 persons respectively. Similarly population covered per sub-centre was minimum in Basantpur block (1531) and population covered by ICDS was lowest i.e. 396 in Chhohara

block. Population covered per civil hospital was lowest in Chopal (38205) and maximum in Theog i.e. 79545. With respect to number of hospitals per 100 sq. km., Mashobra (0.89) was on the top, followed by Chopal (0.34) and Rohru (0.33).

Table 4.11
Important Block-wise Indicators as per Census 2001

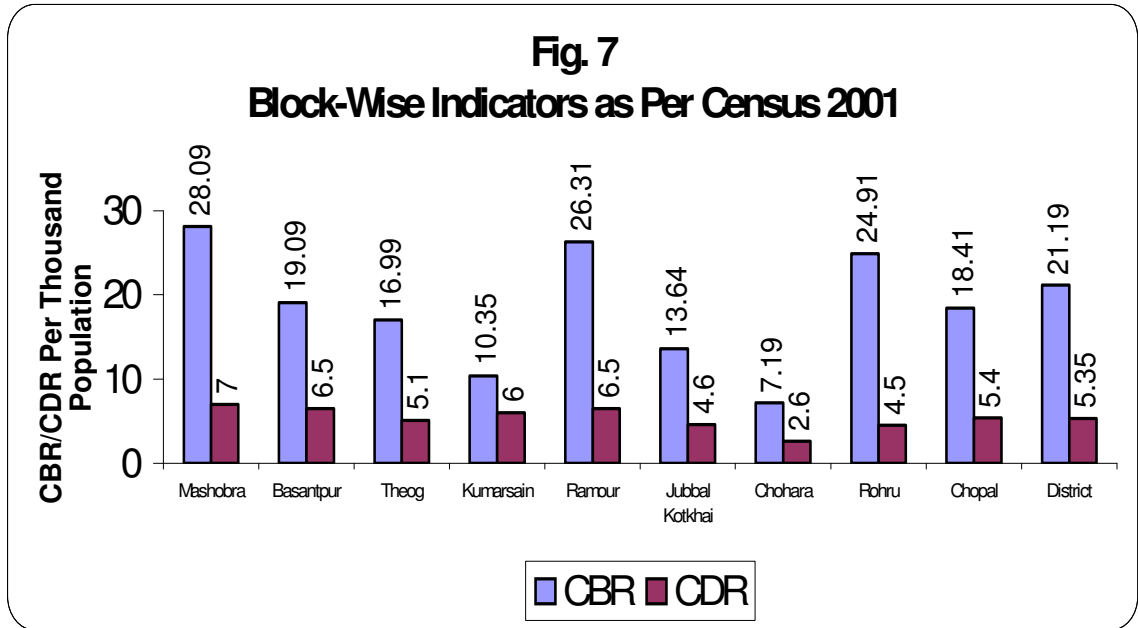
Sr No	Block	CBR	CDR	Pop Covered by Doctor In PHC	Pop Covered per Paramedi-cal staff	Pop Covered per Sub-Centre	Pop Covered by ICDS Angan-wadi	Pop Covered per Civil Hospital	Number of hospitals per 100 sq km
1	Mashobra	28.09	7.0	15722	616	5949	2001	55028	0.89
2	Basantpur	19.09	6.5	9570	1035	1531	580		
3	Theog	16.99	5.1	7795	1732	2515	1130	779545	0.21
4	Narkanda	10.35	6.0	5072	507	1932	597		
5	Ramopur	26.31	6.5	7475	600	3037	689	48590	0.21
6	Jubbal Kotkhai	13.64	4.6	11300	737	2608	1043	67804	0.21
7	Chhohara	7.19	2.6	5189	1112	1610	396		
8	Rohru	24.91	4.5	9579	586	1642	467	57477	0.33
9	Chopal	18.41	5.4	10916	1498	3322	409	38205	0.34
	District	21.19	5.35	9383	836	2789	763	65682	0.26
	X	18.62	5.36	9200	925	2693.5	807.50	41073.90	
	C.V.	36.79	23.88	34.04	44.97	48.52	60.39	73.80	

Source : Primary Census Abstract (C.D.Blockwise), Himachal Pradesh Census of India-2001.

Mashobra block recorded a high value in both CBR and CDR. It was 28.09 and 7.0 per thousand population respectively followed by Rampur and Basantpur blocks. On the other hand Chhohara in CBR and Rohru in CDR recorded lowest value i.e. 7.19 and 4.5 per thousand population. As far as disparities are concerned, CDR recorded lowest variation in the district i.e. 23.88 per cent.

There is very less inter-block variation with respect to population covered by doctors in PHC is concerned i.e. 34.04 per cent. However, there is relatively high inter-block variation in the district with respect to population covered per civil hospital i.e.73.80 per cent. This is because

there are some blocks namely Basantpur, Narkanda and Chhohara where there is not even a single hospital.



Population covered per-sub-centre and population covered by ICDS Anganwadi is maximum in Mashobra block i.e. 5949 and 2001 people respectively. On the other hand, population covered by doctor in PHC and population covered per paramedical staff is minimum i.e. 5072 and 50.7 persons respectively in Narkanda block. Similarly population per-sub-centre and population covered by ICDS Anganwadi was minimum in Basantpur (1531) and Chhohara block (396). Population covered per civil hospital was lowest in Chopal blocks i.e. 38205 and maximum in Theog i.e. 79545. With respect to number of hospitals per 100 sq. km, Maashobra (0.89) was on the top, followed by Chopal (0.34) and Rahrui (0.33).

Detail health services and infrastructure available in each block of Shimla district is given as below :

1. Block Mashobra (BMO Mashobra)

Health Care in Mashobra block is provided by Block Medical Officer with office at PHC Mashobra. The village of Mashobra is on the outskirts of Municipal Corporation Shimla limits. Total area of the block is 410.25 sq.kms. The block has 41 Gram Panchayats for 564 villages,

covering about 0.86 lakhs population, is served by a network of one 30 bedded civil hospital located at Junga, 9 PHCs including Block PHC at Mashobra, 42 sub- centres and 19 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate. CH Junga is not located centrally but in one part of block. Hence it covers small population. There is no CHC in the block.

While number of institutions is adequate quantitatively, only CH Junga and two PHCs have the indoor facility. Total beds in the block are 42, against minimum requirement of 86 beds. Four institutions i.e., CH Junga, PHC Mashobra, PHC Dhama and PHC. Shoghi, conduct deliveries. Laboratory facilities exist in CH Junga and two PHCs. X-ray facilities exist in CH Junga and PHCs at Mashobra, Shoghi and Dhama. PHC Mashobra has a dental clinic.

Under NRHM, PHC Mashobra is proposed to be upgraded as 24 x 7 delivery PHC.

Particular Characteristic of the Block:

This block surround the district headquarters of Shimla and thus has the natural advantage of referral facilities of the level of tertiary care. Otherwise too, some institutions of this block are under ROME scheme of the Medical College Shimla. No institution provides emergency obstetric care in the block. As stated earlier, complicated cases are referred to Shimla. The block is without a CHC.

BLOCK MASHOBRA AT A GLANCE

POPULATION COVERAGE HEALTH INSTITUTIONS, POPULATION- 86,000

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	--	9	42	110	42
Population covered by each	--	9100	2100	800	1: 2000

FACILITIES AND SERVICES, EXPECTATIONS AS PER NORMS AND ACTUAL

Facilities	ndo or	Delivery	Lab	OT	Sterilisation	RTI	Imm	ANC	X ray	Dental
Expected From number Of institutions	10	10	10	10	10	10	71	71	10	--
Number providing services/ Facilities	3	3	4	8	--	3	71	71	4	1

Source : Information Collected from BMO Office, Mashobra

2. Block Basantpur (BMO Sunni)

Health Care in Basantpur block is provided by CHC Sunni. This block, earlier part of Mashobra block, is still administered by Block Medical Officer Mashobra. Total area of the block is 243.95 sq. kms. The block has 202 villages in 26 Gram Panchayats, covering population of about 0.35 lakhs. There is network of one CHC at Sunni, 5 PHCs, 15 Sub-Centres and 9 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate. CHC Sunni is the first referral unit in the block but emergency obstetric care is not provided by the CHC.

While number of institutions is more than normative requirement, only CHC Sunni and two PHCs have the indoor facility, total beds in the block being 18, against minimum requirement of 35 beds. Deliveries are conducted in CHC Sunni only. Laboratory facilities, X-ray facilities and dental clinic exist in CHC Sunni.

Under NRHM, CHC Sunni is proposed to be upgraded as FRU.

BLOCK BASANTPUR AT A GLANCE

**POPULATION COVERAGE BY HEALTH INSTITUTIONS,
POPULATION - 31425**

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80,000	20,000	3000	1000	1:1000
Number In the block	1	5	15	66	18
Population covered by each	31425	6200	2100	<500	1: 1750

FACILITIES AND SERVICES; EXPECTATIONS AS PER NORMS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Sterilisation	RTI	Immune	ANC	X ray	Dental
Expected From number Of institutions	6	6	6	6	6	6	63	63	6	1
Number providing services/ Facilities	2	1	2	3	--	2	63	63	1	1

Source : Information Collected from BMO Office, Sunni.

Above information reveals that while quantitatively number of institutions are adequate, but facilities in the institutions and service provision is inadequate.

3. Block Theog (BMO Matiana)

Health Care in Theog block is provided by Block Medical Officer with office at PHC Matiana. Total area of the block is 470.81 sq. kms. Block has 400 villages in 45 Gram Panchayats, covering about 0.80 lakhs of population. Health care network comprises of one 50 bedded Civil Hospital at Theog, 9 PHCs including Block PHC at Matiana, 31 Sub-Centres and 11 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate.

While number of institutions is more than required, only CH Theog, PHCs at Matiana, Balag, Chhaila have the indoor facility. Total beds available in the block are 70, against minimum requirement of 80 beds. Deliveries are conducted in above mentioned 4 institutions having indoor facility. Laboratory facilities exist in CH and two PHCs. X-Ray facilities exist at CH Theog and PHC Matiana. Dental Clinic exist at CH Theog. Emergency Obstetric Care facilities do not exist in the block. Nearest referral station is Shimla.

Under NRHM, PHCs Chhaila and Balag are proposed to be upgraded as 24 x 7 delivery service PHCs.

Particular Characteristic of the Block

Though large number of institutional deliveries takes place in CH Theog, many cases go to Kamla Nehru Hospital Shimla also. Other patients visit Shimla hospitals as most of the villages have daily direct bus services to Shimla.

BLOCK THEOG AT A GLANCE

POPULATION COVERAGE BY HEALTH INSTITUTIONS, POPULATION 77954

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	--	9	31	69	70
Population covered by each	--	8700	2500	1135	1: 1100

FACILITIES AND SERVICES; EXPECTATIONS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Sterilisation	RTI	Immn	ANC	X ray	Dental
Expected From number of institutions	10	10	10	10	10	10	52	52	10	1
Number providing services/ Facilities	4	4	3	7	--	3	52	52	2	1

Source : Information Collected from BMO Office, Matiana.

4. Block Narkanda (BMO Kumasain)

Health Care in Narkanda block is provided by Block Medical Officer with office at CHC Narkanda. Total area of the block is 231.41 sq.kms. Block has 166 villages in 25 Gram Panchayats, covering about 0.43 lakhs of population is served by network of one 20 bedded CHC at Kotgarh (earlier CH), one CHC at Kumarsain, 8 PHCs, 20 Sub-Centres and 17 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate.

CHC Kotgarh, CHC at Kumarsain, and PHCs at Samathla, Malaindi, Baragaon, and Kotighat have the indoor facility. Total beds in the block are 80, against minimum requirement of 45 beds. Deliveries are conducted in above mentioned institutions having indoor facility. Laboratory facilities exist in CH Kotgarh and CHC Kumarsain and PHCs at Baragaon.

X-Ray facilities exist at CHC Kotgarh and CHC Kumarsain. Dental clinic is at CHC Kumarsain. Emergency Obstetric Care facilities do not exist in the block, hence referral are made to CH Rampur, 30 kms away or ZH Shimla, 90 kms. away from block headquarter.

Under NRHM, PHC Baragaon is proposed to be upgraded as 24 x 7 delivery service PHC

Particular Characteristic of the Block:

This block has number of institutions and bed strength more than required. This block has the distinction of having rich apple belt, per capita income being much higher than the rest of district.

BLOCK NARKANDA AT A GLANCE

POPULATION COVERAGE BY HEALTH INSTITUTIONS, POPULATION - 40577

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	2	8	20	68	80
Population covered by each	20000	5000	2100	550	1: 500

FACILITIES AND SERVICES; EXPECTATIONS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Sterilisation	RTI	Immune	ANC	X ray	Dental
Expected From number Of institutions	10	10	10	10	10	10	47	47	10	1
Number providing services/ Facilities	6	6	3	6	...	6	47	47	2	1

Source : Information Collected from BMO Office, Kumarsain.

5. Block Rampur (BMO Nankhari)

Health Care in Rampur block is provided by Block Medical Officer with office at CHC Nankhari. Total area of the block is 937.86 sq.kms. This block has 44 Gram Panchayats in 239 villages, covering about 0.97 lakhs of population which is served by network of two Civil Hospital at Rampur and Sarahan, one CHC at Nankhari, 14 PHCs, 33 Sub-Centres, one Ayurvedic Hospital at Rampur and 23 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate. Mahatma Gandhi Medical Complex (MGM Complex) at Rampur serves as referral institution as it provides almost all specialized services. It has Blood Bank facility.

Indoor facilities in the block are in MGM Complex (200 beds), CH Sarahan (50 beds), CHC Nankhari (30 beds), and PHCs at Kholighat, Ghanvi, Deothi, Taklech, Bahli and Jeuri. In addition, Ayurvedic Hospital at Rampur has indoor facility. Total bed strength in the block is 330 which is more than normative requirement of the block.

While ultra sound and X-ray facilities are available at MGM Complex Rampur, X-ray facilities exist at CHC Nankhari and PHC Deothi. Delivery facilities are provided by all institutions having indoor facilities.

Under NRHM, CHC Nankhari is proposed to be upgraded as FRU and PHC Ghanvi and Jeuri to be upgraded as 24 x 7 delivery service PHCs.

Particular Characteristic of the Block

Terrain and geographical features of the block are quite rough and difficult, altitude varies from few meters to more than 2500 meters. Road network is not very good. MGM Complex Rampur is one of the best equipped hospital in the state and serves as referral hospital not only for the block but for tribal district of Kinnaur also.

BLOCK RAMPUR AT A GLANCE

POPULATION COVERAGE BY HEALTH INSTITUTIONS, POPULATION - 97180

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	1	14	33	141	330
Population covered by each	97180	7000	3000	700	1: 300

FACILITIES AND SERVICES; EXPECTATIONS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Sterilisation	RTI	Immune	ANC	X ray	Dental
Expected From number of institutions	17	17	17	17	17	17	74	74	17	1
Number providing services/Facilities	9	9	9	9	1	9	74	74	3	1

Source : Information Collected from BMO Office, Nankhari.

6. Block Chhohara (BMO Chirgaon)

Health Care in Chhohara block is administered by Block Medical Officer with office at CHC Chirgaon. However administrative control of health services in DODRA KWAR is with SDM Dodra-kwar. Total area of the block is 523.06 sq.kms.

The block has 26 Gram Panchayats in 127 villages, covering about 0.45 lakhs of population which is served by a network of one CHC, 5 PHCs, 23 Sub-Centres and 12 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate. Block has one CHC at Chirgaon and its referral institution is Civil Hospital Rohru, which provides specialized facilities, almost equivalent to a district hospital.

Indoor facilities in the block are at CHC Chirgaon (30 beds), and in PHCs at Dodrakwar, Goshali and Badiara. Total bed strength in the block is 52 which is more than normative requirement of the block. Ultra sonography and X-ray facilities are available at CHC Chirgaon and PHC Dodrakwar. Delivery facilities are provided by CHC Chirgaon.

Under NRHM, CHC Chirgaon is proposed to be upgraded as FRU and PHC Deudi as 24x7 delivery service PHC.

Particular Characteristic of the Block

Terrain and geographic features of the block are quite rough, rugged and difficult. Road network is not good. One part of the block, DODRA KWAR is still not connected with road and one has to walk on foot for about 40 kms through Uttaranchal to reach PHC Kwar. This land locked area, with population 5661, residing in two-gram panchayats, is served by one PHC with 10 beds at Kwar, 3 sub centres and three AHCs at Dodra, Ziskun and Pujarli. Helicopter services are provided for shifting emergencies whenever required. Civil Hospital Rohru, though located in adjoining block Tikkar, is nearby and caters to the referral health needs of the block.

Some parts of the block (Deudi and Tangnu) are endemic focus of plague.

BLOCK CHHOHARA AT A GLANCE

POPULATION COVERAGE BY HEALTH INSTITUTIONS, POPULATION - 45177

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	1	5	23	118	52
Population covered by each	45177	9100	2000	450	1: 2000

FACILITIES AND SERVICES; EXPECTATIONS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Steril Isation	RTI	Immnn	ANC	X ray	Dental
Expected From number Of institutions	6	6	6	6	6	6	41	41	6	1
Number providing services/ Facilities	4	1	1	1	.....	1	41	41	2	1

Source : Information Collected from BMO Office, Chirgaon

7. Block Rohru (BMO Tikker)

Health Care in Rohru block is administered by Block Medical Officer with office at PHC Tikker. Total area of the block is 298.76 sq.kms. The block has 33 Gram Panchayats for 166 villages, covering about 0.58 lakhs of population, which is served by a network of one Civil Hospital, 8 PHCs, 23 Sub-Centres one Ayurvedic Hospital at Rohru, 10 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate. Block has no CHCs and its referral institution is Civil Hospital Rohru which provides specialized services and has a blood bank.

Indoor facilities in the block are at CH Rohru (150 beds), and in PHCs at Tikker, Summerkot, Katlah and Pujarli. Total bed strength in the block is 184, which is more than normative requirement of the block. While X-ray and ultrasound facilities are available at CH Rohru, X-ray facilities are in position in PHC Tikker, Summerkot and Pujarli. Delivery facilities are provided by CH Rohru, PHC Tikker, Summerkot and Pujarli. Laboratory facilities exist in Rohru, Tikker, Summerkot and Pujarli.

Under NRHM, PHCs Tikker and Summerkot are proposed to be upgraded as 24 x 7 delivery service PHCs.

Particular Characteristic of the Block

Like Nankhari (Rampur) block, this block has adequate health infrastructure. Civil Hospital Rohru is the first referral hospital of the block which provides specialized facilities, including emergency obstetric care.

BLOCK ROHRU AT A GLANCE

POPULATION COVERAGE BY HEALTH INSTITUTIONS, POPULATION 57477

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	...	8	23	123	184
Population covered by each	....	7200	2500	500	1: 500

FACILITIES AND SERVICES; EXPECTATIONS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Sterilisation	RTI	Immune	ANC	X ray	Dental
Expected From number Of institutions	9	9	9	9	9	9	42	42	9	1
Number providing services/ Facilities	5	4	4	4	1	3	42	42	4	1

Source : Information Collected from BMO Office, Tikker.

8. Block Chopal (BMO Nerwa)

Health Care in Chopal block is administered by Block Medical Officer with office at CH Nerwa (Earlier Block PHC). Total area of the block is 583.63 sq.kms. Chopal Block has 48 Gram Panchayats in 353 villages, covering about 0.78 lakhs of population which is served by a network of two civil hospitals, 8 PHCs, 27 Sub-Centres and 21 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate. 50 bedded Civil Hospital at Chopal does not provide specialized services as no specialist is posted there.

Indoor facilities in the block are at CH Chopal (50 beds), CH Nerwa (6 beds) and in PHCs at Kupvi and Throach. Total bed strength in the block is 78, which is near the normative requirement of the block. X-ray facilities are available at CH Chopal. USG and X-ray facilities are at CH Nerwa. Delivery facilities are provided by CH Chopal, CH Nerwa and PHC Kupvi. Laboratory facilities exist in CH Chopal and CHC Nerwa.

Under NRHM, CH Nerwa is proposed to be upgraded as FRU and PHC Throach and Kupvi as 24 x 7 delivery service PHCs.

Particular Characteristic of the Block

Chopal Block has rough and rugged terrain. Distances between block headquarter, CHC, PHCs are long and road network is not satisfactory. Travel time is much more. Emergency obstetric care is not provided by any institution in the block. Nearest FRUs are CH Rohru, 75 kms and Shimla, 130 kms away from Chopal. This is most underserved block in the district. .

BLOCK CHOPAL AT A GLANCE

POPULATION COVERAGE BY HEALTH INSTITUTIONS, POPULATION - 76410

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	...	8	27	123	78
Population covered by each	...	9500	2800	650	1: 1000

FACILITIES AND SERVICES; EXPECTATIONS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Sterli- sation	RTI	Imm	ANC	X ray	Dental
Expected From number of institutions	10	10	10	10	10	10	58	58	10	1
Number providing services/ Facilities	4	3	2	3	...	2	58	58	2	...

Source : Information Collected from BMO Office, Nerwa.

9. Block Jubbal-Kotkhai (BMO Kotkhai)

Health Care in Jubbal-Kotkhai block is administered by Block Medical Officer with office at CHC Kotkhai. Total area of the block is 447.22 sq. kms. Jubbal-Kotkhai block has 48 Gram Panchayats in 300 villages, covering about 0.68 lakhs of population which is served by a network of one 50 bedded civil hospital, one CHC, 11 PHCs, 33 Sub-Centres and 23 Ayurvedic Health Centres. Going by population norms for hill states, the coverage for primary health care is more than adequate.

Indoor facilities in the block are at CH Jubbal (50 beds), CHC Kotkhai (30 beds) and in PHCs at Kiari, Kalbog, Saraswati Nagar, Dvargarh, and Giltari. Total bed strength in the block is 110, which is more than the normative requirement of the block. X-ray facilities are available at CH Jubbal, CHC Kotkhai and PHC Kiari. Delivery facilities are provided by CH Jubbal, CHC Kotkhai, and PHC Saraswati Nagar.

Laboratory facilities exist in CH Jubbal, CHC Kotkhai, and at PHCs Kalbog and Saraswati Nagar.

Under NRHM, CH Jubbal is proposed to be upgraded as FRU and PHC Kalbog as 24 x 7 delivery service PHC.

Particular Characteristic of the Block

Though health services in the block are by and large satisfactory, emergency obstetric care is not provided by any institution. First referral unit is either CH Rohru, 20 kms from CH Jubbal or Zonal Hospital Shimla, 70 kms from Kotkhai.

**This block also has an endemic focus of plague
(Mural forest area)**

BLOCK JUBBAL KOTKHAI AT A GLANCE

POPULATION COVERAGE BY HEALTH INSTITUTIONS, POPULATION - 67804

INSTITUTION	CHC	PHC	SUB CENTRE	ANGANWADI	BEDS
Pop Norm	80000	20,000	3000	1000	1:1000
Number In the block	1	11	33	65	110
Population covered by each	67804	6100	2100	1100	1: 750

FACILITIES AND SERVICES; EXPECTATIONS AND ACTUAL

Facilities	Indoor	Delivery	Lab	OT	Sterilisation	RTI	Immnn	ANC	X ray	Dental
Expected From number Of institutions	13	13	13	13	13	13	68	68	13	1
Number providing services/ Facilities	7	3	4	7	...	4	68	68	3	...

Source : Information Collected from BMO Office, Kotkhai.

HEALTH SERVICES IN MUNICIPAL CORPORATION SHIMLA

Municipal Corporation Shimla has a permanent population of 1.5 Lakhs and a floating population more than 50,000. Recently some surrounding areas belonging to adjoining blocks, with population of 43976, have been merged with corporation. There are five slum areas in the town.

The town is served by number of public and private hospitals and clinics. Two medical college hospitals, one zonal level hospital, four private hospitals and number of allopathic, ayurvedic, unani and homeopathic dispensaries provide curative services to the inhabitants. There is no urban health care system in the town. 3 MCH centres, one Urban MCH centre of Medical College and three Sub-Centres provide maternal and child care. Four private hospitals in Shimla town provide curative care. These are Sanatorium Hospital with 60 beds, Indus Hospital with 100 beds, Tara Hospital with 20 beds and Shriram Hospital with 25 beds.

Central government dispensaries and ESI dispensary cover government employees and their families. There is no Municipal Corporation hospital. In the absence of urban health services in municipal area, normal activities like household survey, annual health action plans, Family Health Awareness Week, IPPI, and implementation of other national health programmes are not carried out.

1. Indira Gandhi Medical College Shimla

One of the two hospitals attached to Medical College Shimla, popularly known as Snowdon Hospital, is a tertiary level institution providing specialised and superspecialised curative services. Bed capacity is 500 beds. It has latest diagnostic facilities, including MRI. Of late, Heart surgery is being undertaken. Regional Cancer Centre is also attached to Medical College.

2. Kamla Nehru Hospital for Women and Children

The second hospital attached with Medical College is Women and Child Hospital, popularly known as Kamla Nehru Hospital. It has bed strength of 120 beds. The bed strength is grossly inadequate. Because the demand for beds is so great that often more than one pregnant woman has to share a bed in the indoor ward. Often this causes a lot of

resentment in the public. Though located at a distance from main medical college building, it is full fledged unit of department of Obstetrics and Gynaecology, having OTs and Blood Bank facilities. However the children's unit is yet to come up as the department of Paediatrics is still located in main building.

3. Deen Dayal Upadhyaya Zonal Hospital Shimla

Zonal Hospital Shimla, popularly called as DDU Hospital, though has sanctioned bed strength of 300 but the building can accommodate only 160 beds. Specialized services are available in the hospital. It has a blood bank facility. Location of the hospital in the heart of city prevents further expansion of buildings and facilities. However there is a proposal to shift the hospital to more spacious place in the town.

4.5 Implementation of Health Programmes in the District

1. Reproductive and Child Health Programme

Implementation of Reproductive and Child Health Programme in the district present a mixed scenario. Whereas the trend of immunization of children and institutional deliveries is on the rise, the same cannot be said about maternal care and temporary methods of contraception. Given below is the details of various components of RCH programme.

i) Fertility Control

Thrust of fertility control measures still continues to be permanent methods in spite of the client oriented, need based, informed choice about methods of contraception. Women bear the double brunt of fertility and contraception. Male related methods are marginal. Not significant shift is observed in the proportion of acceptors between permanent and temporary methods.

However focus on improving quality of services has also boomeranged. Strict compliance with quality standards related to operating surgeons and paces of operations has given a definite setback to the programme implementation as far as sterilization is concerned, due to non availability of specialist's surgeons and obstetricians, camp approach has been forced which is neither client oriented nor cost effective. Currently only three institutions, DDU Hospital Shimla, MGM

Complex Rampur and CH Rohru, provide not only institutional facilities for sterilization but also cater to outreach camps in the district.

However the achievements over the years are as under :

- Couple protection rate has increased from 34 per cent in 1983 to 54.81 per cent in 2003, having touched 62.5 in 1995. Currently it is 51.3per cent as whereas DLHS has estimated it about 70 per cent. 30 percent Couples, mainly residing in rural areas, don't use any method of contraception
- Preference of acceptors is reflected by method-wise break up as;
- Sterilization 41.4per cent, IUDs 8.77per cent, Conventional Contraceptive Users 2.62per cent, and
- Oral Pill users 2.16per cent. Acceptors of natural methods are not monitored by the department.
- Male acceptance of vasectomy is on the decline.
- Birth Rate has been brought down to 19.2 per 1000 population which is less than the state figure (21). DLHS estimations are far less as compared to routine departmental data. v) Total Fertility rate (TFR) is not estimated by the department. TFR for HP is 2.1 and 1.38 for the district as estimated by DLHS.

ii) Maternal Care

Antenatal and post-natal care : Antenatal and post-natal care is availed by about 65 per cent pregnant women. 35 per cent still do not avail the services. Though infant immunization coverage is near 100 per cent, that is not the case for ante-natal coverage. Tetanus toxoid immunization has not crossed 85 per cent. Even IFA supplementation is less than 80 per cent. Not many women turn up for three antenatal and post natal visits. Prevalence of Anemia during pregnancy is quite high. In short, maternal care leaves much to be desired to be done.

iii) Delivery Services

In the previous years institutional deliveries has seen a rising trend. While the figure for 2002-03 was 50per cent, figure released by district health office for 2005-06 reveal that percentage of institutional deliveries has gone up to 76.35 per cent. It is quite heartening to know about the rising trend as it shall help in reduction of infant and maternal mortality. However the other aspect of this is not very heartening. Most of

the deliveries are being conducted in distantly located Civil Hospitals including Medical College Kamla Nehru Hospital Shimla. This trend reveals either low quality care provided by PHCs or expectations of people are high. But it is not cost effective situation. **Burden of normal deliveries should be borne by primary health care and only complicated cases (10-15per cent) should be attended by secondary and tertiary level hospitals. It will take some more time to make PHCs credible and acceptable to people.**

iv) Maternal Mortality Ratio

Exact estimates for MMR are not available for the state as well as district. However as per the report of Registrar General of India²⁸, released in 2006 **“Maternal Mortality In India: 1997-2003 Trends, Causes and Risk Factors”**, a study based on RHIME (Routine, Representative, Resampled Household Interviews of Mortality with Medical Evaluation) reveals MMR for some states and India. MMR for India is estimated at 301 and 110 for Kerala, the lowest. However if comparison is made with the states having similar indicators (Maharashtra, Tamilnadu and Kerala,) MMR for Himachal Pradesh would be between 160-170 per 1 lakh births. In the wake of increasing trend in institutional deliveries, most of them in FRUs and hospitals, the MMR for the district should be less than 150 per lakh. However it is only guess estimate.

v) Child Care

District has attained near universal immunisation of infants before the turn of century and that status is maintained. No case of poliomyelitis has been reported for the last many years and no outbreak of measles reported after the year 2000. There has been cent per cent coverage on National Immunisation Days. Vaccine preventable diseases are under control. Vitamin A administration rate has reached about 90 per cent. However prevalence of malnutrition and diarrhea is quite high. ORT use rate is low. (DLHS report 2002).²⁹

²⁸ Sample Registration System, 2006, *Maternal Mortality in India : 1997-2003, Trends, Causes and Risk Factors*, Registrar General of India, New Delhi.

²⁹ District Level Household Survey (DLHS), 2002, IIPS, Mumbai.

vi) Infant Mortality Rate

Exact figure for IMR for the district is not known. IMR of the state is 50 per 1000 live births. NFHS estimates the IMR at 35 per 1000 live births. However keeping in mind the good health facilities and good indicators like high institutional deliveries it can be safely stated that IMR of the district is less than that of state.

2. Tuberculosis Control Programme

Revised National Tuberculosis Control Programme is being implemented in the district quite satisfactorily. There are 4 TB units in the district located at Shimla, Rampur, Rohru and Chopal which are fully staffed and functioning well. In addition there are 20 Microscopy Centres and 512 DOTS providers in the district. The programme is being supervised by District TB Officer.

District has been able to exceed the national target of Sputum Conversion Rate of 90per cent and Cure Rate of 85 per cent. District has 94per cent sputum conversion rate and 88per cent cure rate in the year 2006. These rates were achieved way back in 2001 and have been maintained. Death rate due to TB for the year 2006 was 1.8per cent (22 patients out of 1760 died). As per GoI guidelines it should be less than 5 per cent.

Since 2000, the district has been detecting new cases of TB, ranging from 1051 in 2001 to 1700 in 2006, out of which sputum positive cases range from 119 in 2001 to 584 in 2006. Though performance of the district is good, it is yet to achieve the new case detection target fixed by GoI which is 257 per one lakh population. In the last five years, district has continuously improved and attained the case detection rate of 221 per one lakh population during the year 2006.

3. Leprosy Control Programme

District has brought down the prevalence of Leprosy to a few cases only. Number of cases detected in previous years were 49 in 2000, 47 in 2001, 46 in 2002-03, 28 in 2005-06 and 37 cases in 2006-07. Special campaign carried out in four blocks of the district could detect few cases. All detected cases are on MDT. Leprosy prevalence rate is less than that of state.

4. Programme for Control of Blindness

Perusal of achievements of Cataract surgery cases in the last five years reveal that targets fixed by state have been achieved. Cataract surgery is being performed at 5 hospitals (DDU Shimla, MGM Rampur, CH Rohru, CH Theog and IGMC Shimla). A private hospital Shimla Sanatorium also conducts eye surgery.

5. Iodine Deficiency Disorders Diseases

Iodine deficiency disorders are not a problem in the district due to effective implementation of IEC for consumption of iodised salt and strict implementation of Prevention of Food Adulteration Act.

6. HIV/AIDS Control Programme

HIV epidemic is slowly spreading its tentacles in Shimla district. Though so far only 154 HIV cases have been detected since the inception of programme, risk is high. District ranks sixth in the state in prevalence of HIV/ AIDS.

The factors which predispose this district to risk of HIV/AIDS in Shimla and surrounding areas being a very famous tourist spot and number of hydro electric projects coming up in the district in which large number of migrant labour from other states are employed.

Various anti HIV control activities being carried out include targeted intervention for high risk population, screening, detection and treatment of patients suffering from RTIs and Sexually transmitted diseases. 14 RTI clinics are functional in the district. 101 centres report on syndromic case management. One Voluntary Counseling and Treatment Centre (VCTC) is functional in Zonal Hospital Shimla. Medical College Shimla has started Anti retroviral treatment.

DLHS estimated awareness levels about RTIs / STDs in males at 27per cent and in females at 21per cent which are quite low. Knowledge about cure of RTIs was estimated at 63.5per cent for males and 53per cent for females. However 15per cent males thought RTIs is to be incurable as against 17per cent by female. 18per cent males and 31per cent females did not know the answer.

For HIV/AIDS, knowledge levels were 90 per cent in males and 76per cent in females. Knowledge about curability of HIV was 26per cent in males and 25per cent in females. Knowledge of its not being curable

was 57per cent in males and 46per cent in females. 6 per cent for males and 28per cent females had no knowledge about the cure.

7. Vector Borne Diseases Control Programme

i) Malaria

It is a matter of great satisfaction that malaria situation remains under control in the district or rather, malaria is not a problem in the district. Reviewing the situation number of positive cases were 46 in 2000, 36 cases in 2001, 16 in 2002. and the decline continued till in the year 2005 there were only two cases (imported) and no case in 2006. However the surveillance activities are continuing. Malaria has been included in Integrated Disease Surveillance Programme to maintain vigil against the disease. .

ii) Plague Endemic Focus

District Shimla has an endemic focus of plague. The plague belt extends from Kharapathar and Mural forest range in Jubbal-Kotkhai block to Tangnu village in Chirgaon block. Cases were reported for the first time in seventies and later in nineties. Some deaths were reported. However during second outbreak vigilance on the part of doctors in Civil Hospital Rohru, preventive measures were taken well in time and no time was wasted in diagnosing the outbreak. Now a plague surveillance unit has been set up in CH Rohru which conducts surveillance activities in this belt. Recently another focus has been found in adjoining area of UTTARKASHI in Uttarakhand State. This signifies the threat of plague outbreak in future in this belt.

8. Water Borne Diseases

Water borne diseases group is major burden of diseases, not only in the district but in the state also. Every year in rainy and summer seasons, there is abrupt rise in the incidence of diarrhoeal episodes. Cases of enteric fever and jaundice are reported in large numbers. Government conducts special campaigns for the control of water borne diseases with the active participation of other departments like IPH, rural development and Panchayati Raj.

9. School Health Programmes

Primary schools in the district are covered for health check ups, immunization, treatment of minor ailments, referral and health

education. Two rounds of health check ups are carried out first in the period from April to June and second from September to December. While first round ensures cent percent coverage, second round may not cover all the schools.

10. Social Welfare Schemes

The Social Justice and Empowerment Department of Himachal Pradesh Government is implementing various schemes/programmes for the socio-economic development/welfare of SCs, STs, OBCs, children, aged disabled and women. The various welfare schemes are as under :

A. Schemes for Women's Welfare

- i. Self-Employment Scheme for Women.
- ii. Mukhya Mantri Kanyadan Yojna.
- iii. State Homes.
- iv. Widow Re-Marriage Scheme.
- v. Deserted/Widow Pension.

B. Welfare of Disabled

- i. Artificial Limbs to Disabled.
- ii. Disabled Scholarship.
- iii. Marriage Grant for Disabled.
- iv. Self-Employment Scheme/Assistance to Disabled.

C. Welfare of Scheduled Castes/Scheduled Tribes and Other Backward Class

- i. Award for Inter-Caste Marriage.
- ii. Housing Subsidy.
- iii. Environmental Improvement of Harijan Basties.
- iv. Proficiency in Typing and Shorthand.
- v. Compensation to Victims of Atrocities on Scheduled Castes/ST Families.
- vi. Gujjar Schools/Ashrams.

CENTRALLY SPONSORED SCHEMES FOR SCHEDULED CASTES/SCHEDULED TRIBES AND OTHER BACKWARD CLASS

The following centrally sponsored schemes on 50:50 sharing basis by State and Central Government are being implemented for the Welfare of Scheduled Castes and Scheduled Tribes in the State :

- i. Hostels for Scheduled Castes/Tribes/OBCs Boys and Girls.
- ii. Pre-Matric Scholarship to the Children of Persons/Families Engaged in Unclean Occupation.
- iii. Coaching and Allied Schemes for SCs/STs/Minorities.
- iv. Implementation of Protection of Civil Rights Act.-1955.
- v. Book Bank.

D. Pension Scheme

- i. Old Age Pension.

E. Child welfare

- i. Bal/Balika Ashrams.

F. Various Corporations

- i. H.P. Minorities Finance and Development Corporation.
- ii. H.P. Backward Classes Finance and Development Corporation.
- iii. H.P. Scheduled Castes and Scheduled Tribes Development Corporation.
- iv. H.P. Women Development Corporation.

v. NGO Sector

Under this scheme, grant-in aids on 90:10 basis are provided to those Voluntary Organizations who are mainly engaged in the upliftment of weaker sections of society i.e. scheduled castes, scheduled tribes, OBCs, children, women old and disabled persons and who are registered under Societies Registration Act. 1860.

The department is funding about 14 Voluntary Organizations for implementing various social welfare programmes. The list of Voluntary Organizations to whom grant-in aid is being released are as under :

- i. H.P. Council for Child Welfare.
- ii. H.P. Social Welfare Advisory Board.
- iii. Other Voluntary Organizations.

G. Integrated Child Development Services Programme

Under 'Integrated Child Development Services' (ICDS) Programme, which is 100 per cent Centrally Sponsored Scheme/Programme, for the overall development of children between the age of 0-6 years, pregnant and nursing mothers, the department is providing supplementary nutrition, pre-school education, nutrition and health education, immunisation, health check-ups and referral services through 7354 Anganwadi Centres spread all over the State. Integrated Child Development Scheme (ICDS) was started by the Government of India in 1975 in Pooh block in the remote Kinnaur district. Initially, the scheme covered only children of poor families. The scheme provided primary school-going children with one time meal (at noon) to add to their calorie and nutrition intake. With encouraging results, the scheme was extended in 1984 to all children of Himachal Pradesh.

Under this programme 76 ICDS projects are functional in the state, out of which 4 were sanctioned during 2005-06. During 2005-06, 10894 additional Anganwadi Centres have been sanctioned by the Government of India and these centres are being made functional very shortly.

Today, the range of activities that are carried out under the ICDS umbrella ranges from allocation of nutritious food to school going

children and pregnant and nursing women, conduct women skill development programmes, formation of Self Help Groups (SHGs) and collection of data at household level on health, nutrition and well-being (the nature and periodicity depending on project). The ICDS activities are carried out through *Anganwadi Workers*. The lowest unit of the ICDS is an *Anganwadi Centre* that covers two to three villages. On Anganwadi Centre is established for 300 people (may vary depending on topography and demography). An Anganwadi Centre has two members on its staff, a *Worker* and a *Helper*, both are women and are trained by ICDS.

Under **Special Nutrition Programme**, supplementary nutrition is provided to the eligible women/mothers, adolescent girls and children through Anganwadi Centres.

Kishori Shakti Yojna (100 per cent Centrally Sponsored Scheme) was introduced in the year, 2000-01 in the 15 selected blocks of Mandi, Hamirpur, Una, Kinnaur, Lahaul and Spiti districts of the State for providing skill trainings in different traditional (weaving, knitting and toys making) and non-traditional trades to Adolescent girls and particularly to illiterate and school drop outs. Under this awareness/legal literacy camps and NHED comps are being organized for them.

Balika Samridhi Yojna is initiated to change the negative attitude towards the girl child and mothers at the time of birth. Under this scheme, there is a provision to give post-birth grant of Rs. 500 to first two girl children taking birth in the BPL family. Besides, scholarship ranging from Rs. 300 to Rs. 1000 per girl student per annum upto 10th standard is also given to those girls (only to first two) who took birth on or after the date of fifteenth August, 1997.

Swayamsidha Yojna

For the economic and social empowerment of women, the department is implementing the Government of India's sponsored Scheme 'Swayamsidha' in 8 blocks viz., Rohru, Baijnath, Chamba, Solan, Pachhad, Jhanduta, Lambagaon and Karsog. Under this scheme, 800 Women Self Help Groups have been formed, out of these, 775 SHGs have been linked with the banks. So far, these SHG members have saved Rs. 132.03 lakhs. Under this scheme, training, exposure visits and awareness camps are organized by SHG members.

Block-wise Performance Under ICDS Project in District Shimla

Block-wise population covered under ICDS Project during 2005-06 is shown in Table 4.12. Total population of the district came out to be 616267, out of which 556950 population i.e. 90.37 per cent was covered by the ICDS Project. Out of nine blocks of district Shimla, five blocks i.e. Mashobra, Narkanda, Chhohara, Basantpur and Rampur were having cent per cent coverage of population under the ICDS project. In Rohru, Jubbal-Kotkhai and Chopal blocks the coverage was more than 87 per cent. The only exception was Theog block where ICDS coverage was quite less i.e. 51.59 per cent. In this block, out of total 82454 people, only 42537 were covered under the Project. On the whole, Shimla district was covered very well by ICDS project i.e. to the extent of 90.37 per cent.

Age-wise distribution of beneficiary children and Pregnant and Lactating Mothers is depicted in Table 4.13. In the age group of 0-6 months, there were cent per cent beneficiaries in Moshabra and Narkanda blocks, implying that all new-born children were benefited by the Project. The percentage coverage was less i.e. 78.92, 80.81 and 83.81 per cent in Rampur, Chopal and Rohru blocks respectively. In the age

group of 6 to 12 months, Basantpur block had highest beneficiaries i.e. 94.32 per cent, followed by Mashobra (87.26%). The minimum beneficiaries were in Narkanda (73.05%) and Rohru blocks (75.54%). In one to three years group, Chhohara had the maximum beneficiaries (96.31%), followed by Theog i.e. 91.32 per cent. The minimum was in Rohru block i.e. 76.26 per cent.

Chhohara and Basantpur blocks had the highest beneficiaries i.e. 89.27 and 87.82 per cent among children of 3 to 6 years. The least was in Narkanda (61.19%) followed by Rohru (64.69%). The nutrition of pregnant and lactating mothers is utmost important for the good health of mothers and children. Basantpur block had cent per cent coverage among the Pregnant Mothers and in other five blocks namely, Theog, Mashobra, Narkanda, Choppal and Chhohara, the coverage was more than 90 per cent. Lactating Mothers need proper nutrition to meet out the requirement of growing children. Only Theog and Mashobara blocks had more than 90 per cent beneficiaries among Lactating Mothers. The beneficiary percentage was quite less i.e. 78.92 per cent in case of Rampur block. The over all coverage of 3-6 years' children in district Shimla was quite less i.e. 76.51 per cent, whereas in all other categories of beneficiaries, it was more than 80 per cent. In district Shimla, 81.55 per cent children between the age of 0-6 years were provided supplementary nutrition. The extent of Pregnant and Lactating Mothers covered under Special Nutrition Programme was quite high i.e. 88 per cent in district Shimla. There is a need and scope for enhancing the coverage of children under ICDS Project.

Table 4.12

Block-wise Population Covered Under ICDS Project During 2005-06

Name of Block	Population of the Block/District During 2005-06	Population Covered/Benefited Under ICDS Project
Theog	82454	42537 (51.59)*
Mashobra	77179	77179 (100)
Narkanda	46906	46906 (100)
Chopal	82624	80779 (97.77)
Chhohara	50853	50853 (100)
Basantpur	47457	47457 (100)
Rampur	88477	88439 (99.96)
Jubbal	73390	64537 (87.94)
Rohru	66927	58263 (87.05)
Distt. Shimla	616267	556950 (90.37)

Note : * Figures in Parentheses show percentage to total.

Source : Compiled from the Office of District Programme Officer, Shimla.

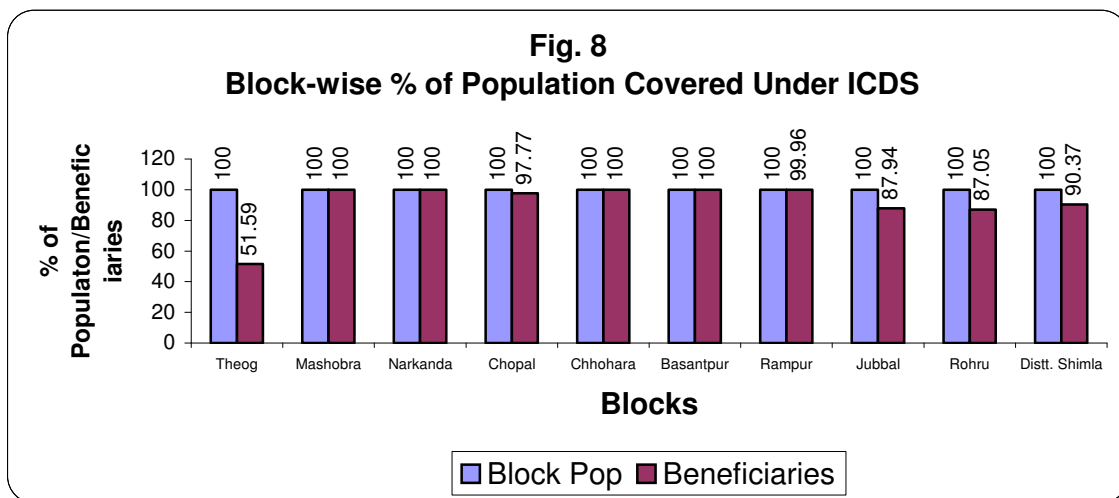


Table 4.13
Age-wise Distribution of Beneficiaries Both Mothers and Children During 2005-06

Blocks	0-6 Months		6-12 Months		1-3 Years		3-6 Year		Pregnant Mothers		Lactating Mothers	
	Total	Benefited	Total	Benefited	Total	Benefited	Total	Benefited	Total	Benefited	Total	Benefited
Theog	390	357 (91.54)*	555	464 (83.60)	1337	1221 (91.32)	1895	1613 (85.12)	369	336 (91.05)	390	357 (91.54)
Mashobra	633	633 (100)	746	651 (87.26)	2682	2384 (88.89)	3682	2521 (68.47)	567	514 (90.65)	633	616 (97.31)
Narkanda	327	327 (100)	397	290 (73.05)	1360	1088 (80.00)	1693	1036 (61.19)	240	220 (91.67)	327	283 (86.54)
Chopal	620	501 (80.81)	737	599 (81.27)	2332	1837 (78.77)	2849	2318 (81.36)	551	504 (91.47)	620	501 (80.81)
Chhohara	503	460 (91.45)	631	544 (86.21)	1869	1800 (96.31)	2339	2088 (89.27)	383	347 (90.60)	503	452 (89.86)
Basantpur	382	372 (97.38)	511	482 (94.32)	1595	1489 (93.35)	1979	1738 (87.82)	444	444 (100)	421	372 (88.36)
Rampur	702	554 (78.92)	811	653 (80.52)	2586	2071 (80.08)	2737	2056 (75.12)	502	416 (82.87)	702	554 (78.92)
Jubbal	608	533 (87.66)	735	641 (87.21)	1685	1401 (83.14)	2258	1740 (77.05)	540	435 (80.55)	608	533 (87.66)
Rohru	457	383 (83.81)	458	346 (75.54)	1601	1221 (76.26)	2048	1325 (64.69)	478	420 (87.87)	457	383 (83.81)
Dsitt. Shimla	4622	4120 (89.14)	5581	4670 (83.68)	17047	14512 (85.13)	21480	16435 (76.510)	4074	3636 (89.25)	4661	4051 (86.91)

Note : * Figures in Parentheses Show Percentage to Total in Each Category of Beneficiaries.

Source : Complied from the Office of District Programme Officer, Shimla.

4.6 Relative Availability of Health Care in District Shimla

By and large health facilities are satisfactory in the district. As pointed out earlier, location of capital town Shimla in the district ensures better availability and accessibility of comprehensive health care to the inhabitants of the district. This factor alone influences better quality of health care as large number of doctors, hospital beds, specialized care of tertiary level etc are within the reach of the inhabitants of the district. However in the nine blocks of the district, the pattern and level of health care is not uniform. Some of the blocks are better placed than others. An effort is made to find out which blocks have comparatively better facilities than other blocks

Criteria for ranking would ideally be comparison of health indicators but in the absence of block level data in this regard, it would not be possible. However sufficient information about health facilities, situation of manpower etc. is available. Hence following criteria is applied:

1. Coverage by primary health care institutions
2. Availability of beds per one thousand population
3. Doctor population ratio
4. Availability of diagnostic facilities in the block
5. Availability of First referral unit (FRU) facilities in the block so that patients in the need of emergency treatment like caesarian section in a difficult labour case could be given timely treatment i.e. within two - three hours.

Going by above mentioned criteria, three blocks of the district i.e. Rampur, Rohru and Mashobra are adjudged as better blocks than other six blocks. Within the three blocks, their ranking is given below :

I. Block Rampur

Population of the block (97180) is covered by 74 primary health care institutions. The block has the facility of a First Referral Unit at MGMC Hospital Rampur, which provides specialised services equivalent to district hospitals. This hospital is approachable within two hours from the farthest end of the district. This makes the block as one having the best health infrastructure in the district, away from the district

headquarters. Block headquarter Rampur is about 120 kilometer away (6 hours travel time by public transport) from Shimla.

Coverage of population by primary health care institutions is much more than the norm for the state and is the best in the district. Almost all the institutions are manned by trained manpower. No PHC is without doctor.

Sufficient numbers of diagnostic facilities such as laboratory and radiological units exist in the block, hence patients do not have to visit the block headquarter Rampur for routine investigations. Doctor population ratio is one doctor for approximately 1600 population. This block has one hospital bed for approximately 400 populations, which is a very high figure for any block in the country.

In view of above cited facts, it would be correct to conclude that this block is one of the ideal blocks not only in the district but in the whole state.

II. Block Rohru

Population of the block (45177) is covered by large number (41) of primary health care institutions. It has the facility of a First Referral Unit at Civil Hospital at Rohru, which provides specialised services equivalent to a First Referral Unit, with a blood bank facility. This hospital is approachable within two to three hours from the farthest village of the block. This makes the block as one having the second best health infrastructure in the district after Rampur.

Coverage of population by primary health care institutions is much more than the norm for the state and is of the best in the district. Almost all the institutions are manned by trained manpower.

Sufficient numbers of diagnostic facilities such as laboratory and radiological units exist in the block, hence patients do not have to go outside the block for common routine investigations. Doctor population ratio is one doctor for 1100 population. This block has one hospital bed for approximately 500 populations, which is a second highest figure for any block in the district, first being Rampur.

III. Block Mashobra

Geographically, this block surrounds the district headquarters of Shimla and thus has the natural advantage of availability of referral

facilities of the level of tertiary care within travel time of two hours. Some PHCs of the block are under ROME scheme of the Medical College Shimla. Zonal Hospital Shimla and Medical College Hospitals provide first referral care. The deficiency of non-availability of a CHC in the block is made up by its proximity to state capital

Coverage of the population by primary health care facilities i.e. Sub-Centres, Primary Health Centres and Ayurvedic Health Centres (71) is far less than the norm for the state. Almost all-primary health care institutions are manned by trained staff.

Diagnostic facilities such as laboratory and X-ray are available in four institutions in rural areas. Doctor population ratio is one doctor for approximately for 2700 population. However deficiency of indoor beds, etc is more than made up by unavailability of medical facilities at Shimla within easy reach

This criteria can be applied for other six blocks. In the final analysis it would appear that Chopal is the most underserved and deprived block. It is a big block spread in 580 square kilometers and having more than 80,000 population. Terrain is very rugged, with very poor transport and other communication facilities. On the paper the count of health facilities appears to be satisfactory, but on the ground most of the Sub-Centres are without Health Workers, some of the PHCs are without Doctors, condition of buildings is poor, diagnostic facilities are only at Block headquarter at Chopal. There is no FRU in the block. All emergency patients are referred to district headquarter which is 130 kilometers away. This block needs immediate attention of the authorities.

ABBREVIATIONS

DLHS	District Level Household Survey
DALY	Disability adjusted life years
IIPS	Indian Institute of Population Sciences, Mumbai
CDR	Crude Death Rate
CBR	Crude Birth Rate
CHC	Community Health Centre
IMR	Infant Mortality Rate
IPH	Irrigation & Public Health department
MMR	Maternal Mortality Ratio
NGO	Non-government organization
PRI	Panchayati Raj
PHC	Primary Health Centre
TFR	Total Fertility Rate
RTI	Reproductive Tract Infections
STD	Sexually Transmitted Diseases
IFA	Iron and Folic Acid Tablets
EBF	Exclusive Breast Feeding
NSV	No Scalpel Vasectomy
ISM	Indian System of Medicines
IDD	Iodine Deficiency Disorders
DALYs	Disability Adjusted Life Years
IVRS	Interactive Voice Response System
AHCs	Aurvedic Health Centres

CHAPTER - V

AGRICULTURE PROFILE OF DISTRICT SHIMLA

5.1 Introduction

Majority of the population in district Shimla is living in rural areas and agriculture is the main source of livelihood of these people. The district has varied agro-climatic conditions, ranging from sub-tropical to temperate. The elevation of the district ranges from 300 to 6000 meters above the mean sea level. The soil texture varies from light sandy to heavy clay, which is suitable for growing fruits and vegetables in the district. The temperature in higher reaches in the district goes down much below 0°C during winter months; the maximum temperature in lower areas exceeds even 40°C during summer months. The annual rainfall in the district ranges from 700 mm to 1400 mm. The district has favourable agro-climatic conditions for growing temperate fruits and vegetables grown here, have great demand in the markets of different states in the country. Consequently, farmers have been found shifting their land towards these crops in district Shimla³⁰.

The overall literacy in District Shimla was 79.1 per cent as per 2001 Population Census. It was about 55 per cent during the year 1991. Female literacy has increased from 44 per cent to 70.1 per cent during the period 1991 to 2001. Overall literacy in general, and female literacy in particular, should be increased as it contributes to a great extent in economic development. Transformation of rural economy is impossible without imparting better education and skills to womenfolk.

In this chapter, an attempt has been made to study the different dimensions of agriculture sector in various blocks of district Shimla. An attempt is made to analyse land use pattern, status of agriculture workers, structure of land holdings, cropping intensity, horticulture development, livestock system and certain other important elements of agriculture set-up in district Shimla. The indicators for which block-wise

³⁰ Singh Ranveer. (1992), 'Increasing Farm Income and Employment in Hilly Areas : A Study in Himachal Pradesh', *Agricultural Situation in India*, Vol. XLVI, No. 12, p. 920.

data was available, block-wise study is made, but for those variables, where this kind of information was not available, only district level position is analyzed. Further, the analysis of different sub-sectors pertains to different years due to lack of uniform information (concerning a particular reference year) available in the concerned departments.

5.2 Land Utilization Pattern in District Shimla

Land is one of the most important productive factors in agriculture. This factor is becoming more and more important in the wake of growing population. Therefore, analysis of land utilization is one of the important components of agricultural profile of an area. Besides, size of geographical area, its utilization is of great significance to planners, economists and analysts to draw social and economic conclusions³¹.

Land utilization pattern in district Shimla for the year 2002-03 is given in Table 5.1. It may be seen from the Table that the total geographical area of District Shimla is 5,07,370 hectares, which is 11.17 per cent of the total geographical area of the state. The area under forest and pasture and grazing land constituted 25.46 and 49.09 per cent of total geographical area of the district. Proportionate area under the forest and pasture and grazing land was more in the district than for the state as a whole. However, proportionate area under barren and area not available for cultivation was less in district Shimla as compared to Himachal Pradesh. The net sown area in the district was 13.26 per cent, while it was 11.99 per cent of total area for the state as a whole.

Block-wise land utilization pattern in District Shimla for the year 2002-03 is presented in Table 5.2. As compared to all other blocks, Rohru block had the highest percentage of net area sown (25.45 per cent), and Chhohara had the lowest (5.95 per cent). Area under pastures and grazing land was as high as 76.66 per cent of total geographical area in Chhohara block and it was as low as 21.51 per cent in Jubbal-Kothai.

³¹ Singh Ranveer (1996), *An Analysis of Trend in Operational Holdings in H.P.* Agro-Economic Research Centre, H. P., University, Shimla (Mimeo) p.3.

Table- 5.1: Land use Pattern in District Shimla and H.P. During the Year 2002-03

Particulars	Shimla District		Himachal Pradesh	
	Area in Ha	% of total	Area in Ha	% of total
Area according to village paper	507370	100.00	4543146	100.00
Area under forest	129177	25.46	1099447	24.20
Land put to non-agril uses	14660	2.89	319206	7.03
Barren and uncultivated land	12729	2.51	806258	17.75
Area not available for cultivation	27389	5.40	1125464	24.77
Permanent pasture and grazing land	249092	49.09	1518025	33.42
Land under misc. trees and groves	3476	0.68	57957	1.28
Cultivable but barren	13503	2.66	122221	2.69
Uncultivable land	266071	52.44	1698203	37.38
Fallow and other than fallow	5681	1.12	15143	0.33
Current fallow	11751	2.32	60314	1.33
Fallow land	17432	3.44	75457	1.66
Net sown area	67301	13.26	544575	11.99
Area sown more than once	26178	5.16	400630	8.82
Gross cropped area	93479	18.42	945205	20.80
Cropping intensity(%)	138.90	-	173.57	-

Source: Directorate of Land Records, Shimla, 2006

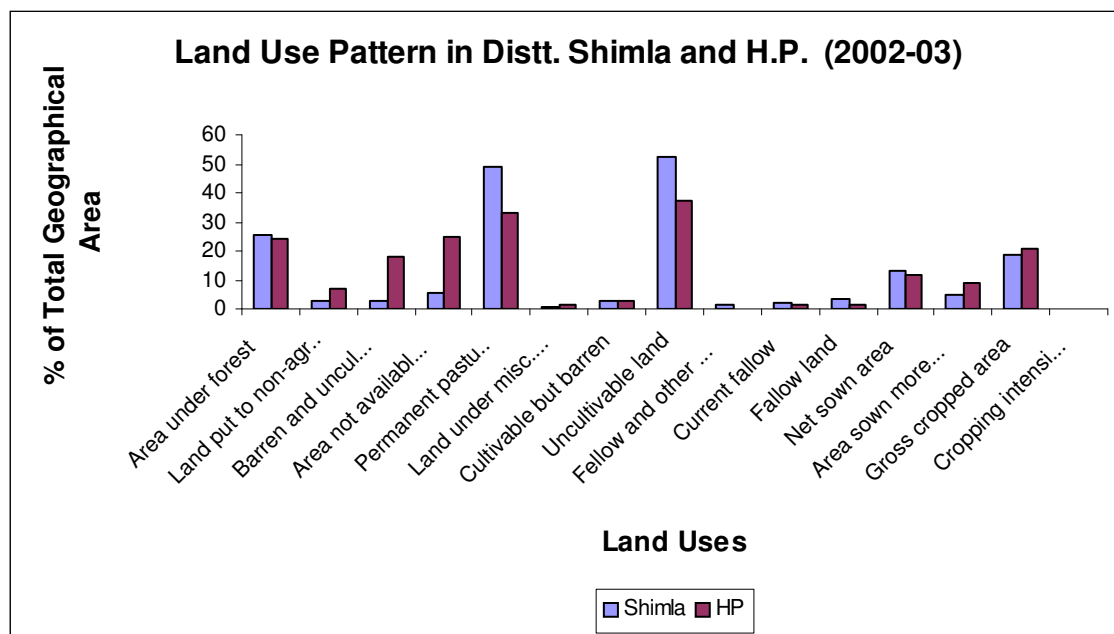


Fig. 1

Table-5.2
Block-wise Land use Pattern in District Shimla During 2002-03

(% of geographical area)

Block	Area under forest		Barren and uncultivated land		Land put to non agri. uses		Land under miscall. Tree crops and groves		Permanent pastures and grazing land		Culturable waste		Net area sown	
	%age	Rank	%age	Rank	% age	Rank	% age	Rank	% age	Rank	% age	Rank	% age	Rank
Mashobra	15.92	8	2.24	6	6.52	2	4.58	4	56.37	2	4.28	2	10.09	8
Theog	16.45	7	2	7	3.61	4	8.56	2	52.87	4	0.75	9	15.76	4
Ram-pur	45.32	1	2.91	3	2.39	8	2.59	6	33.43	7	1.98	7	11.38	7
Narkanda	26.36	4	3.18	2	2.55	7	5.01	3	38.46	5	2.86	4	21.58	2
Jubbal-Kothai	38.17	2	2.65	4	14.3	1	1.98	7	21.51	9	1.88	8	20.51	3
Chhohara	10.43	9	1.61	8	1.2	9	1.33	9	76.66	1	2.82	5	5.95	9
Roh-ru	28.41	3	2.59	5	3.53	5	11.03	1	26.4	8	2.59	6	25.45	1
Chopal	24.31	5	4.29	1	2.59	6	3.75	5	38.22	6	12.02	1	14.82	5
Basant- pur	20.2	6	0.84	9	4.57	3	1.81	8	54.8	3	3.71	3	14.07	6
C.V. (In %)	41.79		37.5		82.11		70.27		37.16		84.97		38.12	

Source : As per Table 5.1.

Culturable waste land was highest in Chopal block (12.02%) and lowest in Theog block (0.75%). Barren and uncultivated land ranged between 0.84 per cent in Basantpur block to 4.29 per cent of reported area in Chopal block. Forests covered about 45.32 per cent of geographical area in Rampur block and 10.43 per cent in Chhohara block. The analysis revealed that area under forests is very less than the required figure (except in Rampur and Jubbal-Kotkhai block) in different blocks of the district. Area under forests has to be increased to protect the eco-system of the district. It can be done by pasture development i.e. growing such varieties of plants which are used as fodder for animals. Animal pressure is very high on grazing and pasture land, and day by day the condition of village common lands and other community land resources is becoming worse. These can be developed by launching Social Forestry Schemes and active participation of local people. The values of co-efficient of variation revealed, that there were wide variations among different blocks with respect to percentage of area under, culturable waste (84.97%), land put to non-agricultural uses (82.11%) and land under miscellaneous tree crops and groves (70.27%) in the district.

Table- 5.3
Block-wise Status of Agriculture Workers in District Shimla (2001)

Block	% of cultivators to total population	Ranks	% of Agri. workers to total population	Ranks	% of Agri. workers to total workers	Ranks	% of main workers tot total workers	Ranks	% of marginal workers tot total workers	Ranks
Mashobra	11.33	9	0.5	8	1.16	8	39.32	7	3.77	9
Theog	48.19	2	2.03	2	3.47	3	52.23	1	6.36	8
Rampur	37.12	7	1.49	5	2.69	6	41.33	6	14.06	3
Narkanda	46.8	3	1.07	7	2.29	7	33.07	9	25.76	1
Jubbal-Kothai	41.87	6	2.99	1	5.47	1	46.55	3	8.16	5
Chhohara	42.84	4	1.63	4	3.3	4	43.31	5	9.39	4
Rohru	42.72	5	2.02	3	3.71	2	47.41	2	6.94	7
Chopal	35.92	8	1.48	6	3.09	5	37.74	8	7.09	6
Basantpur	50.83	1	0.4	9	0.63	9	44.18	4	20.42	2
District Shimla	32.87		1.36		2.65		42.31		8.93	

Source : *Compiled on the basis of data provided in Primary Census Series, 3 H.P. Census of India 2001 Director of Census operations H.P.*

5.3 Status of Agriculture Workers in District Shimla

In District Shimla agriculture is the main occupation of people. Seventy Seven per cent of total population is rural. People are mostly engaged in agriculture, horticulture, animal husbandry and allied activities. Out of total workers in the district, about 42.31 per cent were categorized as main workers. Nearly 33 per cent of total population, constituted of cultivators. The proportion of agricultural workers to total workers on an average stood at 2.65 per cent in the district (Table 5.3).

Block-wise analysis depicts that proportion of main workers to total workers was highest i.e. 52.23 per cent in Theog block and lowest i.e. 33.07 per cent in Narkanda block. Percentage of cultivators to total population stood as high as 50.83 per cent in Basantpur block during the year 2001. It was lowest i.e. 11.33 per cent in Mashobra block. Whereas In Jubbal-Kotkhai, the percentage of agricultural workers to total workers was highest (5.47%), it turned out to be lowest (0.63%) in Basantpur. Percentage of workers engaged in household industry, manufacturing, servicing, repairs etc. was found to be insignificant in the district.³² It appears that there is very high pressure of population on agricultural land in the district, which has resulted in to disguised unemployment, and low level of productivity per unit of labour employed.

5.4 Land Holdings and Distribution

Block-wise distribution of number and area of land holdings in District Shimla are given in Tables 5.4 to 5.8. Distribution of land holdings and area by size class in district Shimla for the year 1995-96 is given in Table 5.4. About 89 per cent of total holdings were in the category of marginal and small holdings i.e. having land equal to or less than 2 hectares. At block level, the proportion of number of small and marginal operational holdings ranged from 81.56 per cent (Mashobra block) to about 96 per cent (Narkanda block). The co-efficient of variation with respect to number of small holdings among different blocks in district Shimla stood at 10 per cent. However, in case of large holdings this value stood as high as 67.30 per cent. The analysis revealed that the distribution of the productive asset i.e. land is quite unequal in the district.

³² Ibid, p.7.

Table- 5.4
Block- wise Number and Area of Operational Holdings in District Shimla
During 1995-96

(% of total)

Block	Number						Area					
	Marginal	Small	Semi-Medium	Medium	Large	Total	Marginal	Small	Semi-Medium	Medium	Large	Total
Mashobra	47.31	34.25	11.22	6.16	1.06	100	11.41	33.73	23.5	22.7	8.66	100
Theog	44.33	38.13	11.12	5.58	0.78	100	12.56	37.32	23.69	20.52	5.91	100
Rampur	64.18	30.78	4.12	0.79	0.13	100	29.36	48.02	14.62	4.71	3.29	100
Narkanda	66.71	28.91	3.3	1.04	0.04	100	30.33	49.75	12.81	6.6	0.51	100
Jubbal-Kothai	55.83	35.1	6.62	2.26	0.19	100	19.53	46.86	20.44	11.24	1.93	100
Chho-hara	54.05	35.01	7.91	2.77	0.26	100	17.93	44.43	22.13	13.13	2.28	100
Roh-ru	53.97	35.61	6.97	2.88	0.57	100	17.69	43.78	18.84	13.58	6.11	100
Chopal	46.61	41.69	8.5	2.41	0.79	100	13.05	57.77	12.46	11.32	7.4	100
Basantpur	50.49	34.95	9.05	4.66	0.85	100	14.93	37.66	21.02	19.2	7.19	100
District Shimla	54.14	34.72	7.54	3.1	0.54	100	17.77	42.91	19.58	14.59	5.15	100
C.V. (in %)	13.48	10.02	33.9	56.46	67.3		35.59	15.78	22.21	42.02	55.78	

Source: Agriculture Census, 1995, Directorate of Land Records, Shimla.

Table- 5.4.1
Block- wise Ranks of Number and Area of Operational Holdings in
District Shimla During 1995-96

Block	Number					Area				
	Marginal	Small	Semi-Medium	Medium	Large	Marginal	Small	Semi-Medium	Medium	Large
Mashobra	7	7	1	1	1	9	9	2	1	1
Theog	9	2	2	2	4	8	8	1	2	5
Rampur	2	8	8	9	8	2	3	7	9	6
Narkanda	1	9	9	8	9	1	2	8	8	9
Jubbal-Kothai	3	4	7	7	7	3	4	5	7	8
Chho-hara	4	5	5	5	6	4	5	3	5	7
Roh-ru	5	3	6	4	5	5	6	6	4	4
Chopal	8	1	4	6	3	7	1	9	6	2
Basantpur	6	6	3	3	2	6	7	4	3	3

Table- 5.5
Block-wise Share of SC in Number and Area of Operational Holdings in
District Shimla During 1995-96

(In %age)

Block	Number						Area					
	Marginal	Small	Semi-Medium	Medium	Large	Total	Marginal	Small	Semi-Medium	Medium	Large	Total
Mashobra	39.77	26.52	15.08	8.74	2.42	30.15	41.12	24.49	14.57	8.21	2.07	18.42
Theog	40.8	23.31	9.98	4.01	-	28.32	40.15	20.96	9.37	3.76	-	15.86
Rampur	39.4	20.55	4.13	0.79	-	31.79	37.05	19.16	3.9	0.88	-	20.69
Narkanda	34.22	16.6	6.16	5.75	-	27.89	31.37	15.52	5.84	5.67	-	18.36
Jubbal-Kothai	33.15	16.09	4.99	2.86	-	24.55	15.07	14.49	4.41	2.58	-	10.92
Chho-hara	40.4	14.2	3.7	-	-	27.1	37.76	12.27	30.3	-	-	12.9
Roh-ru	39.92	19.82	5.17	0.43	-	28.97	38.98	17.48	4.88	0.33	-	15.51
Chopal	53.22	19.87	9.4	2.4	-	33.94	69.87	17.43	11.34	3.39	-	20.63
Basantpur	33.57	17.47	7.57	4.76	-	23.96	34.56	15.88	7.44	4.7	-	13.61
District Shimla	39.04	20	8.51	4.42	0.68	28.86	36.26	18.16	8.13	4.32	0.61	16.49
C.V. (In %)	14.53	18.56	46.31	78.94	248.38	10.57	35.06	19.62	78.54	75.73	244.44	19.88

Source : As per Table 5.4.

Table- 5.5.1
Block-wise Ranks of Share of SC in Number and Area of Operational Holdings in
District Shimla During 1995-96

Block	Number						Area					
	Marginal	Small	Semi-Medium	Medium	Large	Total	Marginal	Small	Semi-Medium	Medium	Large	Total
Mashobra	1	1	1	1	3	2	1	2	1	1	3	1
Theog	2	2	4	.	5	3	2	4	4	.	5	2
Rampur	3	8	7	.	2	6	3	9	7	.	1	3
Narkanda	7	5	2	.	6	8	7	6	2	.	4	7
Jubbal-Kothai	8	7	5	.	8	9	8	8	6	.	9	8
Chho-hara	9	9	.	.	7	5	9	1	.	.	8	9
Roh-ru	5	6	8	.	4	4	4	7	8	.	6	5
Chopal	4	3	6	.	1	1	5	3	5	.	2	4
Basantpur	6	4	3	.	9	7	6	5	3	.	7	6

Most of the farmers in the district have weak production base and hence, are trapped in low-income cycle. Due to poor production base, the farmers are not in a position to make best use of their other productive asset, i.e. labour.

As far as percentage of area under different size class of holdings is concerned, it is observed that on an average, 17.77 per cent of total area under operational holdings was of marginal holdings in the district (Table 5.4). This percentage share was maximum in Narkanda (30.33%) and minimum in Mashobara block (11.41%). Further, on an average, 42.91 per cent of total area under operational holdings, was of the nature of small holdings. Whereas this figure stood as high as 57.77 per cent in Chopal block, in Mashobra block, it was as low as 33.73 per cent.

The area under semi-medium, medium and large holdings on an average in the district turned out to be 19.58, 14.59 and 5.15 per cent respectively. There existed large inter-block disparities with respect to percentage of area under large operational holdings in the district (55.78%). In contrast, this variation was quite nominal i.e. 15.78 per cent with respect to area under small operational holding in the district.

Table 5.5 reveals that nearly 29 per cent of the total holdings were owned by the scheduled caste families in the district. The scheduled caste holdings ranged between 23.96 per cent of total holdings in Basantpur block to 33.94 per cent in Chopal block. Further, the scheduled caste group continued to own 16.49 per cent of total area under operational holdings in the district. It was observed, that in all the blocks, the percentage share of SC stood more in marginal holdings than in other holdings. In all the blocks (except Mashobra) there was not even single large scale holding, which was owned by a SC household. Infact the percentage share of SC households turned out to be high with respect to number of holding vis-à-vis their share in area under operational holdings. Thus, as compared to their percentage share in total population, their share in area under operational holdings turned out to be quite low in the district.

Scheduled tribe population in the district is negligible. However, except Basantpur block, all other blocks have few ST households. The percentage share of ST group in total holdings was 1.19 per cent in Rampur block and 0.01 per cent in Theog block (Table 5.6).

Table-5.6
Block-wise Share of ST in Number and Area of Operational Holdings in
District Shimla During 1995-96

(In %age)

Block	Number						Area					
	Marginal	Small	Semi-Medium	Medium	Large	Total	Marginal	Small	Semi-Medium	Medium	Large	Total
Mashobra	0.16	0.27	0.3	0.14	-	0.21	0.12	0.3	0.27	0.12	-	0.21
Theog	-	0.02	-	-	-	0.01	-	0.04	-	-	-	0.01
Rampur	1.19	1.31	0.31	1.59	-	1.19	2.12	1.17	0.32	1.39	-	1.3
Narkanda	0.29	-	-	-	-	0.19	0.29	-	-	-	-	0.09
Jubbai-Kothai	0.2	0.04	0.12	-	-	0.14	0.199	0.04	0.12	-	-	0.08
Chho-hara	-	0.04	0.19	-	-	0.03	-	0.03	0.1	-	-	0.03
Roh-ru	0.09	0.07	-	-	-	0.07	0.15	0.06	-	-	-	0.05
Chopal	0.25	0.08	0.27	-	-	0.17	0.43	0.05	0.45	-	-	0.14
Basantpur	-	-	-	-	-	-	-	-	-	-	-	-
District Shimla	0.36	0.27	0.15	0.11	-	0.3	0.59	0.24	0.14	0.09	-	0.25
C.V. (In %)	140	190.47	100	277.77	-	152.17	164.1	189.47	114.28	268.75	-	177.27

Source: Directorate of Land Records, Shimla.

Table-5.6.1
Block-wise Ranking of Share of ST in Number and Area of Operational Holdings in District
Shimla During 1995-96

Block	Number						Area					
	Marginal	Small	Semi-Medium	Medium	Large	Total	Marginal	Small	Semi-Medium	Medium	Large	Total
Mashobra	5	2	2	2	.	2	6	2	3	2	.	2
Theog	.	7	.	.	.	8	.	5.5	.	.	.	8
Rampur	1	1	1	1	.	1	1	1	2	1	.	1
Narkanda	2	.	.	.	.	3	3	.	.	.	.	4
Jubbal-Kothai	4	5.5	5	.	.	5	4	5.5	4	.	.	5
Chho-hara	.	5.5	4	.	.	7	.	7	5	.	.	7
Roh-ru	6	4	.	.	.	6	5	3	.	.	.	6
Chopal	3	3	3	.	.	4	2	4	1	.	.	3
Basantpur	-	-	-	-	-	-	-	-	-	-	-	-

Average size of land holding in Himachal Pradesh is decreasing rapidly³³. This marginalization of holdings has been perpetuated by a host of factors ranging from informal institutional changes to formal legislations. The major institutional changes are the breaking-up of joint family system and various tenure systems. The major legislations are the two phases of land ceiling to support small farms and tenants. The other complementary factors leading to fall in size of holdings are heavy dependence on agriculture for livelihood, technological development in cropping system and low productivity. In Himachal Pradesh, land laws and legislations are implemented sincerely and this is the only state in the country where there is no one, who is landless³⁴.

According to 1995 Agricultural Census average size of holding was about 1.39 hectares in District Shimla (Table 5.7). It was slightly larger than the State average of 1.2 hectares. At block level, size of holding was 1.86 hectares in Mashobra block and 0.96 hectare in Narkanda block. There were not much inter-block variations with respect to average size of holdings, whether these were marginal, small, semi-medium, medium or large holdings in the district.

Average size of holding among SC and ST is 0.80 and 1.15 hectares respectively, which is lesser than that of overall category of households (Table 5.8). Size of holding has sharply gone down over the various Agricultural Census periods. It is not a healthy trend, as small size of holdings do not attract the farmers to invest more and to apply modern agricultural inputs/machinery in the agriculture sector. Irrigation facilities being meager, fields are sloppy and highly fragmented, most of these holdings are not economically viable³⁵.

³³ Singh Ranveer. (1992). 'Increasing Farm Income and Employment in Hilly Areas: A Study in Himachal Pradesh', *Agricultural Situation in India*, Vol. XLVI, No. 12, p. 921.

³⁴ Ibid, p.920.

³⁵ Ibid, p.923.

Table-5.7
Block-wise Average Size of Holding in District Shimla During the Year 1995-96

Blocks	Operational Holdings (in Hectares)						Ranks					
	Marginal	Small	Semi-Medium	Medium	Large	Average	Marginal	Small	Semi-Medium	Medium	Large	Average
Mashobra	0.45	1.83	3.89	6.84	15.18	1.86	7	1	2	1	2	1
Theog	0.5	1.74	3.79	6.54	13.51	1.78	1	4.5	4	4	7	2
Rampur	0.49	1.66	3.77	6.3	27.75	1.06	2	7.5	5	7	1	8
Narkan-da	0.44	1.65	3.72	6.08	13.67	0.96	8	9	8	8	5	9
Jubbal-Kothai	0.46	1.74	4.03	6.51	13.57	1.31	5	4.5	1	6	6	6
Chho-hara	0.46	1.75	3.85	6.53	12.53	1.38	5	2.5	3	5	8	5
Rohru	0.46	1.71	3.76	6.56	14.89	1.39	5	6	6.5	3	3	4
Chopal	0.35	1.66	1.81	5.82	11.63	1.24	9	7.5	9	9	9	7
Basant-pur	0.48	1.75	3.76	6.67	13.7	1.62	3	2.5	6.5	2	4	3
District Shimla	0.46	1.72	3.62	6.55	14.46	1.39	7	1	2	1	2	1
C.V %	8.69	2.90	17.77	4.65	30.28	20.71						

Source: As per Table 5.4.

Table-5.8

Block-wise Average Size of Holding of SC and ST in District Shimla During the Year 1995-96

(Hectares)

Blocks	SC						ST					
	Marginal	Small	Semi-Medium	Medium	Large	Average	Marginal	Small	Semi-Medium	Medium	Large	Average
Mashobra	0.46	1.69	3.76	6.43	13	1.13	0.33	2	3.5	6	-	1.8
Theog	0.49	1.56	3.56	6.15	-	0.99	-	3	-	-	-	3
Rampur	0.46	1.55	3.55	7	-	0.69	0.87	1.48	4	5.5	-	1.16
Narkan-da	0.4	1.54	3.53	6	-	0.63	0.44	-	-	-	-	0.44
Jubbal-Kothai	0.21	1.57	3.56	5.87	-	0.74	0.43	1.5	4	-	-	0.76
Chho-hara	0.43	1.51	3.16	-	-	0.65	-	1	2	-	-	1.5
Rohru	0.44	1.51	3.55	5	-	0.32	0.75	1.5	-	-	-	1
Chopal	0.45	1.45	2.19	8.2	-	0.75	0.6	1	3	-	-	1
Basant-pur	0.49	1.59	3.7	6.58	-	0.92	-	-	-	-	-	-
District Shimla	0.42	1.56	3.46	6.39	13	0.8	0.75	1.55	3.4	5.67	-	1.15
C.V. (In %)	18.6	3.87	13.23	38.02	210.76	28.94	78.57	68.46	90.45	161.04	-	69.49

Source: As per Table 5.4.

Table-5.8.1
Block-wise Ranks of Average Size of Holding of SC and ST in District
Shimla During the Year 1995-96

Blocks	SC						ST					
	Marginal	Small	Semi-Medium	Medium	Large	Average	Marginal	Small	Semi-Medium	Medium	Large	Average
Mashobra	3.5	1	1	4	1	1	6	2	3	1	.	2
Theog	1.5	4	3.5	5	.	2	.	1	.	.	.	1
Rampur	3.5	5	5.5	2	.	6	1	5	1.5	2	.	4
Narkanda	8	6	7	6	.	8	4	.	.	.	.	8
Jubbal-Kothai	9	3	3.5	7	.	5	5	3.5	1.5	.	.	7
Chho-hara	7	7.5	8	.	.	7	.	6.5	5	.	.	3
Rohru	6	7.5	5.5	8	.	9	2	3.5	.	.	.	5.5
Chopal	5	9	9	1	.	4	3	6.5	4	.	.	5.5
Basant-pur	1.5	2	2	3	.	3	.	.	.	.	.	.

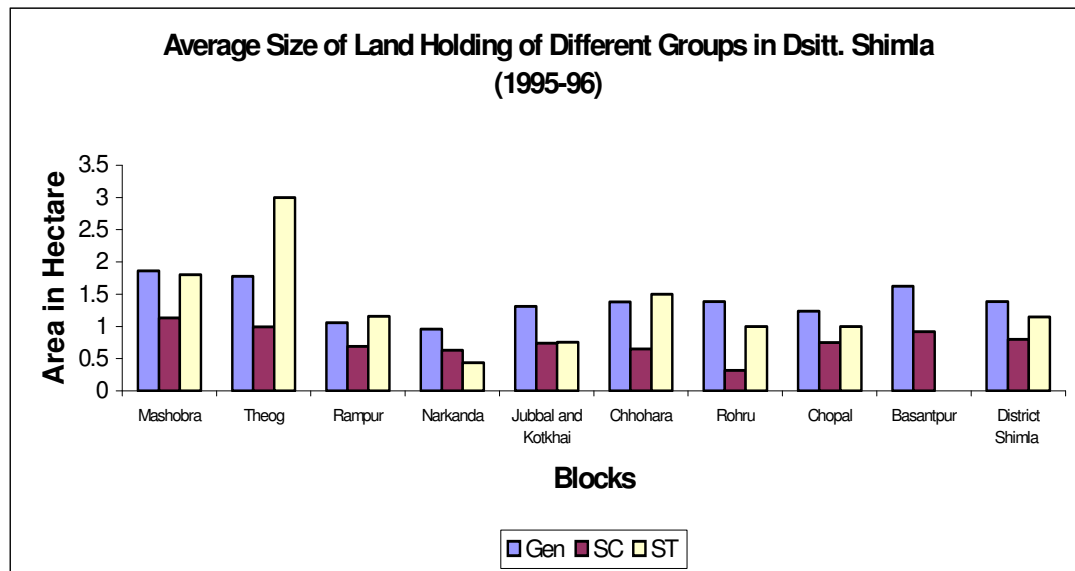


Fig.- 2

5.5 Cropping Pattern and Cropping Intensity

Cropping pattern reflects the efficiency with which land has been cultivated by the farmers. It is dependent upon factors such as climate of the region, rainfall and other variables. Cropping pattern varies from one area to another depending upon the relation of the factors prevailing there.

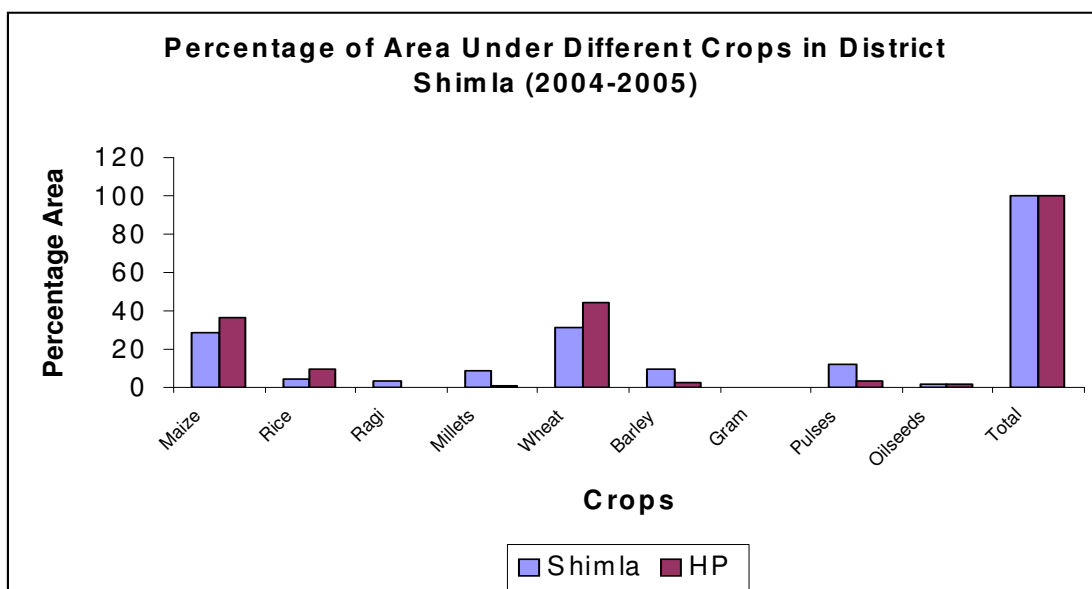


Fig.- 3

Table- 5.9 : Cropping Pattern in District Shimla and H.P. During the Year 2004-05

Crops	Shimla District		Himachal Pradesh	
	Area in Hectares	% of total	Area in Hectares	% of total
Maize	13896	29.07	298605	36.13
Rice	1981	4.14	79519	9.62
Ragi	1480	3.10	3469	0.43
Millets	4049	8.47	8904	1.08
Wheat	15105	31.60	367770	44.50
Barley	4704	9.84	23427	2.83
Gram	29	0.06	1333	0.16
Pulses	5865	12.28	28010	3.39
Oilseeds	688	1.44	15388	1.86
Total	47796	100.00	826425	100.00

Source: Directorate of Land Records, Shimla, 2006.

Area under various crops grown in the district and the state during the year 2004-05 is presented in Table 5.9. The area under wheat, maize and rice was 31.60, 29.07 and 4.14 per cent of the total cropped area, which was lesser than the state as a whole. However, proportionate area under millets, ragi and pulses was higher in District Shimla as compared to the state as a whole. Rice and maize are important kharif crops while, wheat and barley are prominently grown during rabi season. Very less area was devoted towards cultivation of pulses and oil seeds in District Shimla. Productivity of all the cereals as well as of oil seeds and pulses was very low in the district.

The block-wise information regarding cropping pattern was available only for the year 2002-03. Cropping pattern in various blocks in District Shimla during the year 2002-03 is given in Table 5.10 and 5.11. It is clear from Table 5.10 that in Mashobra and Theog block, more than 50 per cent of the area under cultivation was for the production of single crop i.e. maize. Similarly in Chhohara, 53.44 per cent of total cropped area was under wheat production. In all the blocks, percentage of area under rice cultivation stood very nominal (except Chopal 16.25%). There existed very high inter-block variations with respect to percentage of area

under rice (77.64%) in the district, but the variation was quite nominal with respect to area under wheat (21.86%) and maize (42.66%).

It is clear from Table 5.11 that food crops in kharif season accounted for 70 per cent of gross cropped area at the district level. In rabi season these crops accounted for 29 per cent of the gross cropped area. Area under non-food crops in both kharif as well as rabi, was negligible in the district. The variation in the area under non-food crops across the blocks was relatively high in both the seasons. Inter-block disparities with respect to percentage of area under kharif and rabi crops, as shown by the values of co-efficient of variation turned out to be 17 per cent and 38.53 per cent respectively in district Shimla. An important observation made is that, whereas area under cereals in district Shimla has decreased, that of under fruits and vegetables has registered a remarkable growth.³⁶

³⁶ Dahiya Prem S. and Ranveer Singh. (1997). 'Horticultural Development in Himachal Pradesh: Profitability, Policy and Prospects', *Indian Journal of Agricultural Economics*, Conference Number, July-September, p.590.

Table-5.10
Block-wise Area Under Major Crops in District Shimla During 2002-03

Block	% of Area under Major Crops							Ranks					
	Wheat	Rice	Maize	Barley	Gram	Ragi	Total	Wheat	Rice	Maize	Barley	Gram	Ragi
Mashobra	39.41	0.34	50.81	8.44	-	1	100	6	8	2	8	.	6
Theog	19.26	0.18	69.3	10.48	-	0.78	100	9	9	1	6	.	7
Rampur	44.37	9.76	20.05	13.66	-	12.16	100	3	3	8	3	.	1
Narkan-da	42.35	4.01	39.65	9.47	0.56	3.96	100	5	6	5	7	1	2
Jubbal-Kothai	37.03	8.48	42.23	12.04	0.15	0.07	100	8	4	4	5	3	9
Chho-hara	53.44	12.38	16.08	14.55	-	3.55	100	1	2	9	2	.	3
Rohru	47.25	6.79	24.22	19.02	0.36	2.36	100	2	5	7	1	2	4
Chopal	38.04	16.25	31.06	12.77	0.05	1.83	100	7	1	6	4	4	5
Basant- pur	42.57	1.86	49.07	5.95	0.04	0.51	100	4	7	3	9	5	8
Shimla district	41.55	7.93	35.17	11.55	0.07	3.68	100						
C.V. (In %)	21.86	77.64	42.66	30.53	158.33	117.39	100						

Source: Directorate of Land Records, Shimla, 2006.

Table-5.11
Block-wise Area and Ranks Under Kharif and Rabi Crops in District Shimla During 2002-03

Blocks	%age of Area under Kharif		%age of Area under Rabi		Kharif (Ranks)		Rabi (Ranks)	
	Food crops	Non-food crops	Food crops	Non-food crops	Food crops	Non-food crops	Food crops	Non-food crops
Mashobra	53.57	0.076	45.54	0.12	9	7	1	2
Theog	69.78	-	30.21	-	4	.	6	.
Rampur	68.74	0.79	30.46	-	5	3	5	.
Narkan- da	80.4	0.24	19.35	-	2	6	8	.
Jubbai-Kothai	91.56	0.42	8	-	1	4	9	.
Chho-hara	64.44	0.07	35.47	-	6	8	3	.
Rohru	78.89	0.4	20.7	-	3	5	7	.
Chopal	62.73	1.99	35.26	-	7	1	4	.
Basant-pur	54.24	1.17	44.45	0.13	8	2	2	1
Shimla district	70	0.7	29.27	0.02				
C.V. (In %)	16.99	90.76	38.53	166.66				

Source: As per Table 5.10

Table- 5.12
Net Area Sown and Irrigated Area in Various Blocks in District Shimla (2001)

Blocks	% of NSA to total area	% of net irrigated area to NSA	% of gross irrigated area to NSA	Cropping intensity	Ranks			
					% of NSA to total area	% of net irrigated area to NSA	% of gross irrigated area to NSA	Cropping intensity
Mashobra	10.09	11.66	13.04	1.66	8	1	1	2
Theog	11.38	3.03	4.49	1.52	7	5	4	4.5
Rampur	20.51	0.76	0.95	1.32	3	8	8	6
Narkan- da	21.58	2.43	3.53	1.28	2	6	6	7
Jubbai-Kothai	5.94	8.52	2.77	1.2	9	2	7	8
Chho-hara	25.44	1.55	5.28	1.52	1	7	3	4.5
Rohru	14.82	3.58	4.45	1.06	5	4	5	9
Chopal	14.07	8.37	8.94	1.56	6	3	2	3
Basant-pur	15.76	0.66	0.43	1.71	4	9	9	1
Shimla district	13.26	3.78	4.31	1.39				
C.V. %	38.12	85.1	77.3	14.78				

Source : As per Table 5.1

In Table 5.12 net area sown and irrigated area in various blocks in district Shimla during the year 2001 is elucidated. Cropping intensity in the year 2001 was 139 per cent in District Shimla which was relatively less than the state average of 174 per cent. Block-wise cropping intensity ranged between 106 per cent in Rohru block to 171 per cent in Basantpur block. It may be seen from the Table, that only 3.78 per cent of net sown area was irrigated in the district. The gross irrigated area accounted for 4.31 per cent of total net sown area in the district. Percentage of irrigated area to net sown area was highest in Mashobra block (11.66%) and lowest in Basantpur block (0.66%). There did not exist large inter-block variations with respect to cropping intensity (C.V. being 14.78%) in the district. However, there were large inter-block variations with respect to percentage of net and gross irrigated area to net sown area as reflected through the value of co-efficient of variation (85.10% and 77.30% respectively).

Crop yield

Although, the use of modern inputs such as HYV seeds, fertilizers, plant protection measures and farm machinery and implements had started almost three decade ago yet, most of the farmers were found to be under-using these inputs. Hence, there are large gaps in the yield obtained at experimental fields and farmer's fields. The yield gap ranges between 10 to more than 80 per cent in various crops grown in the state.³⁷

The yield of important crops in District Shimla is given in Table 5.13. It may be observed from the Table that the yield of Maize, Ragi, Millets, gram and oilseeds crops was more in the district, vis-à-vis the

³⁷ Singh Ranveer and C.S. Nadda. (1995). *Use of Modern Inputs in Hill Agriculture: A Study of Himachal Pradesh*, Agro-Economic Research Centre, H. P. University, Shimla (Mimeo) p.6.

state. The yield of these crops during the year 2004-05 was 2419, 1830, 1008, 1241 and 653 kg per hectare in district Shimla. However, the block-wise information of yield per crop in the district was not available and thus not analysed here.

Table- 5.13 : Productivity of Various Crops in District Shimla and H.P. During the Year 2004-05

Crops	(Kg/ha)	
	Shimla	Himachal Pradesh
Maize	2419	2131
Rice	1071	1372
Ragi	1830	1282
Millets	1008	640
Wheat	1342	1869
Barley	1223	1439
Gram	1241	992
Pulses	326	342
Oilseeds	653	501
C.V.	49.64	56.78

Source: Directorate of Agriculture, Himachal Pradesh Government, Shimla, 2006.

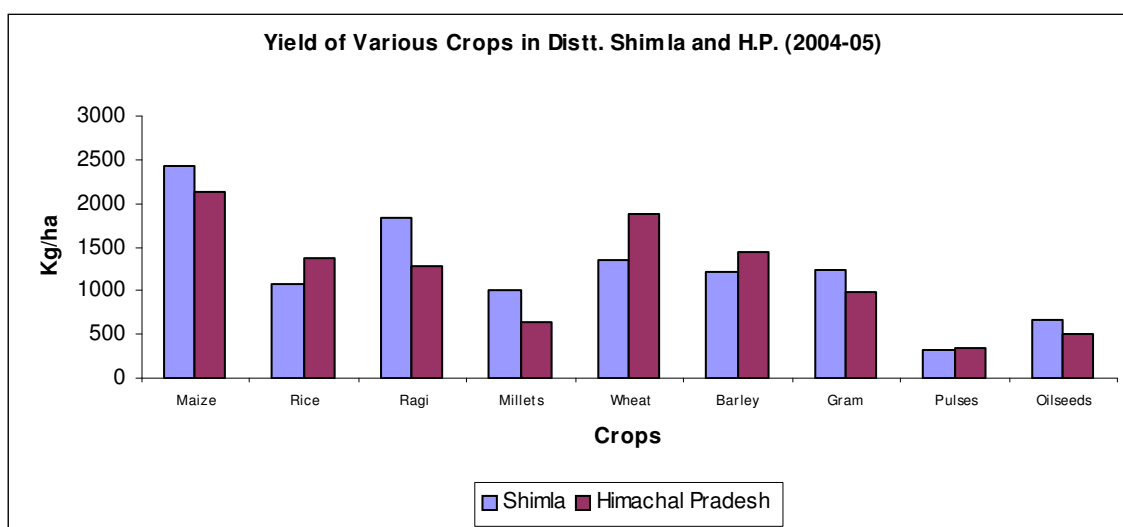


Fig. - 4

5.6 Fruit Production in District Shimla

The peculiar topography and agro-climatic conditions in most parts of the district limit the scope of production of field crops, but the same offer suitable conditions for cultivating horticultural crops. Further, cereal cultivation, except for some areas of the low hill zone, do not offer good potential to sustain economic well being of the hill people. Even the weather does not permit multiple cropping on a profitable basis in most parts of the district. Therefore, the best use of the land can only be made through cultivation of perennial fruit crops³⁸. Thus, the introduction of horticulture in the State not only added to the cash incomes of the farmers but also infused in them the desire to better utilize the marginal hilly land areas that were not much suitable for production of field crops³⁹.

Agro-climatic conditions of the district are suitable to grow a wide variety of temperate and tropical fruits. Area under various fruits in the district and in the state as a whole, for the year 2004-05 is given in Table 5.14. It may be seen from the Table that the area under all fruits in the district stood at 34,966 hectares, which was 18.71 per cent of the total area under all fruits in the state.

³⁸ Dahiya Prem S. and Ranveer Singh. (1997) 'Horticultural Development in Himachal Pradesh: Profitability, Policy and Prospects', *Indian Journal of Agricultural Economics*, Conference Number, July-September, p.592.

³⁹ Singh Ranveer, C.S.Vaidya, Suresh Kumar. (2007). *Cost of Production of Apple for Market Intervention Scheme in Himachal Pradesh*, Agro-Economic Research Centre, H. P. University, Shimla (Mimeo), p.4.

Table- 5.14 : Area Under Various Fruits in District Shimla and H.P. During the Year 2004-05

Particulars	Shimla District		Himachal Pradesh	
	Area in Ha	% of total	Area in Ha	% of total
Apple	29029	83.02	86202	46.12
Plum	586	1.67	8335	4.46
Peach	295	0.84	4966	2.66
Apricot	631	1.80	2947	1.58
Pear	1438	4.11	7564	4.05
Cherry	213	0.61	302	0.16
Kiwi	14	0.04	111	0.06
Pomegranate	79	0.22	585	0.31
Olive	30	0.09	54	0.03
Persimmon	26	0.07	332	0.18
Almond	1515	4.33	5732	3.07
Walnut	308	0.88	4729	2.53
Orange/Kinnow	33	0.09	7906	4.23
Kagzi lime	420	1.22	9188	4.92
Galgal	72	0.23	2322	1.24
Mango	197	0.56	36215	19.38
Litchi	23	0.06	3362	1.80
Guava	14	0.04	2201	1.18
Anola	22	0.06	908	0.48
Other fruits	21	0.06	2942	1.56
Total fruits	34966	100.00	186903	100.00

Source: Directorate of Horticulture, Himachal Pradesh, Shimla, 2006.

Block-wise area under various fruits in district Shimla during the year 2005-06 is given in Table 5.15 and 5.16. Whereas in Table 5.15, the percentage share of area under each fruit in a particular block in district Shimla is given, in Table 5.16 the percentage share of different blocks in various fruits grown in the district is exhibited. Low hill region in the district is conducive to grow citrus fruits. Valley areas are also favourable to grow tropical and sub-tropical fruits. Peach and plum have good potential in this region. Temperate region is most suitable for apple. Apple cultivation has brought revolution in improving living standards of this region. Apple occupied about 83 per cent of total area under all fruits in the district (Table 5.15). Percentage of area under apple to total fruits ranged between 49.87 per cent in Basantpur block to 91.94 per cent in Rohru block. Pear and Almond are other popular fruits grown in all the blocks in the district. The area under pear ranged between 1.60 per cent in Rohru block to 11.72 per cent of total area under all fruits in Mashobra block. Theog block had relatively high area under Almonds in the district. Dry fruits have good potential in the district and all efforts must be made to increase the production of these fruits. An additional advantage of growing dry fruits lies in the fact that they do not require quick transportation.

The block-wise distribution of area under various fruits is given in Table 5.16. It may be observed from the Table that more than 20 per cent of the total area under apple in the district was in Jubbal-Kothai block. It was followed by Rohru (16.09 per cent) and Narkanda blocks (15.39 per cent). As compared to all the blocks, percentage of area under peach was highest in Mashobra block (25.31 per cent). About 31 per cent of the area under pear in the district was in Jubbal-Kothai block. Theog had largest share of Almond area in the district. It may be seen from Table 5.16, that the variation in area of fruits in different blocks was comparatively more in Mango and citrus fruits. In other fruits, coefficient of variation ranged between 32.76 per cent in case of apricot to 79.92 per cent in case of pear.

Table- 5.15
Block-wise Area Under Different Fruits in District Shimla During 2005-06

#	Fruits	Mashobra	Theog	Rampur	Narkanda	Jubbal-Kothai	Chho-hara	Rohru	Chopal	Basant-pur	Shimla district
A		In Hectares									
1	Apple	1222.92	3541.94	3149.72	4565.48	6040.26	2782.17	4775.41	2927.79	665.25	29670.94
2	Plum	74.25	93.16	141.35	85.04	11.84	32.31	75.67	28.81	48.58	591.00
3	Peach	75.43	59.90	22.33	14.58	23.34	16.20	15.46	22.51	48.24	298.00
4	Apricot	86.34	78.42	112.75	68.37	56.27	38.78	90.36	49.14	57.58	638.00
5	Pear	254.71	219.92	76.86	91.57	456.40	68.85	82.79	91.15	111.74	1454.00
6	Almond	161.49	382.03	193.00	150.21	203.70	131.83	86.35	113.33	101.06	1523.00
7	Mango	40.78	0.25	28.35	82.67	0.00	0.00	0.00	12.15	60.80	225.00
8	Citrus	174.81	39.10	58.23	26.48	25.75	3.06	18.25	12.13	174.40	532.21
9	Other	81.82	69.24	102.16	206.21	60.10	48.90	49.60	74.99	66.41	759.43
	Total	2172.55	4483.96	3884.75	5290.61	6877.66	3122.10	5193.89	3332.00	1334.06	35691.58
B	% Of Block										
1	Apple	56.29	78.99	81.08	86.29	87.82	89.11	91.94	87.87	49.87	83.13
2	Plum	3.42	2.08	3.64	1.61	0.17	1.03	1.46	0.87	3.64	1.66
3	Peach	3.47	1.34	0.57	0.28	0.34	0.52	0.30	0.68	3.62	0.83
4	Apricot	3.97	1.75	2.90	1.29	0.82	1.24	1.74	1.47	4.31	1.79
5	Pear	11.72	4.90	1.98	1.73	6.64	2.21	1.60	2.74	8.38	4.07
6	Almond	7.43	8.52	4.97	2.84	2.97	4.22	1.66	3.40	7.58	4.27
7	Mango	1.88	0.01	0.73	1.56	-	-	-	0.36	4.55	0.63
8	Citrus	8.05	0.87	1.50	0.50	0.37	0.10	0.35	0.36	13.07	1.49
9	Other	3.77	1.54	2.63	3.90	0.87	1.57	0.95	2.25	4.98	2.13
	Total	100	100	100	100	100	100	100	100	100	100

Source: Directorate of Horticulture, Himachal Pradesh Govt., Shimla, 2006.

Table-5.16
Block-wise Area Under Different Fruits in District Shimla During 2005-06

(% of Total District)

	Apple	Plum	Peach	Apricot	Pear	Almond	Mango	Citrus	Other	Total	Apple
Mashobra	4.12	12.56	25.31	13.53	17.52	10.6	18.12	32.85	10.77	6.09	4.12
Theog	11.94	15.76	20.11	12.29	15.12	25.08	0.11	7.35	9.12	12.56	11.94
Rampur	10.62	23.92	7.49	17.67	5.29	12.67	12.6	10.94	13.45	10.88	10.62
Narka-nda	15.39	14.39	4.89	10.72	6.3	9.86	36.75	4.97	27.15	14.82	15.39
Jubbal-Kothai	20.36	2	7.83	8.82	31.39	13.38	-	4.84	7.91	19.27	20.36
Chho-hara	9.38	5.47	5.44	6.08	4.73	8.66	-	0.57	6.45	8.75	9.38
Rohru	16.09	12.81	5.19	14.16	5.69	5.67	-	3.43	6.53	14.55	16.09
Chopal	9.86	4.87	7.55	7.7	6.27	7.44	5.4	2.28	9.87	9.34	9.86
Basant-pur	2.24	8.22	16.19	9.03	7.69	6.64	27.02	32.77	8.75	3.74	2.24
Shimla District	100	100	100	100	100	100	100	100	100	100	100
C.V. (In %)	51.48	60.66	67.59	32.76	79.92	52.65	122.22	113.11	57.51	43.02	51.48

Source : As per Table 5.15.

Table-5.16.1
Block-wise Rank of Area Under Different Fruits in District Shimla During
2005-06

Blocks	Apple	Plum	Peach	Apricot	Pear	Almond	Mango	Citrus	Other	Total
Mashobra	8	5	1	3	2	4	3	1	3	8
Theog	4	2	2	4	3	1	6	4	5	4
Rampur	5	1	6	1	8	3	4	3	2	5
Narka-nda	3	3	9	5	5	5	1	5	1	2
Jubbal-Kothai	1	9	4	7	1	2	.	6	7	1
Chho-hara	7	7	7	9	9	6	.	9	9	7
Rohru	2	4	8	2	7	9	.	7	8	3
Chopal	6	8	5	8	6	7	5	8	4	6
Basant-pur	9	6	3	6	4	8	2	2	6	9

Production of Fruits

Nearly 45 per cent of total fruit production of the state is contributed by District Shimla (Table 5.17). The share of District Shimla in production of apples in the state is about 57 per cent.

Table-5.17: Production of Various Fruits in District Shimla and H.P. During the Year 2005-06

Fruits	Shimla District		Himachal Pradesh	
	Qty in MT	% of Total	Qty in MT	% of Total
Apple	310252	98.43	540356	77.69
Plum	557	0.18	11763	1.69
Peach	147	0.08	7823	1.12
Apricot	269	0.09	2890	0.41
Pear	2632	0.83	23990	3.45
Cherry	421	0.13	447	0.06
Kiwi	33	0.01	138	0.02
Pomegranate	38	0.01	223	0.03
Olive	31	0.01	38	0.005
Persimmon	35	0.01	211	0.03
Almond	273	0.009	1503	0.22
Walnut	37	0.01	1798	0.26
Orange/Kinnow	1	Neg.	18397	2.64
Kagzi lime	62	0.02	5921	0.86
Galgal	28	0.09	3354	0.48
Mango	51	0.02	63091	9.08
Litchi	3	Neg.	3702	0.53
Guava	2	Neg.	2833	0.42
Anola	4	Neg.	1638	0.23
Other fruits	324	0.10	5401	0.78
Total fruits	315200	100.00	695517	100.00

Source: Directorate of Horticulture, Himachal Pradesh Government, Shimla, 2006.

Block-wise production of various fruits in the district during the year 2005-06 is presented in Table 5.18. During the year 2005-06 production of all fruit in district Shimla stood at 3,15,200 tones. Out of total fruit production, 3,10,252 tones was that of apples. Meaning thereby, that the share of apple production in total fruit production in the district stood at about 98 per cent. Where as in Chhohara block, 99.61 per cent of total production of fruits was of apples, in Mashobra it was 91.05 per cent only. In Mashobra block, 4.04 and 1.02 per cent of total production of fruits was of pear and apricot respectively. Similarly in Chopal and Basantpur block also 4.10 and 21.24 per cent production of fruits was of pear. The share of production of other fruits was not even one per cent of total fruit produced in the concerned blocks.

It may be observed from Table 5.19 that more than 35 per cent of the total production of apples in the district was coming from Jubbal-Kotkhai block. It was followed by Rohru block (13.19 per cent), Narkanda (12.54 per cent), and Rampur, Chhohara and Chopal blocks (about 9% each). Twenty six per cent of apricot production in the district is coming from Mashobra block. Further, about 31 per cent of the production of peach in the district is originating from Jubbal-Kothai block. As far as Rampur block is concerned, it produced nearly 31 per cent of total almonds produced in the district. Inter-block disparities, with respect to share of different blocks, in the production of fruits, turned out to be quite high in the district. The variation in fruits production was quite high in pear (139.51%), mango (129.70%) and plum (115.03%). Coefficient of variation (showing inter-block disparities) with respect to share of apple, peach, almond, citrus and apricot also turned out to be as high as 90.09, 92.97, 94.41, 99.27 and 71.37 per cent respectively.

Table-5.18
Block-wise Production of Different Fruits in District Shimla During 2005-06

#	Fruits	Mashobra	Theog	Rampur	Narka- nda	Jubbal- Kothai	Chho- hara	Rohru	Chopal	Basant- pur	Shimla district
A	In Tones										
1	Apple	6306.13	26147.45	28763.67	38913.97	109866.68	27999.37	40913.18	28544.06	2797.50	310252.01
2	Plum	46.00	55.00	108.00	56.00	232.00	7.00	28.00	20.00	5.00	557.00
3	Peach	34.00	21.00	12.00	10.50	46.00	2.00	1.50	16.00	4.00	147.00
4	Apricot	70.48	14.89	17.87	38.71	52.61	12.00	35.73	20.85	4.96	269.00
5	Pear	280.00	230.00	12.00	92.00	675.00	36.00	46.00	1225.00	36.00	2632.00
6	Almond	52.00	10.00	85.00	62.00	18.00	18.00	15.00	8.00	5.00	273.00
7	Mango	8.00	3.00	10.00	22.00	-	-	-	-	8.00	51.00
8	Citrus	22.00	8.00	16.00	28.00	-	-	1.50	10.50	5.00	91.00
9	Other	107.63	23.85	131.45	226.49	331.41	32.40	28.67	15.04	31.06	928.00
	Total	6926.24	26513.19	29155.99	39449.67	111221.70	28107.67	41069.58	29859.45	2896.52	315200.01
B	% Of Block										
1	Apple	91.05	98.62	98.65	98.64	98.78	99.61	99.62	95.59	96.58	98.43
2	Plum	0.66	0.21	0.37	0.14	0.20	0.02	0.07	0.07	0.17	0.18
3	Peach	0.49	0.08	0.04	0.03	0.04	0.01	-	0.05	0.14	0.05
4	Apricot	1.02	0.06	0.06	0.10	0.05	0.05	0.09	0.07	0.17	0.08
5	Pear	4.04	0.87	0.04	0.23	0.61	0.13	0.11	4.10	1.24	0.83
6	Almond	0.75	0.04	0.29	0.16	0.02	0.16	0.04	0.03	0.17	0.09
7	Mango	0.12	0.01	0.03	0.06	-	-	-	-	0.28	0.02
8	Citrus	0.32	0.03	0.06	0.07	-	-	-	0.04	0.17	0.03
9	Other	1.55	0.08	0.46	0.57	0.30	0.12	0.07	0.05	1.08	0.29
	Total	100	100	100	100	100	100	100	100	100	100

Source: Directorate of Horticulture, Himachal Pradesh Government, Shimla, 2006.

Table-5.19
Block-wise Production of Different Fruits in District Shimla During 2005-06

(% of total district)

#	Fruits	Mashobra	Theog	Rampur	Narka- nda	Jubbal- Kothai	Chho- hara	Rohru	Chopal	Basant- pur	Shimla district	C.V.
1	Apple	2.03	8.43	9.28	12.54	35.41	9.02	13.19	9.20	0.90	100	90.09
2	Plum	8.26	9.87	19.39	10.05	41.65	1.26	5.03	3.59	0.90	100	115.03
3	Peach	23.13	14.29	8.16	7.14	31.29	1.37	1.02	10.88	2.72	100	92.97
4	Apricot	26.20	5.54	6.64	14.39	19.56	4.80	13.28	7.75	1.84	100	71.37
5	Pear	10.64	8.74	0.45	3.50	25.64	1.37	1.75	46.54	1.37	100	139.51
6	Almond	19.05	3.66	31.14	22.72	6.59	6.59	5.49	2.93	1.83	100	94.41
7	Mango	15.69	5.88	19.60	43.14	-	-	-	-	15.69	100	129.70
8	Citrus	24.18	8.79	17.58	30.77	-	-	1.65	11.54	5.49	100	99.27
9	Other	11.60	2.57	14.16	24.41	35.71	3.49	3.09	1.62	3.35	100	107.29
	Total	2.20	8.41	9.25	12.51	35.29	8.92	13.03	9.47	0.92	100	89.55

Source : As per Table 5.18.

5.7 Vegetable Production in District Shimla

In addition to production of fruits, the entire district is also suitable to grow off-season vegetables and good quality virus free seed potato. The district is leading in the production of off-season vegetables, such as peas, tomatoes, cabbage, cauliflower, capsicum, etc. Seed potato is grown in temperate region. Low hill and valley areas are also producing good quality ginger crop. All these crops are commercial and generate enough income and employment to the farmers⁴⁰. Irrigation is the main impediment in the expansion of area under these high value crops in the district.

Area Under Vegetables

Area under various vegetables in the district during the period 1997-98 to 2005-06 is presented in Table 5.20. It may be seen from the Table that the area under vegetable crops has increased from 5,472 hectares during 1997-98 to 8,045 hectares by the year 2005-06. Among different vegetables, peas is the major crop occupying about 46 per cent of the total area under vegetables in the district in the year 2005-06. The area under cabbage accounted for about 21 per cent of the total area under all vegetables in the same year. Tomato, Beans, cauliflower and capsicum respectively accounted for 8.6, 5.0, 5.2 and 5.0 per cent of the total area under all vegetables in the year 2005-06.

⁴⁰ Singh Ranveer. (1992). 'Increasing Farm Income and Employment in Hilly Areas: A Study in Himachal Pradesh', *Agricultural Situation in India*, Vol. XLVI, No. 12, p. 924.

Table- 5.20: Area Under Various Vegetables in District Shimla

(Area in hectares)

Vegetables	1997 -98	1998 -99	1999 -00	2000 -01	2001 -02	2002- 03	2003 -04	2004 -05	2005 -06
Peas	2750	2900	2800	2625	2700	2400	3000	3200	3700
Tomato	210	250	375	550	655	655	680	690	690
Beans	290	280	290	300	340	340	350	400	400
Onion and Garlic	145	150	160	150	170	50.50	60	60	70
Cabbage	960	1000	1030	1050	1070	1090	1500	1500	1700
Cauliflower	85	345	355	340	360	365	400	420	420
Radish	130	70	75	75	80	85	120	120	120
Bhindi	90	20	20	25	20	20	20	20	20
Cucumber	180	150	150	140	140	135	135	135	135
Capsicum	140	240	250	265	280	290	290	350	400
Brinjal	10	10	15	20	15	20	20	20	20
Other veg	340	345	330	320	310	210	210	370	370
Total Veg.	5472	5760	5850	5860	6140	5665.5	6785	7285	8045

Source: Directorate of Agriculture, Himachal Pradesh Government, Shimla, .2006.

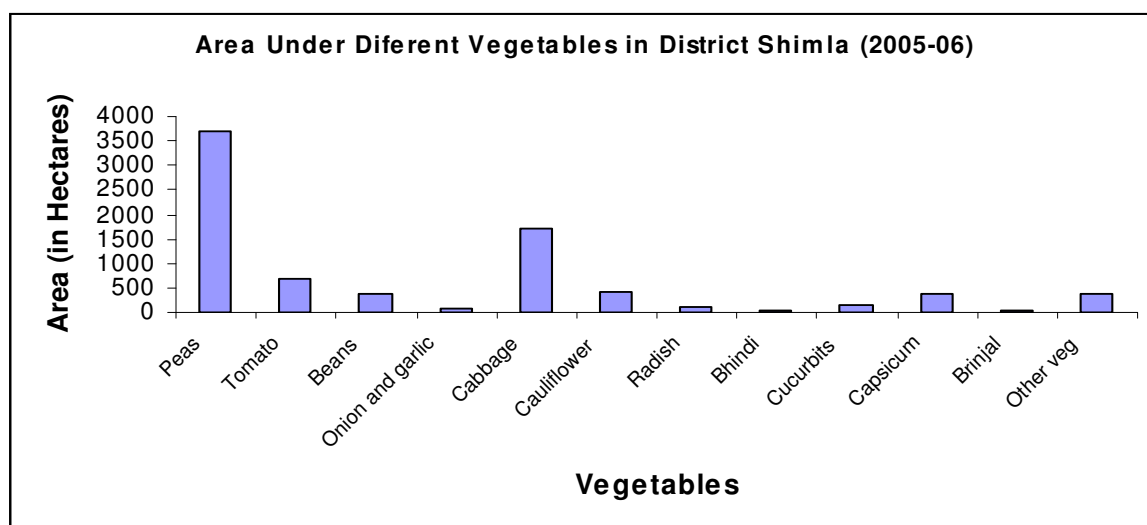


Fig. 5

Production of Vegetables

Production of different vegetables in the district, during the period 1997-98 to 2005-06 is given in Table 5.21. Production of vegetables in district Shimla stood at 82,330 metric tones in 1997-98 which increased to 1,50,535 metric tones by the year 2005-06. During 2005-06, cabbage accounted for 39.52 per cent of the total vegetable production in the district. Production of peas, tomato, cauliflower, capsicum and beans was respectively 24.58, 14.67, 6.14, 3.66 and 2.82 per cent of the total production of vegetables in the district during the same year.

Table- 5.21 : Production of Various Vegetables in District Shimla
(Production in MT)

Vegetable	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Peas	26950	27278	29000	25975	26085	23130	30,000	32000	37000
Tomato	5750	7800	12250	18700	21500	19650	20400	22080	22080
Beans	2850	2780	2890	3020	3600	3625	3710	4240	4240
Onion and Garlic	2435	2520	2800	2750	3275	1084	1180	1180	1380
Cabbage	26825	28225	30500	31200	28490	36590	45800	52500	59500
Cauliflower	1570	6755	6600	6560	7015	8325	8800	9240	9240
Radish	2200	1260	1320	1300	1390	1790	2100	2165	2160
Bhindi	745	155	160	190	160	210	210	210	210
Cucurbits	5480	4460	3540	3290	3300	3340	3340	3340	3340
Capsicum	1145	2000	2300	2570	2600	3995	3995	4823	5512
Brinjal	175	170	250	340	265	360	360	360	360
Other veg	3740	3870	3235	3520	3440	3130	3130	5513	5513
Total Veg.	82330	87273	94845	99415	101120	105229	122285	137646	150535

Source: Directorate of Agriculture, Himachal Pradesh Govt., Shimla, 2006.

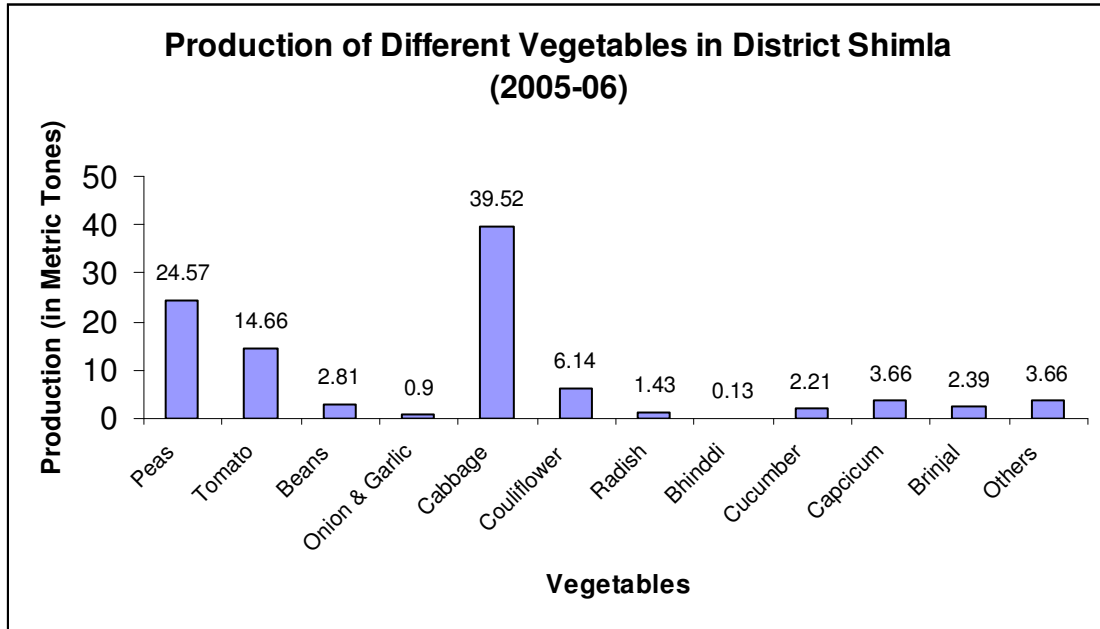


Fig. 6

Yield of Vegetable Crops

Per hectare productivity of various vegetable crops grown in district Shimla is presented in Table 5.22. Whereas the yield of peas has increased from 9.8 quintals per hectare in the year 1997-98 to 10 quintals during 2005-06, the productivity of tomato increased from 27.38 quintal per hectare to 32 quintals during the same period. Yield of cabbage also increased from 27.94 quintals to 35 quintals during the period under context. The yield of other vegetables has also increased in the district.

Table- 5.22 : Yield of Various Vegetables in District Shimla

Vegetables	(Quintals/hac.)								
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Peas	9.8	9.41	10.36	9.89	9.66	9.64	10.00	10.00	10.00
Tomato	27.38	31.20	32.67	47.23	32.82	30.00	30.00	32.00	32.00
Beans	9.83	9.93	9.96	10.07	10.59	10.66	10.6	10.6	10.6
Onion and Garlic	16.79	16.80	17.5	18.33	19.26	21.46	19.67	19.67	19.71
Cabbage	27.94	28.22	29.61	29.71	26.63	33.57	30.53	35.00	35.00
Cauliflower	18.47	19.58	18.59	19.29	19.49	22.81	22.00	22.00	22.00
Radish	16.92	18.00	17.60	17.33	17.37	21.06	17.50	18.04	18.00
Bhindi	8.28	7.75	8.00	7.6	8.00	10.5	10.5	10.5	10.5
Cucumber	30.44	29.73	23.6	23.5	23.6	24.74	24.74	24.74	24.74
Capsicum	8.18	8.33	9.2	9.70	9.28	13.77	13.77	13.78	13.78
Brinjal	17.5	17.00	16.67	17.00	17.67	18.00	18.00	18.00	18.00
Other veg	11.00	11.23	9.80	11.00	11.10	14.90	14.90	14.90	14.9
Average	15.04	15.15	16.21	16.96	16.47	18.57	18.02	18.89	18.71
C.V.	45.81	47.83	46.42	58.64	43.76	38.78	37.12	41.06	41.11

Source: Directorate of Agriculture, Shimla, 2006.

5.8 Livestock and Animal Products

In most of the developing countries animal enterprise is combined with mixed cropping systems. A common characteristic of these small farms with mixed animal crop enterprise is the close interaction between animals and crops⁴¹. The efficiency of crop-animal interactions is most pronounced, where production resources are scarce, therefore, they are crucial to the improvement and success of small farms where production potential is otherwise limited and where the possibility of capturing and

⁴¹ Singh Ranveer.(1998). *Economics of Livestock Production System in H.P.* Agro-Economic Research Centre, H. P. University, Shimla (Mimeo), p.3.

exploiting additional crop and labour energy by raising animals is relatively large⁴².

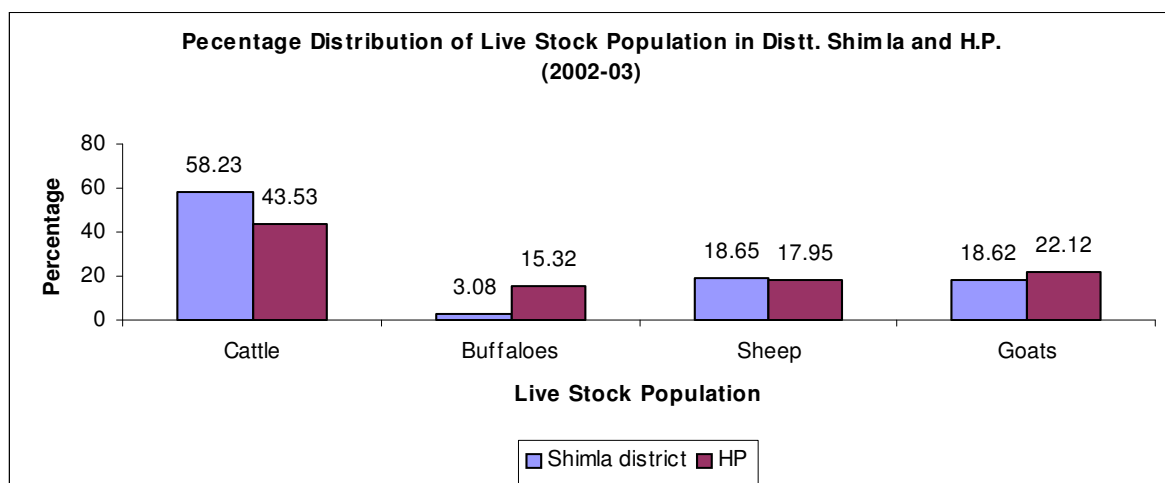
Livestock Population and Composition

Animal rearing is one of the important occupations of people in district Shimla. Most of the households in the district are keeping animals. During 2002-03, total livestock population in the district was 5,27,551 heads which is about 10 per cent of the total livestock of the state (Table 5.23). The proportion of cattle, sheep and horses/ponies/mules is relatively high in district Shimla as compared to the state level.

Table- 5.23: Livestock Population in District Shimla and H.P. During the Year 2002-03

Particulars	Shimla District		Himachal Pradesh	
	Number	% of Total	Number	% of Total
Cattle	307187	58.23	2196538	43.53
Buffaloes	16292	3.08	773229	15.32
Sheep	98376	18.65	906027	17.95
Goats	98223	18.62	1115587	22.12
Horse and Ponies, Mules	6013	1.14	17144	0.34
Others	1460	0.28	37519	0.74
Total	527551	100.00	5046044	100.00

Source: Department of Animal husbandry, Govt. of Himachal Pradesh, Shimla, 2006.



Economic Research Centre, H. P. University, Shimla (Mimeo), p.8.

Fig. 7

Block-wise livestock population during the year 2002-03 is given in Table 5.24. In Table 5.25 the percentage share of different livestock, in total livestock population in the district is exhibited. In all the blocks the share of cattle population in total live stock population stood highest in the district. The share of cattle population in total livestock population was highest in Rohru block (80.17%) followed by Theog (78.56%). Most of the cows in the district are that of indigenous breed which have low milk productivity (1.5 kg/day). Jersey cows are very successful in valley areas as well as at high altitudes. Crossbred cows on an average have the milk productivity of about 4.3kg/day in the district.⁴³

In District Shimla buffaloes constituted about 3.09 per cent of total livestock population. Mashobra block has maximum number of buffaloes (12.90%) due to comparatively warmer climate. In other blocks, buffaloes are less preferred, as this animal can not survive in severe cold. Milk productivity per buffalo per day in the district stood at about 4 kgs.⁴⁴

Sheep is one of the prominent animals kept by hill farmers. It is because of the fact, that heavy woolen clothes are required during winters. Sheep reared in district Shimla produced good quality wool. Sheep accounted for 18.65 per cent of total livestock in the district. Chhohara block has maximum number of sheep (48.61%) in the district, while in other blocks sheep population ranged from 4.04 per cent (Block Basantpur) to 31.66 per cent (Rampur block).

As meat is an important item in the food basket of hill peplem, goats are also reared for milk and meat purposes. Goat hair is used in making ropes and carpets. Goats constituted about 18 per cent of total livestock population in District Shimla. Chopal has maximum proportion of goats (30.56%) in the district, followed by Chhohara (23.39%), Rampur (22.01%), Narkanda (19.31%) and Basantpur block (18.49%). The higher proportion of sheep and goats in these blocks is due to larger area under pasture and grazing land.

⁴³ Ibid, p.9.

⁴⁴ Ibid.

Table-5.24
Block-wise Number of Different Livestock in District Shimla During the Year
2002-03

#	Type of Livestock	Mashobra	Theog	Rampur	Narkanda	Jubbal-Kothai	Chhohara	Rohru	Chopal	Basantpur	Shimla district
1	Bullocks	13900	11568	7826	2154	2631	5565	3361	14830	7531	69366
2	Cows	19639	22066	18679	8225	15700	9870	11455	22627	10207	138468
3	Young Stock	12241	14548	13424	5925	9763	7633	7709	19738	8372	99353
4	Total cattle	45780	48182	39929	16304	2804	23068	22525	57195	26110	307187
5	Buffaloes	8002	2415	726	231	153	148	72	1762	2783	16292
6	Yaks	0	9	0	0	0	0	0	0	0	9
7	Sheep	3154	3032	28190	2234	3970	42011	3806	10460	1519	98376
8	Goats	4294	6032	19599	4529	4251	20219	982	31403	6914	98223
9	Horses, ponies	364	736	181	84	60	171	88	289	77	2050
10	Mules, donkeys	384	920	360	69	242	793	625	1281	185	4867
11	Pigs	69	2	47	0	52	13	0	359	2	544
Total Livestock		62047	61328	89040	23451	36822	86426	28098	102749	37590	527551

Source: Department of Animal Husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

Table-5.25
Block-wise Composition of Livestock in District Shimla During the Year
2002-03

#	Type of Livestock	(%age to total)									
		Mashobra	Theog	Rampur	Narkanda	Jubbal-Kothai	Chhohara	Rohru	Chopal	Basantpur	Shimla district
1	Bullocks	22.40	18.86	8.79	9.19	7.15	6.44	11.96	14.43	20.03	13.15
2	Cows	31.65	35.98	20.98	35.07	42.64	11.42	40.77	22.02	27.15	26.25
3	Young Stock	19.73	23.72	15.07	25.26	26.51	8.83	27.44	19.21	22.27	18.83
4	Total cattle	73.78	78.56	44.84	69.52	76.30	26.69	80.17	55.66	69.46	58.23
5	Buffaloes	12.90	3.94	0.82	0.99	0.42	0.17	0.26	1.71	7.40	3.09
6	Yaks	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Sheep	5.08	4.94	31.66	9.53	10.78	48.61	13.55	10.18	4.04	18.65
8	Goats	6.92	9.83	22.01	19.31	12.30	23.39	3.49	30.56	18.49	18.62
9	Horses, ponies	0.59	1.20	0.21	0.36	0.17	0.20	0.31	0.28	0.20	0.39
10	Mules, donkeys	0.62	1.49	0.41	0.30	0.65	0.92	2.23	1.25	0.50	0.92
11	Pigs	0.11	0.00	0.06	0.00	0.14	0.01	0.00	0.35	0.01	0.10
	Total Livestock	100.00	100.0	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : As per Table 5.24.

Due to lack of roads, people reared horses, ponies and mules for transportation of agricultural commodities and other goods. However, their number to total livestock population is not significant in the district. In Theog and Rohru blocks equines accounted for 2.69 and 2.54 per cent of total livestock number.

Livestock Output

Production of milk, wool, meat and eggs in district Shimla vis-a-vis Himachal Pradesh has been analyzed in the subsequent section of the analysis.

Production of Milk

The district Shimla registered a progressive increase in milk production during the last six years. The total milk production was estimated to be 78.58 thousand tons in the year 1999-2000, which increased to 95.911 thousand tons by the year 2004-05 (Table 5.26). The production of milk recorded more than 22 per cent increase in district Shimla within a time span of about six years. This increase appears to be partly encouraging and to some extent confirms the soundness of policies adopted for the development of cattle in the district. The share of the district in total milk production in the state increased from 10.60 per cent in the year 2003-04 to 11.03 per cent in the year 2004-05.

District-wise annual milk production in Himachal Pradesh is exhibited in Table 5.27. It is evident from Table that in both the periods District Shimla ranked third with respect to production of milk in the state.

Table- 5.26: Milk Production in District Shimla and H.P.

(‘000 Tones)

Years	Shimla District	Himachal Pradesh	% Share of District in the State
1999-2000	78.580	741.266	10.60
2000-01	71.622	760.411	9.42
2001-02	79.250	762.864	10.39
2002-03	80.319	772.494	10.40
2003-04	83.269	786.222	10.59
2004-05	95.911	869.510	11.03

Source: Department of Animal husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

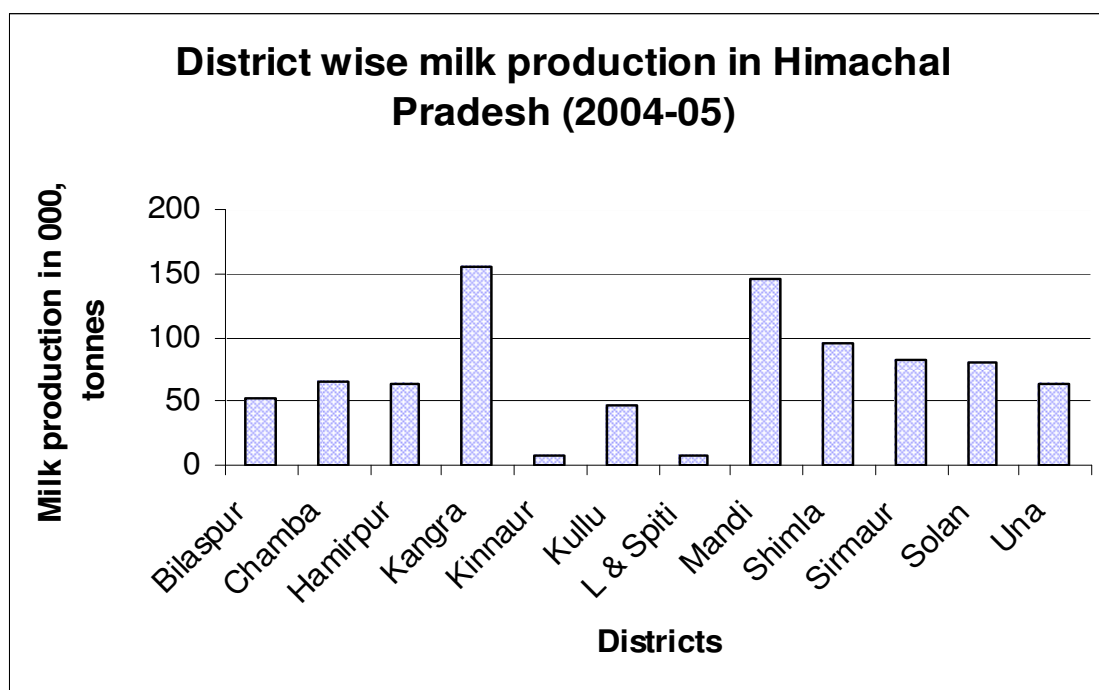


Fig. 8

Table-5.27: District-wise Annual Milk Production in Himachal Pradesh During 2003-04 and 2004-05

Sr. No.	District	2003-2004 (‘000 Tones)	Rank	2004-2005 (‘000 Tones)	Rank	%age increase (+) or decrease (-) during 04-05 over 03-04
1	Bilaspur	53.364	9	53.182	9	0.34 (-)
2	Chamba	58.628	7	64.777	6	10.49 (+)
3	Hamirpur	70.604	5	64.207	7	9.06 (-)
4	Kangra	152.360	1	155.334	1	1.95 (+)
5	Kinnaur	9.155	11	8.079	12	11.75 (-)
6	Kullu	40.161	10	46.812	10	16.56 (+)
7	Lah. and Spiti	5.178	12	8.306	11	60.41 (+)
8	Mandi	119.769	2	146.692	2	2.48 (+)
9	Shimla	83.269	3	95.911	3	15.18 (+)
10	Sirmaur	56.598	8	81.657	4	44.28 (+)
11	Solan	76.441	4	80.607	5	5.45 (+)
12	Una	60.695	6	63.946	8	5.36 (+)
Total (H.P.)		786.222		869.510		10.59 (+)

Source: Department of Animal Husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

Production of Wool

Wool has always occupied an important place in the social and economic set-up of man. The sheep was one of the first animals to be domesticated for supplying two of the necessities of life—meat and clothing. There is, as yet, no substitute for wool as a durable, warm and health-promoting raw product for clothing. The wool produced by the sheep in District Shimla is softer and used mainly in making clothes and carpets. The share of district Shimla in total wool production in the state during the year 2004-05 stood at 9.77 per cent. Wool production in district Shimla during the period 1999-2000 to 2004-05 is given in Table 5.28. It can be seen from the Table that the production of wool during 1999-2000 was 150061 kgs, which increased to 156274 kgs in the year 2004-05. Whereas it's share in total wool production in the state stood at

12.66 per cent in the year 2000-01, in the year 2004-05 this share shrunk to 9.77 per cent

District-wise wool production during the years 2003-04 and 2004-05 has been given in Table 5.29. It is observed, that district Shimla ranked fifth in wool production in the state during both the years under study.

Table- 5.28 : Wool Production in District Shimla and H.P.

(Qty '000 kgs)

Years	Shimla District	Himachal Pradesh	% Share of District in the State
1999-2000	150.061	1576.077	9.52
2000-01	200.382	1582.481	12.66
2001-02	175.916	1586.111	11.09
2002-03	144.735	1593.766	9.08
2003-04	160.941	1598.643	10.07
2004-05	156.274	1599.648	9.77

Source: Department of Animal husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

Table-5.29: District-wise Wool Production in Himachal Pradesh During the Years 2003-04 and 2004-05

Sr. No.	District	2003-2004 ('000 kgs.)	Rank	2004-2005 ('000 kgs.)	Rank	%age change) during 04-05 over 03-04
1	Bilaspur	30.280	10	4.335	11	85.68 (-)
2	Chamba	372.652	1	496.294	1	33.18 (+)
3	Hamirpur	58.819	8	34.322	8	41.65 (-)
4	Kangra	249.735	3	212.763	4	14.80 (-)
5	Kinnaur	66.883	6	121.750	6	82.03 (+)
6	Kullu	169.786	4	231.976	3	36.63 (+)
7	Loh. and Spiti	59.904	7	58.318	7	2.65 (-)
8	Mandi	328.258	2	245.300	2	25.27 (-)
9	Shimla	160.941	5	156.274	5	2.90 (-)
10	Sirmaur	58.533	9	29.695	9	49.27 (-)
11	Solan	31.821	11	6.065	10	80.94 (-)
12	Una	0.840	12	0.215	12	97.57 (-)
Total (H.P.)		1596.452		1597.307		0.06 (+)

Source: Department of Animal Husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

Production of Meat

Though sheep and goats are found all over the state in large numbers yet, the production of mutton and goat meat varies widely in the state. Where land is undeveloped and climate is unsuitable, sheep and goats are kept in large flocks for production of meat and wool in the district. The production of mutton and goat meat in District Shimla is given in Table 5.30. It is observed that the total meat production in the district decreased from 991.490 tones in the years 2000-01 to 774.403 tons during the year 2004-05. Whereas in the year 2000-01 district Shimla accounted for 28.94 per cent of total meat production of the state, in the year 2004-05 this share shrunk and turned out to be only 26.56 per cent.

District-wise meat production in the state during the year 2004-05, has been presented in Table 5.31, It is observed that the larger meat producing districts in the state are Shimla, Kangra, Kullu, Mandi and Sirmour. This is due to large population of sheep and goats reared in these districts.

Table-5.30 : Meat Production in District Shimla and H.P.

Years	Shimla District	Himachal Pradesh	(In tones) % Share of District in the State
2000-01	991.490	3425.414	28.94
2001-02	1114.416	3548.305	31.41
2002-03	-	3416.394	-
2003-04	791.914	3213.194	24.65
2004-05	774.403	2915.416	26.56

Source: Department of Animal Husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

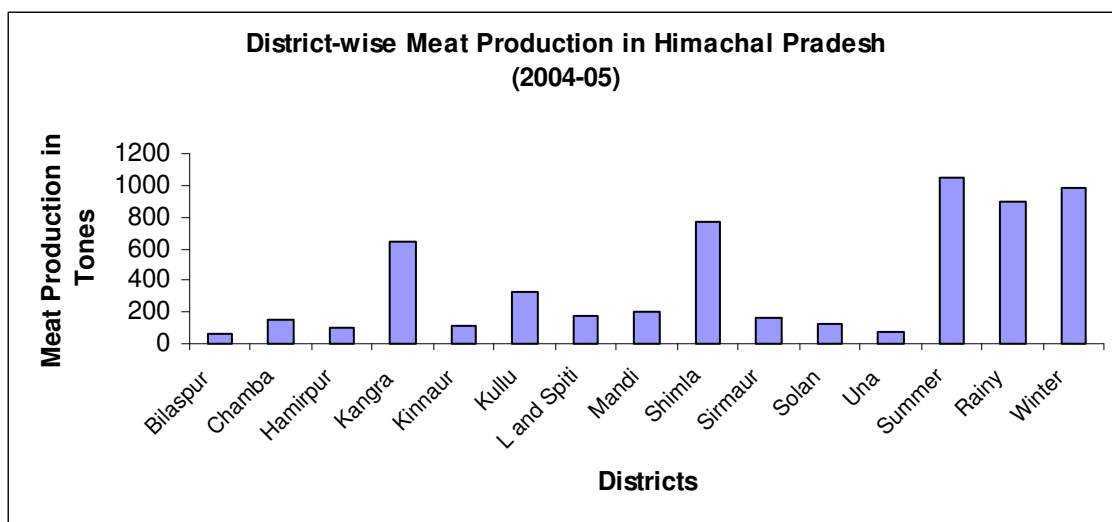


Fig. 9

Table-5.31: District-wise Meat Production in Himachal Pradesh During 2004-05

(in Tones)

District	Goat	Sheep	Pig	Total
Bilaspur	46.169	12.642	4.498	63.309
Chamba	86.015	60.288	7.396	153.699
Hamirpur	72.877	24.115	0.780	97.772
Kangra	416.023	178.037	48.976	643.036
Kinnaur	86.382	28.383	-	114.765
Kullu	252.720	71.283	1.769	325.772
Loh. and Spiti	80.605	96.551	-	177.156
Mandi	103.968	55.902	43.139	203.009
Shimla	618.928	83.824	71.651	774.403
Sirmaur	67.496	29.157	64.424	161.077
Solan	62.715	32.562	34.462	129.739
Una	55.272	9.593	6.814	71.679
Summer	710.208	237.071	95.601	1042.880
Rainy	591.813	199.577	101.115	892.505
Winter	647.149	245.689	87.193	980.031

Source: Department of Animal Husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

Production of Eggs

The high hill region of the state is climatically not suitable for poultry. The production of eggs in district Shimla, which stood at 54.257 lacs in the year 1999-2000, decreased to 48.215 lacs in the year 2003-04 (Table-5.32). The share of the district in total eggs produced in the state declined from 6.78 per cent in the year 1999-2000 to 5.74 per cent in the year 2003-04.

Table- 5.32 : Eggs Production in District Shimla and H.P.

(in Lacs)

Years	Shimla District	Himachal Pradesh	% Share of District in the State
1999-2000	54.257	800.539	6.78
2000-01	46.913	815.677	5.75
2001-02	47.536	822.405	5.78
2002-03	39.017	827.743	4.71
2003-04	48.215	839.864	5.74

Source: Department of Animal Husbandry, Govt. of Himachal Pradesh, Shimla, 2006.

5.9 Honey Production

The sustainable development of hill agriculture requires that the non-land based activities are given due emphasis. Such activities, if otherwise viable, have inbuilt capacity to augment the income and at the same time do not compete with activities like crop cultivation or horticulture etc. which are land based. On the contrary, these may have desirable supplementary relationship with other on-going farm activities by raising their productivities and resultant income. Apiculture is one such activity which is non-land based. Besides yielding additional income, it helps conservation of forests and grassland ecosystems as honeybees are most efficient pollinators in nature⁴⁵. This makes

⁴⁵ Vaidya C.S. (1996). *Economics of Honey Production in Himachal Pradesh* Agro-Economic Research Centre, H. P. University, Shimla (Mimeo) p.6.

apiculture and horticulture as well as certain flowering crops supplementary activities. Thus, apiculture can be used as double-edged weapon for betterment of rural people. Honey provides them with nutritious food and is also a source of income. Thus, there is no doubt that honey industry can become an important source of income for economically backward people of the district, but this goal can be achieved only if proper technology is provided to beekeepers regarding honey processing, quality control and value addition as there are various uses of honey in the domestic market.

The annual production of honey in district Shimla during the period 2002-03 to 2005-06 is presented in Table 5.33. Honey production in the district was maximum i.e. 319432 kgs in the year 2003-04, and declined to 308680 kgs in the year 2005-06. This indicated a decline in the share of the district in honey production in the state from 38.52 per cent in the year 2002-03 to 19.23 per cent in the year 2005-06.

Table- 5.33 : Honey Production in District Shimla and H.P.

Years	Shimla District	Himachal Pradesh	(in kgs)
			% of State
2002-03	269684	964708	27.95
2003-04	319432	829302	38.52
2004-05	265589	1547401	17.16
2005-06	308680	1605320	19.23

Source: Directorate of Horticulture, Himachal Pradesh Government, Shimla, 2006.

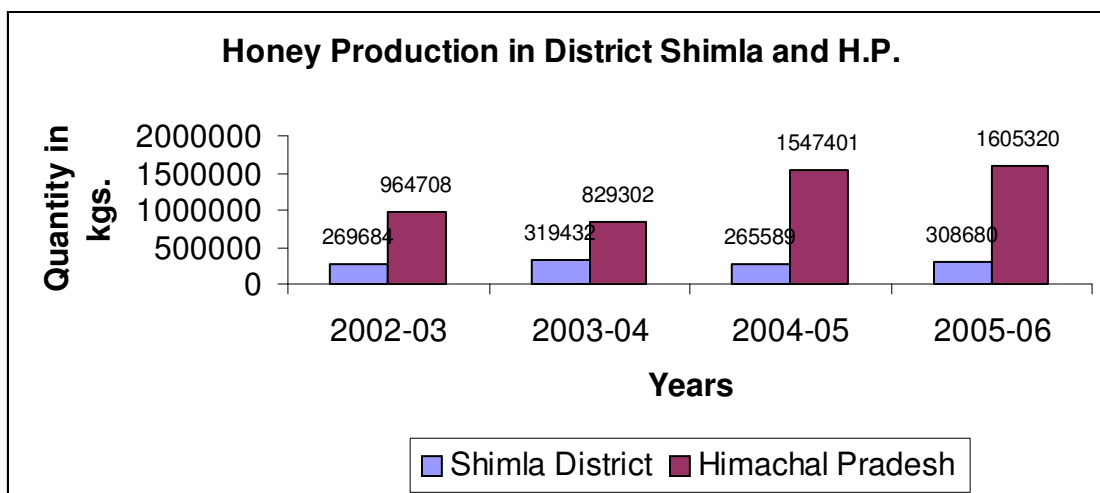


Fig. 10

5.10 Fish Production

The fish industry can provide means of livelihood to large number of people in the district, which can contribute substantially to the district's income.

In the State, Fish Farmers Development Agency was set up during the year 1982-83, and since then it has been rendering technical and financial assistance for excavating ponds and improving the existing water resources for fish production. It is trying to create fish culture in the district by utilizing the wasteland, swamps and derelict water areas. The farmers in the district are encouraged to adopt this profession as a supplementary occupation with the agriculture. The neglected ponds can prove useful to increase fish production and help in providing gainful employment opportunities in the different parts of the district.

District Shimla has a number of streams and rivers, which have a vital potential for the production of exotic Brown Trout, and indigenous Asla (Snow Trout). In District Shimla, about 319.07 tones of fish was produced during the year 1999-2000, which increased to 357.90 tones

by the 2003-04 (Table-5.34). This means that the fish production during the period under reference increased by nearly 12 per cent in the district.

Table-5.34 : Fish Production in District Shimla

(Qty in MT)

Years	Fish Production
1999-2000	319.07
2000-01	288.822
2001-02	269.072
2002-03	292.470
2003-04	357.899

Source: Directorate of Fisheries, Bilaspur, 2006.

5.11 Floriculture

Flower cultivation is a labour intensive, high value occupation, and helps in diversification of agriculture to get sustainable income and employment in a big way. Unfortunately, no serious attempt has been made in the past to exploit the full potentiality of floriculture industry in the district. This is mainly because of the reason that in district Shimla, the marketing of flowers has not been taken seriously, due to which floriculture has partly failed to develop. Further, there are certain inherent problems in marketing of flowers and the most important of them, is the lack of authentic statistic required for meaningful planning relating to floriculture in the state in general, and in district Shimla in particular.

Area Under Various Flowers

District Shimla has varied agro-climatic conditions, which are quite conducive for the cultivation of variety of cut-flowers like, carnation, lilies, gladiolus, tulip, rose, etc and other high value flowers and potted ornamental plants almost round the year. For the last five years, some progressive and innovative farmers have taken lead in the commercial cultivation of flowers/cut-flowers in different parts of the district. The

area under flowers in the district during the year 2005-06 was 23.09 hectares, which turned out to be about 5 per cent of the total area under flowers in Himachal Pradesh (see Table 5.35). District Shimla ranks third with respect to area under flowers in the state. Among various flowers grown in the district, Gladiolus occupied highest area in the district (34.99% of the total area under flowers), followed by Marigold (25.99%), Chrysanthemums (14.16%), Potted plants (11.26%) and Carnation (4.50%).

Table- 5.35 : Area Under Flowers in District Shimla and H.P. During the Year 2005-06

Flowers	Shimla District		Himachal Pradesh	
	Area in ha	% of Total	Area in ha	% of Total
Gladiolus	8.08	34.99	114.69	24.56
Carnation	1.04	4.50	22.31	4.78
Marigold	6.00	25.99	237.84	50.93
Lilies	0.12	0.53	5.54	1.19
Daffodils	0.05	0.22	1.07	0.23
Rose	0.01	0.04	13.73	2.94
Tulip	0.01	0.04	0.06	0.01
Chrysanthemums	3.27	14.16	46.14	9.88
Seasonal flowers	0.06	0.26	8.46	1.81
Other flowers	1.84	7.97	6.14	1.31
Flower seeds	0.01	0.04	4.09	0.88
Potted Plant	2.60	11.26	6.91	1.48
Total	23.09	100.00	466.98	100.00

Source: Directorate of Horticulture, Himachal Pradesh Govt., Shimla, 2006.

5.12 Future Development Issues and Strategies

The agro-climatic conditions and other resources available in district Shimla indicates that **the development strategy for the district has to focus it's attention on the sectors/avocations like forestry, fruit crops, livestock, raising of high value crops and strengthening the post-harvest technology for fruit and vegetable crops.** All these issues have been highlighted in the following text.

Land : Land is one of the most important factors of production available to the rural masses. Due to rapid increase in human and livestock population, land is becoming scarcer. **Thus, this factor has to be used in most optimal manner so that it's benefits accrue to the poor in most efficient way.** The land utilization pattern of district Shimla indicates that the net area sown is about 13 per cent of total reported geographical area. This is mainly due to tough terrain, steep slopes and other climatic and geomorphic factors, which reduce the area available for cultivation. About 75 per cent area is under forests and uncultivable land, which has also reduced the extent of net area sown. Average holding size is about 1.39 hectares.

About 89 per cent of cultivators have land, less than or equal to two hectares. Fields are sloppy, small in size and highly scattered. In such a situation, the million dollar question that arises is that what should be done to augment the production and productivity, so as to enhance the incomes of the farming families. The following strategies are suggested in this regard:

- (i) **The foremost step should be to consolidate the holdings.** This will encourage the farmers to invest more on their fields and hence productivity will increase.
- (ii) **The agriculture should be practiced on the land with less than 30 per cent slope for taking the maximum possible advantage of scarce land resource. Otherwise, the soil may get eroded.**
- (iii) The land which has high slope and is not fit for agriculture **i.e. the land having 30 to 50 per cent slope can be used for horticulture/fodder development, in case, it is already not covered by forests.**
- (iv) **All the land, having more than 50 per cent slope should be brought under tree cover.**

- (v) **Emphasis should be given to reclaim culturable waste lands which are about 2.5 per cent of the reported area.**

Irrigation: Agriculture in the district is mostly dependent upon rainfall. Very small percentage (3.78%) of net area sown is irrigated and 'kuhls' are the main source of irrigation. This source is also dependent upon rains to a great extent. **In order to increase productivity of land, irrigation is the key factor. Watershed development should be given due emphasis in District Shimla.** Three rivers are flowing in this district. There are also many other natural water sources of varying sizes available in the district. Thus, catchment watersheds should be identified which can be divided into sub and micro-watersheds.

In District Shimla irrigation potential can also be increased by constructing small tanks harnessing the water run off, natural springs and lift irrigation system. **Tank irrigation has been proved to be very successful to vegetable growers in Theog area of the district. Similar tanks have to be constructed in other parts of the district. Lift irrigation can be useful in the catchment areas of the rivers.**

Diversification: Employment opportunities in the district can be increased by diversifying the hill economy. **Farmers must be encouraged to follow intensive crop husbandry on their farms. Cultivation of off-season vegetables, fruits, flowers and vegetable seeds should be popularized.** All these crops are labour intensive. They also fetch good prices due to regional and seasonal advantages. **In District Shimla, great potentialities exist for natural and artificial cultivation of flowers and ornamental plants.** This valuable natural wealth can be tapped for the benefit of local people. **In addition to the beautification of the local landscape, which will help tourism industry in the district to earn more profits, there is great scope to export such plants and cut flowers to other metropolitan cities of the country and abroad as well.**

Agriculture: The comparative economics of horticultural crops and field crops in various blocks of district Shimla, strongly advocates the emphasis on former because of their higher profitability⁴⁶. However, because of social and cultural heritage of farming community the complete switch over from field crops to horticulture is not possible. **It is, therefore, advisable to find out ways and means to increase the productivity etc. of field crops in the district.** For this, the following steps may be important.

- a) Presently, the varieties of different field crops grown in the different parts of the district are not compatible with the local conditions and as such they have long germination and gestation periods. **This calls for evolution of area specific varieties for the eradication of this lacuna.**
- b) There is need to use the scarce land resource in maximum possible efficient way. **This can be achieved by way of multiple and mixed cropping. Some of the important and profitable cropping combinations/crop rotations are: Potatoes – Beans, Peas – Mustard Rajmash – Millets, Wheat–Linseed, Maize, Beans etc.**

Horticulture: District Shimla is the fruit bowl of Himachal Pradesh. Apple is the most important fruit and it has increased the level of income of people to a very high level. As already indicated, agro-climatic conditions in this district are most suitable to grow various types of horticultural crops i.e. fruits and vegetables. In the valley areas, where the horticultural development is in primitive stage, citrus fruits can be grown with great success. **In mid hill areas, agriculture can be**

⁴⁶ Singh Ranveer, S.P.Saraswat and Pratap Singh. (2004).*Agricultural Policy in Himachal Pradesh: A Policy Matrix in a Federal System*, Agro-Economic Research Centre, H. P. University, Shimla (Mimeo), p.9.

diversified by growing off-season vegetables and for this purpose, most suitable blocks are Theog, Mashobra and Basantpur. The important vegetable crops are cabbage, cauliflower, peas, capsicum and tomatoes. All these crops are high value and labour intensive. **Mid and high hills are suitable to grow apples, which is a dominant fruit crop in the district. All the blocks have areas suitable to grow apples.**

All the fruit and vegetable crops mentioned above are perishable and need quick transportation and infrastructural facilities. **Thus, the need of the hour is the development of horticulture by way of providing good variety root stock, storage, transportation and processing facilities to the orchardists in the producing areas. Input delivery system has to be improved and credit facilities should be made available especially to the small and marginal farmers in the district. Extension services should be enhanced so that farmers can use their resources in most efficient way.**

Forestry: In District Shimla, about 26 per cent of total geographical area was under forests during 1989-90. It is very less as per the recommendations of the National Forest Policy norms. State Government is very conscious about this and is making all efforts to protect the existing forest cover and also to increase it to about 50 per cent of total geographical area. Since forests are of great importance for the ecological balance of the district therefore, and steps should be taken to develop this sector of the economy so as to increase income and employment of the rural people residing in the district. **Eco-system in hills is fragile and requires proper focus. Adoption of silviculture should be given preference to agriculture by farmers, whose land is unsuited for agriculture. The pressure of human as well as livestock population has to be reduced by adopting alternatives to forest produce. Social forestry and pasture development should be intensified so that pressure on forests is relieved.**

Animal Husbandry: More than 90 per cent of households keep animals in district Shimla. Holding size being small, people prefer mixed farming system i.e. combining animals with farming. It may be due to close interaction between animals and crops. Cattle are the most important animal as it constitutes about 58 per cent of total livestock population in the district. Most of the cattle population is indigenous. Average per day yield of an indigenous cow is about 1.5 kg. whereas, in case of cross-bred cow, it is about 4.5 kg./day. **There is a good scope to substitute the non-descript cattle with jersey as the exotic breed in a step-wise manner.** It will improve the productivity of milk and thus, be a good source of productive employment to the farmers.

About 19 per cent of total livestock population is that of goats. Government has stressed to reduce goat population, because it is very destructive animal, but, from farmers point of view, it is very beneficial due to quick multiplication of the animal and high sale value per goat.

Floriculture: In District Shimla, great potentialities exist for natural and artificial cultivation of flowers and ornamental plants. **Flowers can be grown as intercrop in orchards.** This valuable natural wealth can be tapped for the benefit of local people. In addition to the beautification of the local landscape which will help tourism industry in the district to earn more profits, there is great scope to export such plants and cut flowers to other metropolitan cities of the country and abroad as well. **For the development of floriculture, extension services have to be provided to the farmers and inputs, such as seed etc. should be distributed to them at low rate. Marketing arrangements should be made well in advance so that farmers are encouraged to take risk.**

Fisheries: In District Shimla, there is a good scope to develop fisheries, because rivers and other perennial sources of water are in abundance. Trout a cold water fish is found in Pubbar and Giri rivers. **Thus,**

fisheries can be a good source of employment as well as income in the district.

Bee Keeping: Bee keeping is also a good source of income in the district. The beehives placed in the apple or other orchards not only facilitate the pollination of the flowers on the trees but also provide additional income by way of sale of the honey. Although the State Government has announced support price to the honey and free training is being given by the department of Horticulture, not much has been achieved yet.

Mushroom Cultivation: Because of low summer temperature and adequate moisture mushroom cultivation can be a good source of employment and income in District Shimla. In this district, four to five crops of mushroom can be grown in a year. There is an extra advantage of growing mushroom in the district, as the market of Shimla town can be easily tapped by the growers.⁴⁷ **It is a non land based activity and hence can prove profitable even for marginal and small farmers.**

In brief, the analysis of agriculture sector in district Shimla reveals that though, it is a major source of livelihood of masses yet, because of small and unviable agricultural holdings, the production and productivity is quite less in the district. This necessitates the role of commercial agricultural in district Shimla in the form of horticulture, off-season vegetables, floriculture, bee keeping and mushroom cultivation.

⁴⁷ Vaidya C.S., M.L. Sharma and N.K. Sharma.(2000). *Problems, Potential and Economics of Mushroom Cultivation in H.P.* Agro-Economic Research Centre, H. P. University, Shimla (Mimeo), p.8.

Table-5.36
Executive Summary

Indicators	Mashobra	Theog	Rampur	Kumar-sain	Jubbai-Kothai	Chhohara	Rohru	Chopal	Basantpur	District Shimla
Population density	493	164	103	175	151	89	191	130	133	170
% of cultivators	11.33	48.19	37.12	46.80	41.87	42.84	42.72	35.92	50.83	32.87
Gender gap in rural	7.33	3.27	2.28	7.98	2.04	9.94	4	6.13	16.47	6.41
Average holding (ha)	1.86	1.78	1.06	0.96	1.31	1.38	1.39	1.24	1.62	1.39
Area under forest (%)	15.92	16.45	45.32	26.36	38.17	10.43	28.41	24.31	20.20	25.46
Net area sown (%)	10.09	15.76	11.38	21.58	20.51	5.95	25.45	14.82	14.07	13.27
Wheat (% of main crops)	39.41	19.26	44.37	42.35	37.03	53.44	47.25	38.04	42.57	41.55
Maize(% of main crops)	50.81	69.30	20.05	39.65	42.23	16.08	24.22	31.06	49.07	35.17
Kharif Food crops (%)	53.57	69.78	68.74	80.40	91.56	64.44	78.89	62.73	54.24	70.00
Rabi Food crops (%)	45.54	30.21	30.46	19.35	8.00	35.47	20.70	35.26	44.45	29.27
% of net irrigated area	11.66	3.03	0.76	2.43	8.52	1.55	3.58	8.37	0.66	3.78
Cropping intensity	1.66	1.52	1.32	1.28	1.20	1.52	1.06	1.56	1.71	1.39
Area under fruits (ha)	2173	4484	3885	5291	6878	3122	5194	3332	1334	35692
Area under Apple (%)	56.29	78.99	81.08	86.29	87.82	89.11	91.94	87.87	49.87	83.13
Area under Pear (%)	11.72	4.90	1.98	1.73	6.64	2.21	1.60	2.74	8.38	4.07
Area under Almond (%)	7.43	8.52	4.97	2.84	2.97	4.22	1.66	3.40	7.58	4.27
Fruit production (MT)	6926	26513	29156	39450	111222	28108	41069	29859	2896	315200
Livestock population	62047	61328	89040	23451	36822	86426	28098	102749	37590	527551
% of cattle	73.78	78.56	44.84	69.52	76.30	26.69	80.17	55.66	69.46	58.23
% of Buffaloes	12.90	3.94	0.82	0.99	0.42	0.17	0.26	1.71	7.40	3.09
% of Sheep	5.08	4.94	31.66	9.53	10.78	48.61	13.55	10.18	4.04	18.65
% of Goats	6.92	9.83	22.01	19.31	12.30	23.39	3.49	30.56	18.49	18.62

Note : Data Relating to Different Variables Pertain to Different Years.

CHAPTER -VI

BASIC AMENITIES IN DISTRICT SHIMLA

Basic amenities are essential to provide a comfortable living for the residents which in turn establish the environment, congenial for undertaking the development activities by the entrepreneurs in agricultural as well as nonagricultural areas. Apparently the basics civic amenities may look to be having no correlation with the production activities but it is clear that no production activity can be possible without the requisite infrastructure and related civic amenities. It is agreed that the provision of civic amenities at desired level is hampered by thin spread of population, high cost of construction, and lack of required funds especially in hilly area like Himachal Pradesh. However, this is poor justification for the inadequate level of civic amenities in both urban as well as rural areas of the region. It is with this background that the existing level of basic amenities in the district has been analyzed in the present chapter.

6.1 Demographic Characteristics

The demographic characteristics studied included the number of persons per census home and the density of population. The analysis has been carried out separately for urban and rural areas of each block.

Urban Areas: According to 2001 population census, there were 3.36 persons per census household in all the blocks combined together. The lowest figure in this regard has been observed to be in Chopal block where it was 3.33 persons per family. The highest family size was in the Basantpur block where there were 4.25 persons per census home (Table 6.1). The density of population was 1794 persons per square kilometer of the geographical area at overall level. The highest population density

was in Rohru block (6175 persons per square kilometer) and least population density was in Chopal block where only 377 persons resided in one square kilometer. There was no urban area in Chhohara Block hence the information has been presented as nil.

The analysis revealed that whereas with respect to per census home, in urban areas, there existed very mild inter-block disparities in the district (38.39%), but in case of density of population the extent of inter-block disparities as revealed through the value of coefficient of variation turned out to be as high as 105.11 per cent, meaning thereby that density of population is quite uneven among different blocks in the district. However, the high value is mainly on account of Chhohara block and if this block is excluded, value of coefficient of variation will come down.

Table 6.1
Demographic Characteristics of Urban Areas

Block	Persons/Census Home	Density of Population
Mashobra	3.90	2421
Basantpur	4.25	869
Theog	3.86	938
Narkanda	3.58	713
Rampur	3.93	2718
Jubbal & Kotkhai	3.46	1934
Chhohara	0	0
Rohru	3.91	6175
Chopal	3.33	377
Mean	3.36	1793.89
C.V.	38.39	105.11

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

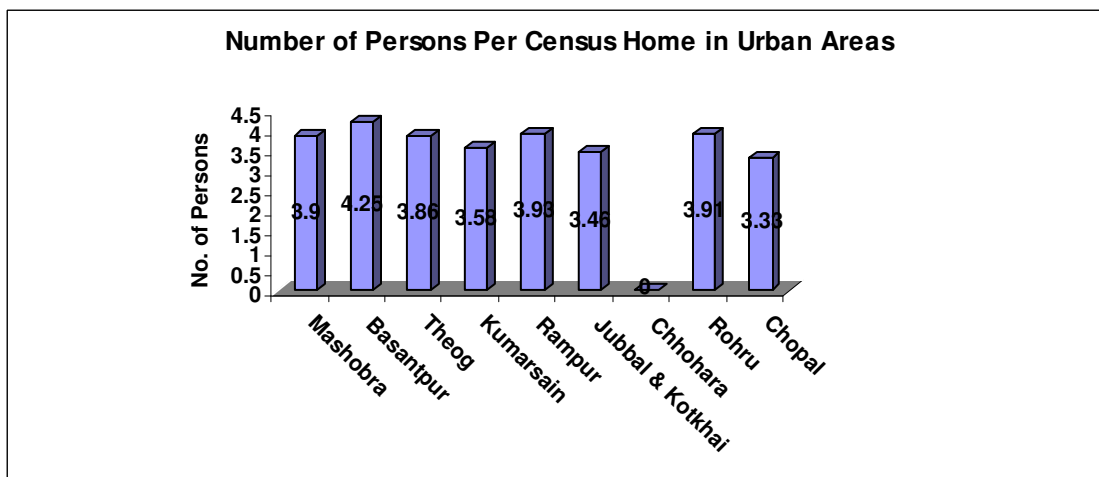


Fig. 1(a)

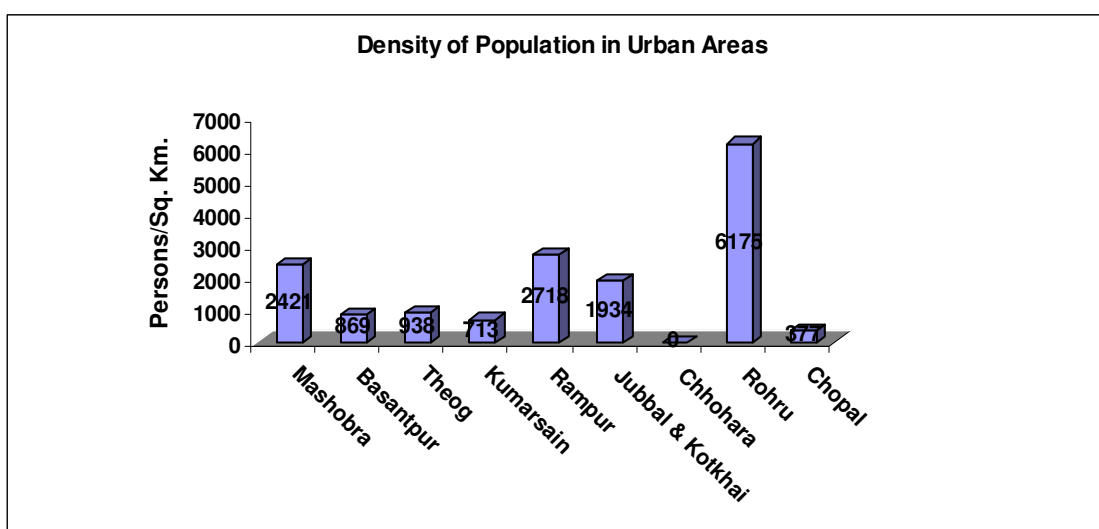


Fig. 1(b)

Rural Areas

The density of population in rural areas was substantially lower than the urban areas. There were only 86 persons residing per square kilometer in Chhohara block of Shimla district. The highest population density of 209 persons per square kilometer was in Mashobra block. At the district level the figure stood at 147.22 persons per square kilometer (Table 6.2). The average family size in the rural areas of the district was 5.05 persons which is quite high (by 33 %) vis-à-vis urban areas of the

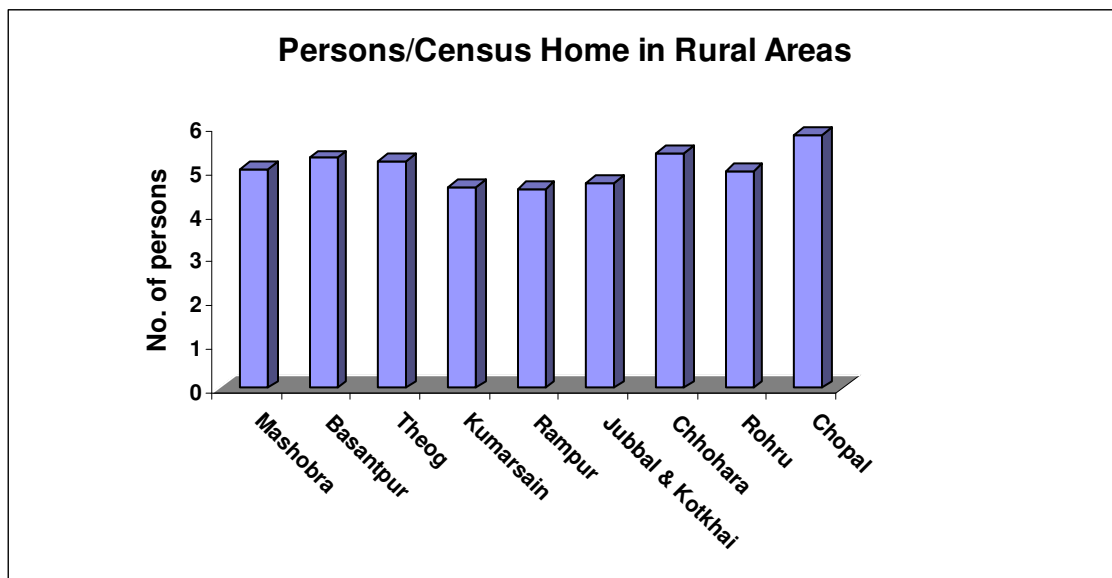
district. The highest in this regard was in Chopal block having 5.80 persons per family whereas the lowest in this regard was 4.57 persons per family in Rampur block. Thus, as compared to urban areas, in rural areas of the district, there was less variation i.e. 7.52 per cent with respect to persons per census home. Similarly, in case of density of population also the value of coefficient of variation turned out to be very low (27.25%).

Table- 6.2 Demographic Characteristics of Rural Areas

Block	Density of Population	Persons/Census Home
Mashobra	209	5.01
Basantpur	110	5.26
Theog	166	5.21
Narkanda	175	4.59
Rampur	104	4.57
Jubbil & Kotkhair	152	4.70
Chhohara	86	5.39
Rohru	192	4.96
Chopal	131	5.80
Mean	147.22	5.05
C.V.	27.25	7.52

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

Fig. 2(a)



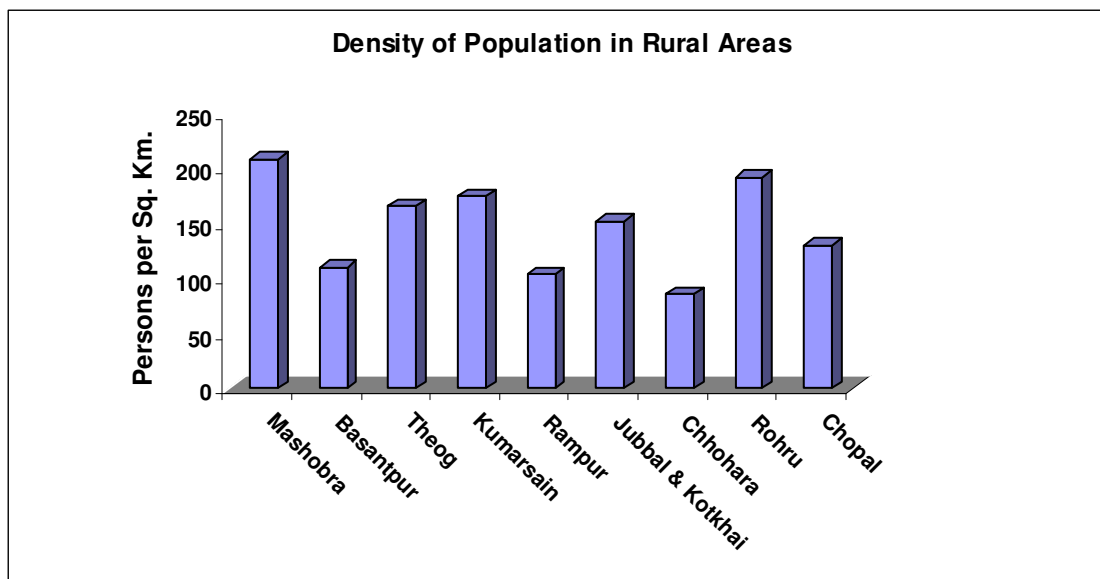


Fig. 2(b)

6.2 Communication and Location

The accessibility of district headquarter to people from different blocks can be taken as an indicator of good quality administration as it leads to active participation of masses in the development process and finding effective solutions for their local problems. The locations of various block headquarters with respect to the district headquarter and distances from railway station and motorble road have been presented in table 6.3. The nearest block headquarter was that of Mashobra block situated at a distance of 12 kilometers from district headquarter. Jubbal-Kotkhai block is situated farthest at a distance of 159 kilometers from district headquarter of Shimla. The mean distance of block headquarters from the district headquarter is about 74 kilometers.

The railway station is located at Shimla town and hence this facility can also be considered to be present in the block itself. Other blocks are not so well placed in this respect except for the distance from motorable road which is present in all the blocks. As the district headquarter has railway station, the distance of both i.e. district

headquarter and railway station from the block headquarters is the same. The farthest located block from railway station is Jubbal-Kotkhai which is located at a distance of 159 kilometers. This is followed by Chhohara (136 kms), Rampur (132 kms) and Rohru blocks (129 kms).

Table-6.3
Communication and Location

Block	Distance from District HQ (Kms)	Distance from Railway Station	Distance from Motorable Road
Mashobra	12	0	0
Basantpur	53	53	0
Theog	32	32	0
Narkanda	87	87	0
Rampur	132	132	0
Jubbal & Kotkhai	159	159	0
Chhohara	136	136	0
Rohru	129	129	0
Chopal	110	100	0
Mean	74.33	74.33	0
C.V.	78.94	78.94	0

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

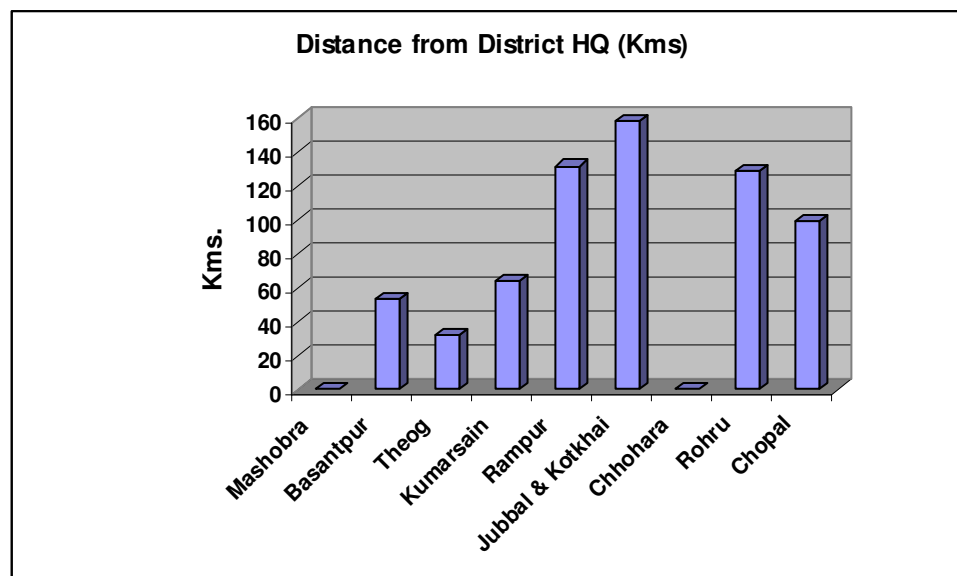


Fig. 3(a)

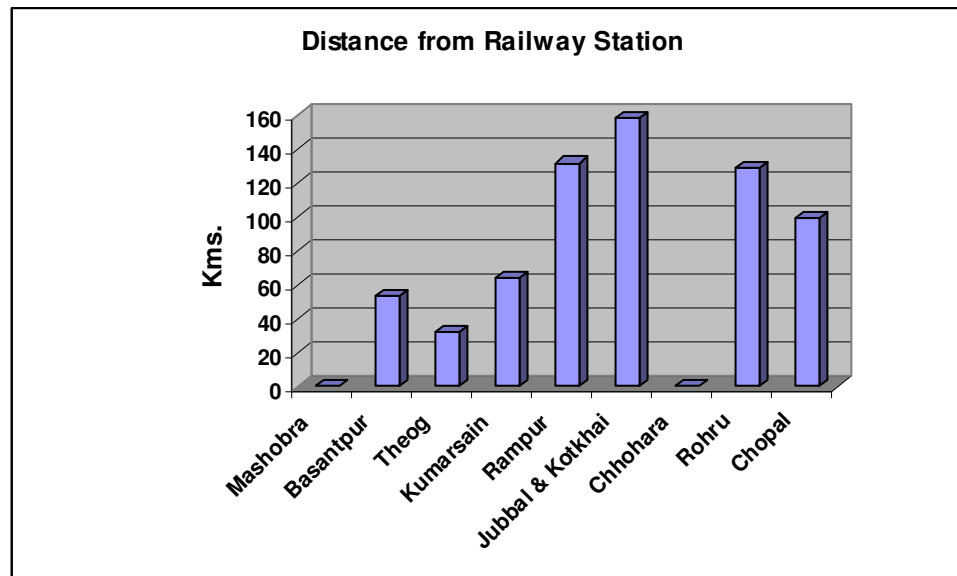


Fig. 3(b)

Village Roads and Transport Connectivity

The roads are the lifeline of development. It is therefore, important to analyze the availability of transport facilities and road infrastructure available in different villages of the blocks of the district. The analysis indicates that the availability of bus facility in the villages is not up to the desired level (Table 6.4). Only about 30 per cent of the villages in majority of cases have bus facility. This was as low as 8.43 per cent villages in Chhohara block and maximum in this respect was Narkanda block where about 50 per cent of the villages have bus connectivity. On the other hand, only 1.71 per cent villages in Mashobra block had facility of railways. This facility is not available to villages of other blocks.

In addition to long distance connectivity, it is also important to study the profile of the streets which indicates the level of development in a given village. But the analysis indicates that only about twenty per cent of the villages have paved streets. The highest in this respect is Basantpur block where about 26 per cent of the villages have paved streets. In Chhohara block, the percentage of villages having paved

streets is only 2.81. Most of the villages have mud roads in the villages and the percentage of such villages having mud roads varied between 19.25 per cent in Rohru block and 53.81 per cent in Chhohara block. Majority of villages also have footpaths. The analysis indicates that the percentage of villages having foot path was 43.79 per cent in Rampur block which went as high as 85.98 per cent in Theog block.

It is therefore, apparent that much is still desired to improve the rural road connectivity in all the blocks of the district. It is observed that in most of the villages of different blocks there is big scope for improvement in quality of roads. There is very low variation with respect to percentage of villages having mud roads (26.09 per cent) and foot paths (15.40 per cent) among different blocks in the district. However, with respect to paved roads, there are relatively higher inter-block variations in the district (49.38 per cent). Further, since the spread of rail net work is only in Mashobra block in the district, the value of coefficient of variation ought to be very high in the district.

Table-6.4
Profile of Village Streets and Transport Connectivity
(% of Villages)

Block	Paved Roads	Mud Roads	Foot Path	Bus Facility	Railway Facility
Mashobra	20.72	48.48	75.85	37.26	1.71
Basantpur	25.79	34.07	77.07	38.85	0
Theog	19.77	48.27	85.98	29.19	0
Narkanda	19.57	45.69	71.50	50.23	0
Rampur	14.28	33.85	43.79	30.43	0
Jubbal & Kotkhai	11.67	53.61	69.72	37.22	0
Chhohara	2.81	53.81	67.97	8.43	0
Rohru	11.23	19.25	66.84	34.76	0
Chopal	9.59	34.53	74.10	48.13	0
Mean	15.04	41.27	70.31	34.94	0.20
C.V.	49.38	26.09	15.40	33.37	270

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

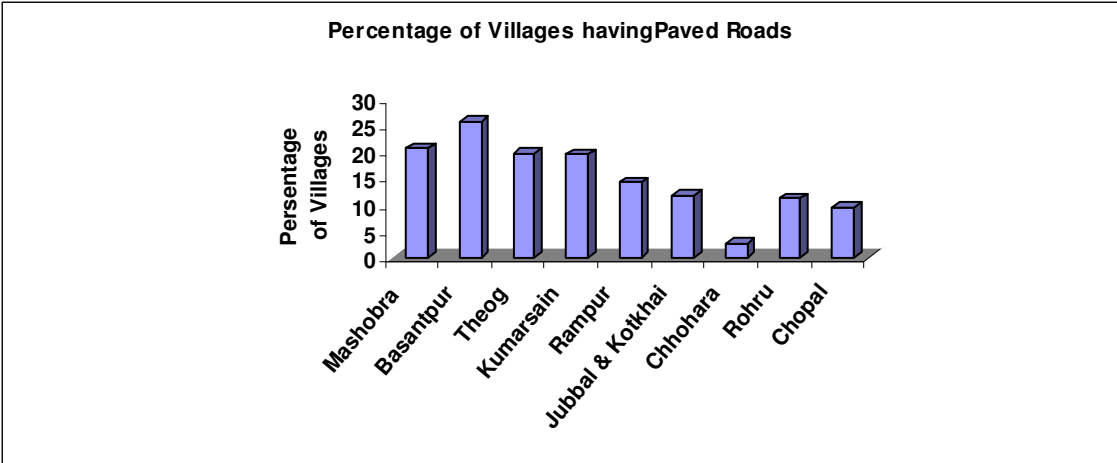


Fig. 4(a)

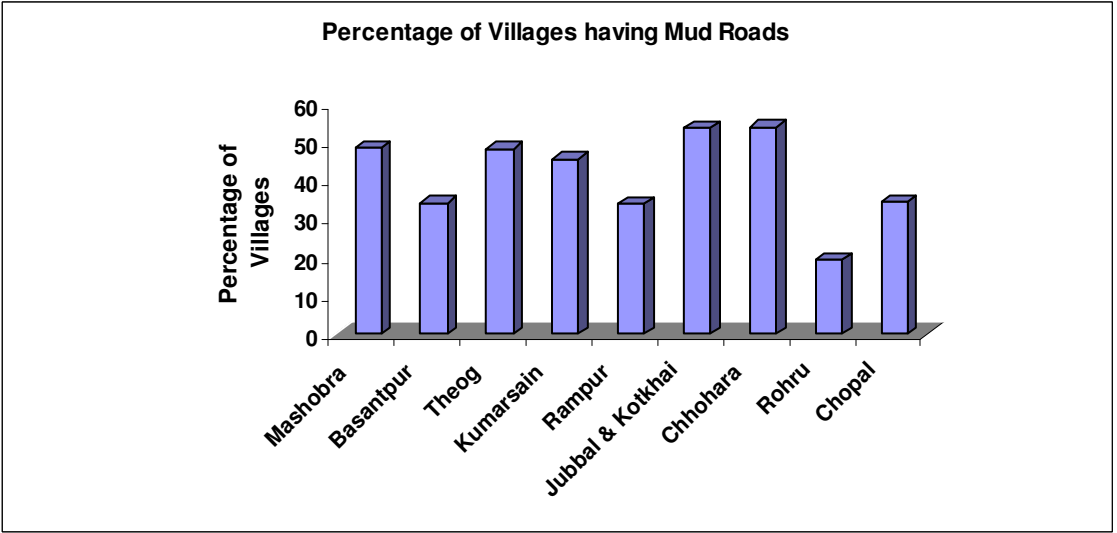


Fig. 4(b)

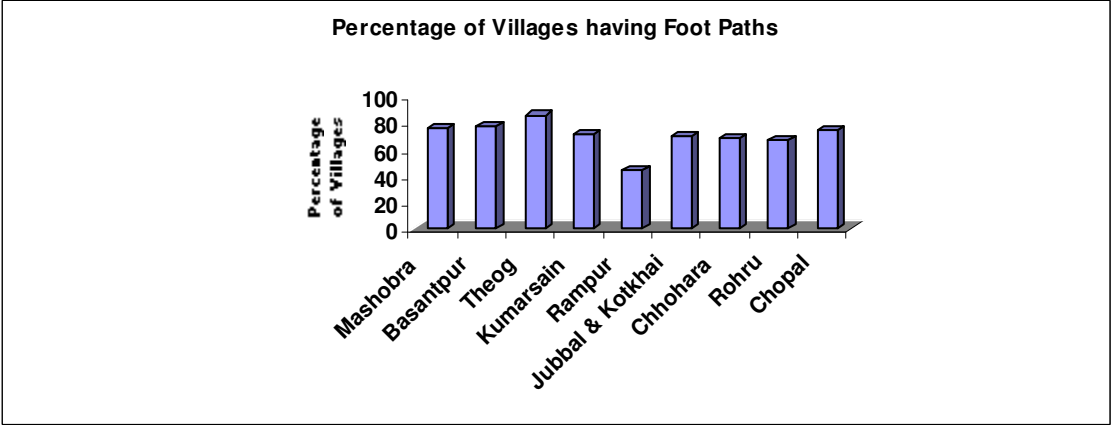


Fig. 4(c)

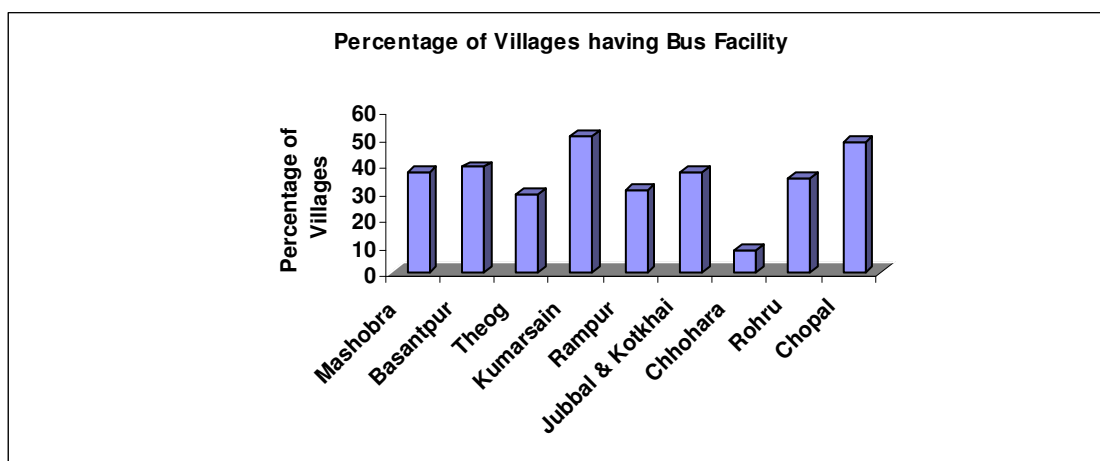


Fig. 4(d)

Communication Infrastructure

The availability of communication infrastructure is of utmost importance in the era of commercialization and globalization. Without fast communication the farmers will not be in a position to make gains out of the quick price fluctuations taking place in the market. The communication infrastructure therefore assumes the importance in the context of marketing of agricultural produce especially when the farm production is market oriented. District Shimla is well known for the commercial production of apples and vegetables. The analysis indicates (Table 6.5) that only 3.06 post offices existed per 100 sq. kms of geographical area in Chhohara block. The highest number of post offices was 11.04 per 100 sq. kms. in Rohru and Theog blocks. Therefore, the situation cannot be said to be happy one. Each post office was serving a population ranging from 1474 in Jubbal-Kotkhai block which is most happily placed to 2823 in Chhohara block. The analysis revealed that there were relatively less inter-block disparities with respect to availability of post offices expressed in terms of population served (22.57per cent) vis-à-vis in context to the geographical area (33.98per cent), which clearly indicated insufficient number of Post Offices per hundred sq. kms.

The other communication facility is provided by telegraph offices, though it is losing its importance day by day. The analysis indicates that number of telegraph offices per 100 sq. kms of geographical area in Chopal Block was as low as 0.17. The largest concentration of telegraph offices is observed in Narkanda block where there were 2.59 telegraph offices per 100 sq. kms of geographical area. The enquiries revealed that hardly any new telegraph offices are being opened by the department in the district. Inter-block variations with respect to population covered by each telegraph office stood at 63.79 per cent, but in terms of number of telegraph offices per 100 sq. kms. the variation stood as large as 100 per cent. Population covered by each telegraph office was as high as 74866 in Chopal block and quite low as 6,643 people in Narkanda block.

Most convenient and popular mode of communication, these days, is the telephone. It is observed that the people have even graduated away from land line telephones and are either supplementing it with mobile cellular phones or have completely switched over to mobile cellular phones. However, the data on number of mobile cellular phones is not available presently; therefore, the analysis has been restricted to the number of telephone connections only. The details of number of telephone connections in each block have been presented in table 6.5. It could be seen from the table that the number of telephone connections per hundred square kilometer was quite high. The minimum number of telephone connections per hundred square kilometer of geographical area was about 154 in Chhohara block and the highest being about 937 in Mashobra block. On an average there are about 458 telephone connections in each block of district Shimla. The analysis has been further extended to find out the population covered by each telephone connection in different blocks. The analysis indicates that on an average one telephone connection serves about 55 persons in each block. However, each telephone connection is serving just 21 persons in Jubbal-Kotkhai block which was the lowest among all the blocks. The

highest in this respect was the Chhohara block where each telephone connection was serving 160 people. Thus, Jubbal-Kotkhai block is most advanced and Chhohara block most backward as far as the facility of telephones is concerned.

The extent of inter-block variations with respect to telephone connections both expressed in terms of geographical area (57.66%) and population covered by each telephone connection (83.23%) is moderately high in the district.

Table-6.5
Communication Infrastructure

Block	Post Office		Telegraph Office		Telephone Connections	
	No./10 OKm ²	Population Covered by Each Connection	No./10 OKm ²	Population Covered by Each Connection	No./1 00Km ²	Population Covered by Each Connection
Mashobra	10.24	2046	0.73	27851	937.23	22.35
Basantpur	9.45	1664	0.35	29894	415.32	26.00
Theog	11.04	1499	0.64	24728	466.00	35.53
Narkanda	12.53	1399	2.59	6643	657.70	27.00
Rampur	5.33	1944	0.75	13039	126.03	82.00
Jubbal & Kotkhai	10.28	1474	0.67	21754	727.00	21.00
Chhohara	3.06	2823	0.19	45148	154.10	160.00
Rohru	11.04	1742	0.33	50831	526.00	36.00
Chopal	6.51	2011	0.17	74866	189.00	89.00
Mean	8.83	1845	0.70	32750	466.48	55.43
C.V.	33.98	22.57	100	63.79	57.66	83.23

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

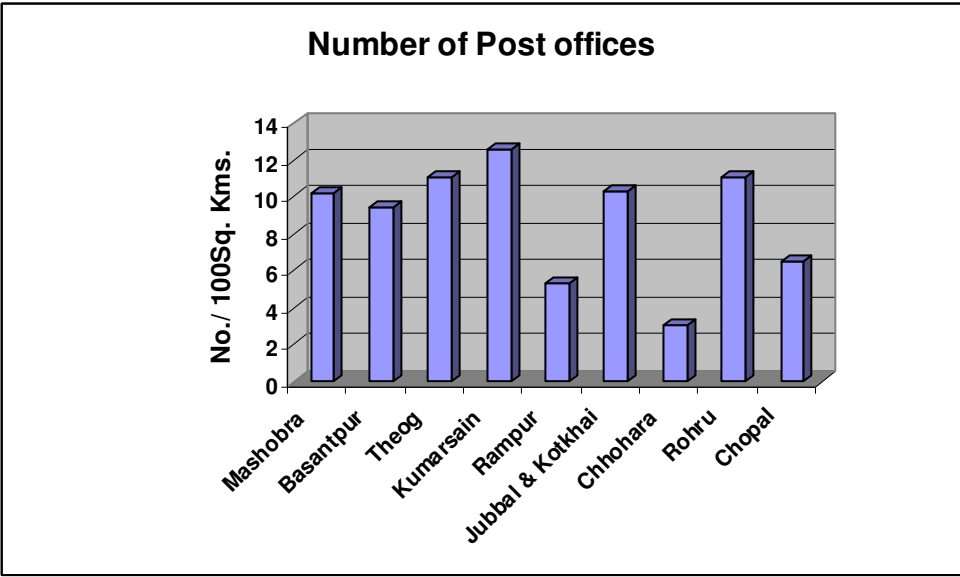


Fig. 5(a)

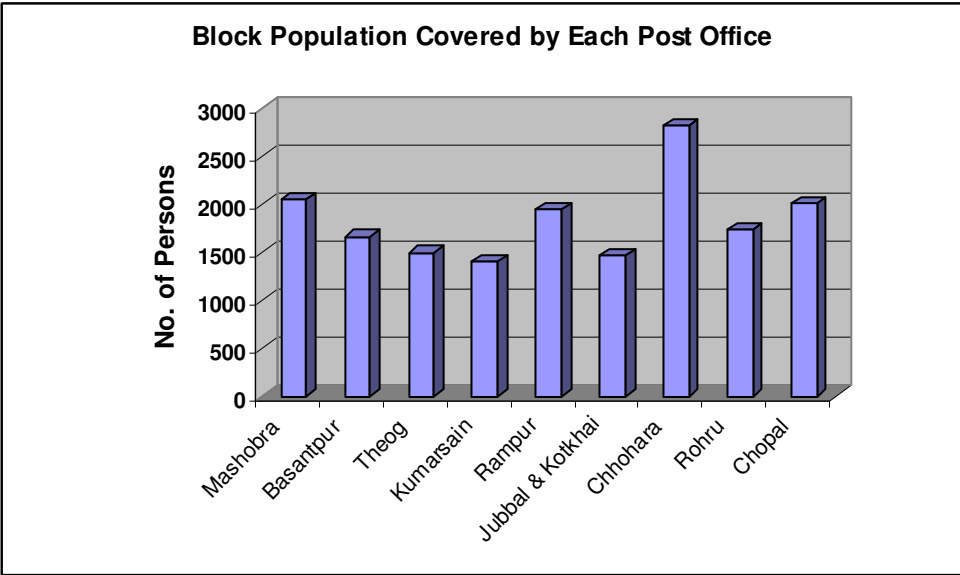


Fig. 5(b)

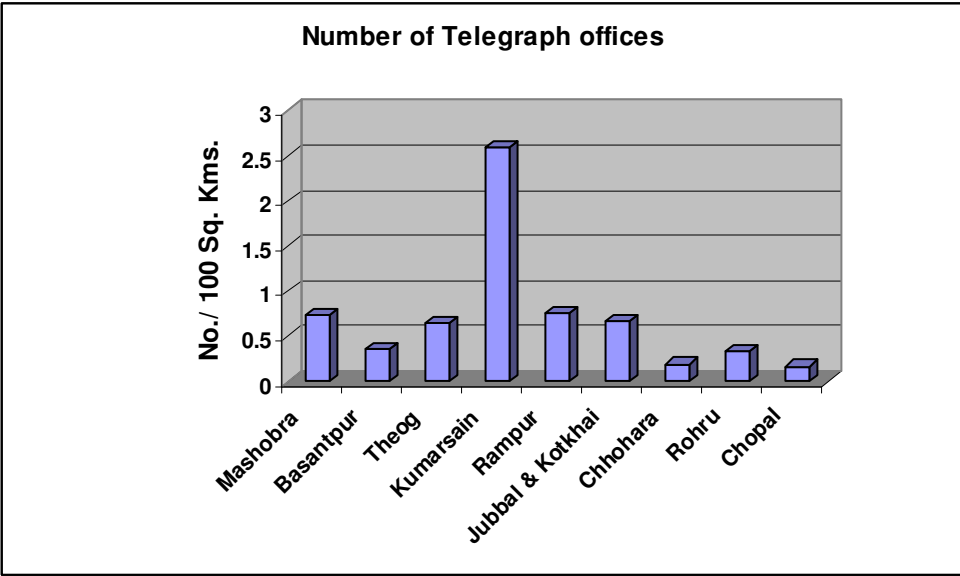


Fig. 5(c)

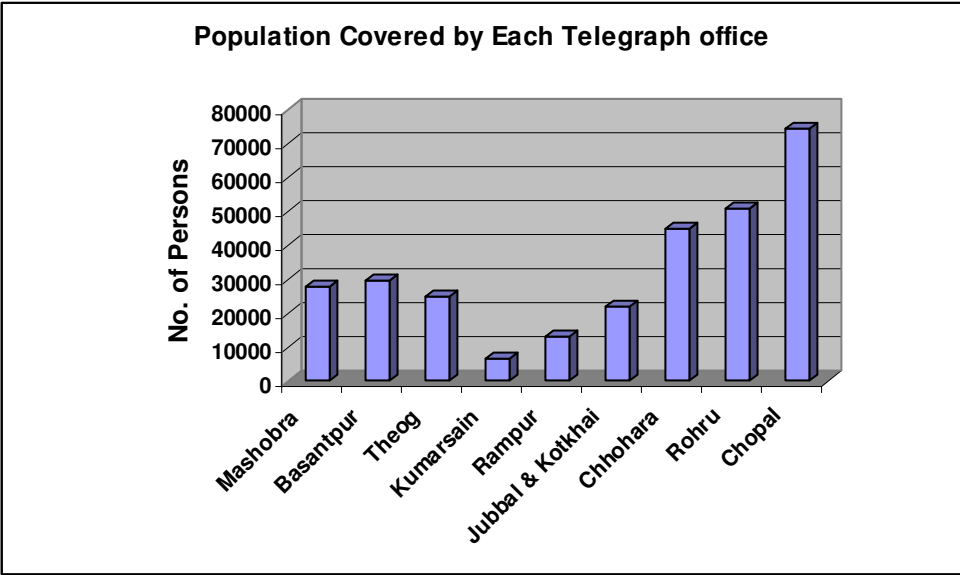


Fig. 5(d)

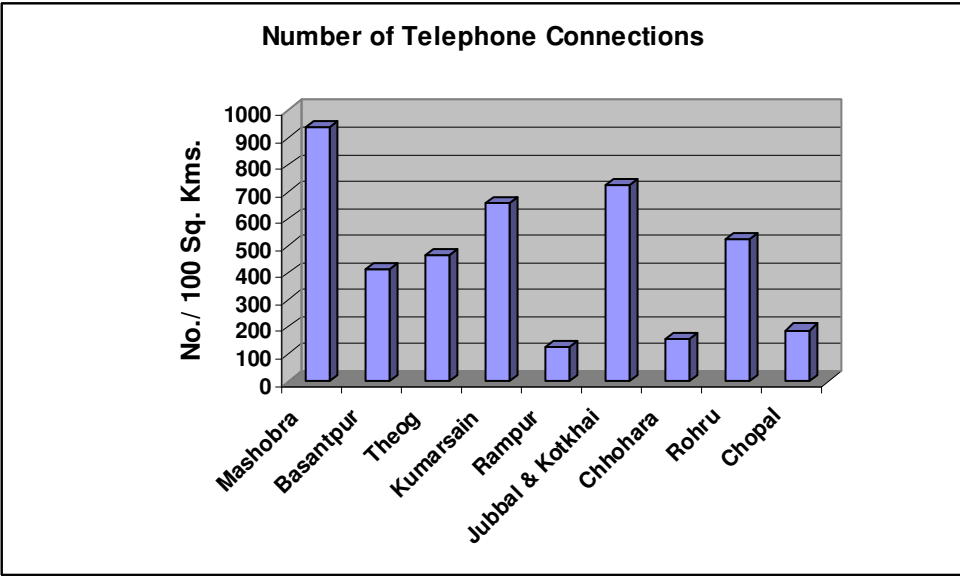


Fig. 5(e)

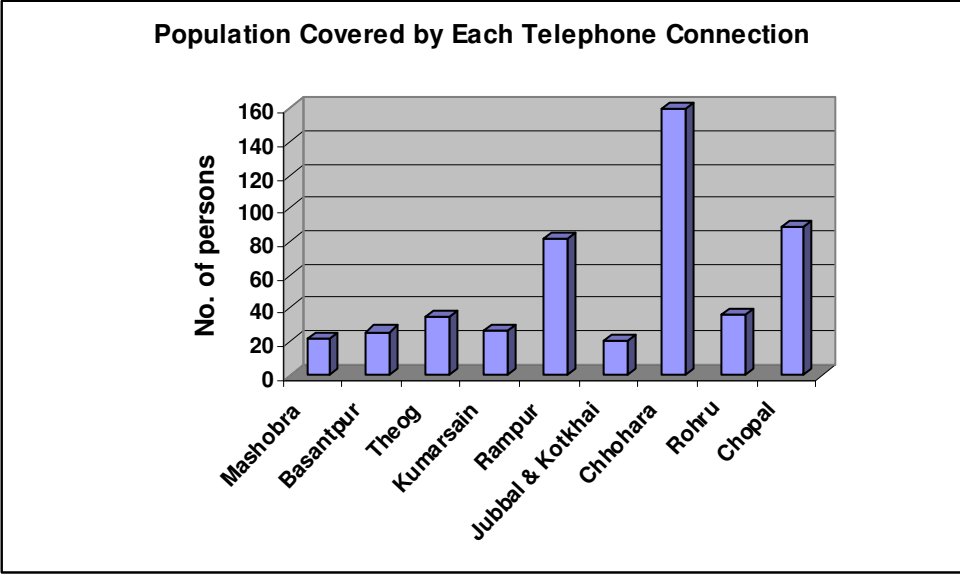


Fig. 5(f)

6.3 Drinking Water Facilities

The provision of clean and safe drinking water is of utmost importance for ensuring the health of the population. Any spread of waterborne diseases is bound to affect the economic activities and hence may reflect on the income levels, production efficiencies and ultimately lead to low quality of life. It is with this in mind that that extent of villages which have drinking water facilities has been analyzed along with the type of water sources existing in the villages. Table 6.6 provides the details. The analysis indicates that overwhelming majority of villages in all the blocks have drinking water facilities, either in the form of tap water or there are other sources like well, tank or hand pumps etc. The analysis indicates that the worst position in respect of drinking water facilities is in Rampur block where only about 66 per cent of the villages have access to drinking water facility and the next is Chhohara (74.72 per cent). On the other hand, the best placed block in this respect is Mashobra where about 94 per cent of the villages enjoy drinking water facility. However, by and large there is very little variation (9.85 per cent) among different blocks with respect to percentage of villages having drinking water facility.

The tap water is considered to be most safe and convenient way of providing drinking water, the analysis therefore has been extended to find out the percentage of villages having tapped drinking water. The pattern of distribution of villages having tapped drinking water is almost the same as the villages that have drinking water facilities. The lowest placed block in this respect is Chhohara and best placed is Mashobra block, where about 94 per cent of its villages have access to the water facility. Merely providing a single tap in a village may be as bad as having none at all. It therefore becomes important to find out the number of households being served by each tap and also the population covered by each tap. It may be seen from the table (6.6) that in Rampur block each tap is serving 81 households being the highest in the district.

The best placed block in this respect is Basantpur where the number of households served per tap is only 26. If one concentrates on the population being served by each tap, one can find that Basantpur is again best placed, with each tap serving 138 persons. This figure was as high as 372 for Rampur block. Rohru and Chhohara blocks also had each tap serving more than three hundred persons. This cannot be considered a happy situation by any standards. The value of coefficient of variation with respect to population covered per tap in different blocks turned out to be 31.88 per cent and number of households served per tap turned out to be 35.09 per cent.

In addition to tap water, the villagers were also using water for drinking from other sources like well, tank and hand pump etc. These sources are important for augmenting the meager water supply of taps. However, there is very small percentage i.e. 9.55 per cent of villages having wells, tanks or hand pumps in the village. The table further presents the existence of other water sources listed above. It may be seen from the table that about 4 to 28 per cent villages in each block have these water sources. There existed very high variations with respect to availability of wells, tanks and hand pumps. Further, each of these water sources covered about 701 households in the district, the least being in Theog block where such sources served 119 households and the highest number of households being served in Rampur block where each of the sources served 1818 households, followed by Rohru block (1281). Further, the least population served by each of these sources was again in Theog Block, 618 persons, and the highest in Rampur block where each of the sources was serving 8320 Persons.

Table-6.6
Drinking Water Facilities

Block	% of Villages having Drinking Water facility	Tap Water			Well, Tank, Hand Pump		
		% of Villages	Population Covered per Tap	No. of HH Covered per Tap	% of Villages	Population Covered	Population Covered per Source
Mashobra	94.29	93.53	153	30	9.31	1533	306
Basantpur	88.22	88.22	138	26	7.32	1664	317
Theog	91.72	85.29	200	38	27.58	618	119
Narkanda	89.24	88.17	243	53	17.74	1208	263
Rampur	66.38	76.39	372	81	3.41	8320	1818
Jubbal & Kotkhai	84.17	84.16	215	46	6.94	2612	555
Chhohara	74.72	74.16	342	63	5.05	5019	931
Rohru	88.77	88.77	306	62	4.28	6359	1281
Chopal	84.65	82.01	219	38	4.32	4161	716
Mean	84.65	84.52	243	48.55	9.55	3499.33	700.66
C.V.	9.85	6.90	31.88	35.09	92.52	76.15	80.28

Source: Village Directory, Amenities and Land Use, Census of India, 2001..

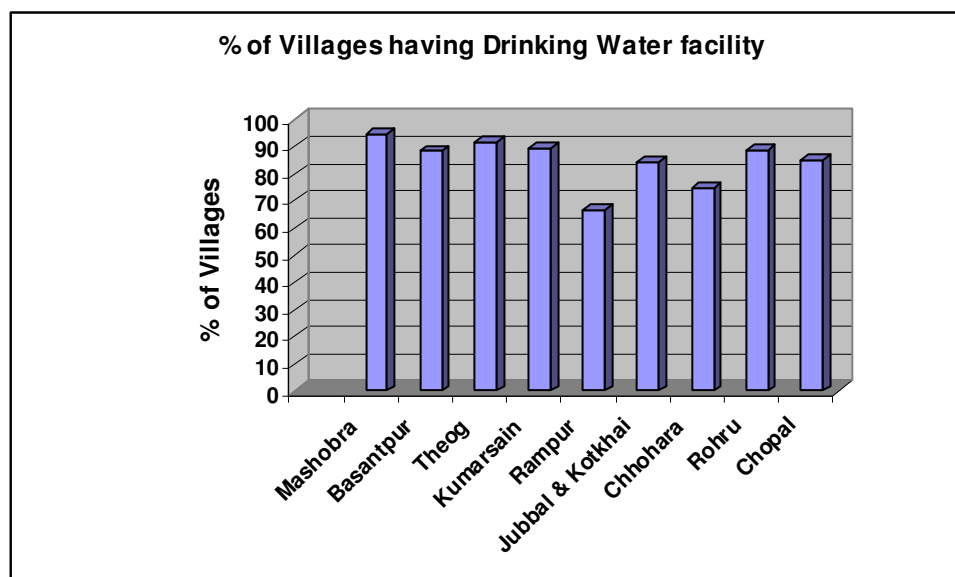


Fig. 6(a)

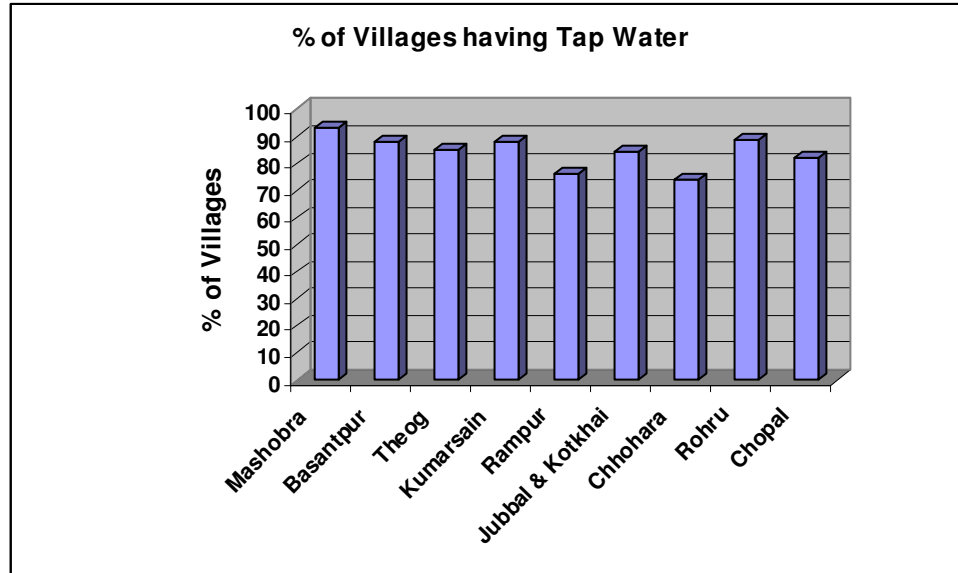


Fig. 6(b)

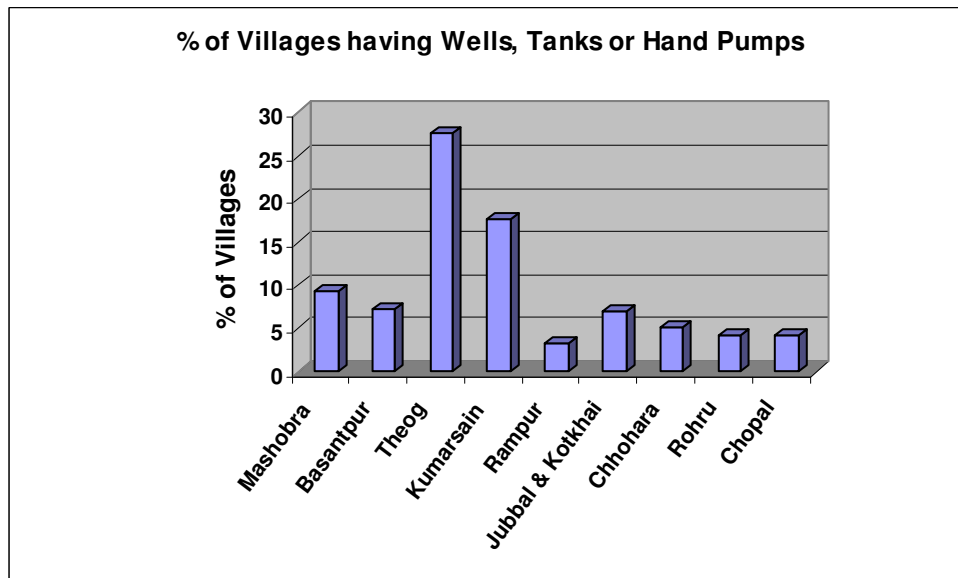


Fig. 6.(c)

Population and Geographical Coverage of Drinking Water Sources

Number of water sources expressed in terms of geographical area can be taken as important indicator of infrastructure in an area. The analysis revealed (Table 6.7) that, the population served by each source

stood lowest in Narkanda (238), followed by Basantpur (382) and Jubbal and Kotkhai (416). In contrast, population served by each source was highest in Rohru (2202), followed by Rampur (1884) and Mashobra (1822). The value of coefficient of variation with respect to this indicator stood at 85.85 per cent. As far as the geographical area covered by each source is concerned, it was lowest in Jubbal and Kotkhai (0.21 sq. kms.), closely chased by Narkanda (0.33 sq. kms.). On the other extreme, in Mashobra block there was only one tap in an area of 7.48 sq. kms. As a result of this, the extent of variations with respect to area covered by each source stood as high as 173 per cent.

Area served by each water source is another indicator, the analysis of which indicates that Jubbal-Kotkhai Block is best placed with each water source serving only 0.21 square kilometer of area. But on the other hand each water source in Mashobra block had to serve 7.48 square kilometer of area indicating that people have to devote their time and effort for fetching drinking water.

Table- 6.7
Coverage Provided by Drinking Water Sources*

Block	Population Served by Each Source (No.)	Area Covered by Each Source (sq. kms.)
Mashobra	1822	7.48
Basantpur	382	0.44
Theog	1251	1.33
Narkanda	238	0.33
Rampur	1884	0.69
Jubbal & Kotkhai	416	0.21
Chhohara	N.A.	N.A.
Rohru	2202	0.36
Chopal	502	1.33
Mean	966.33	1.35
C.V.	85.85	173

N.A. – Not available

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

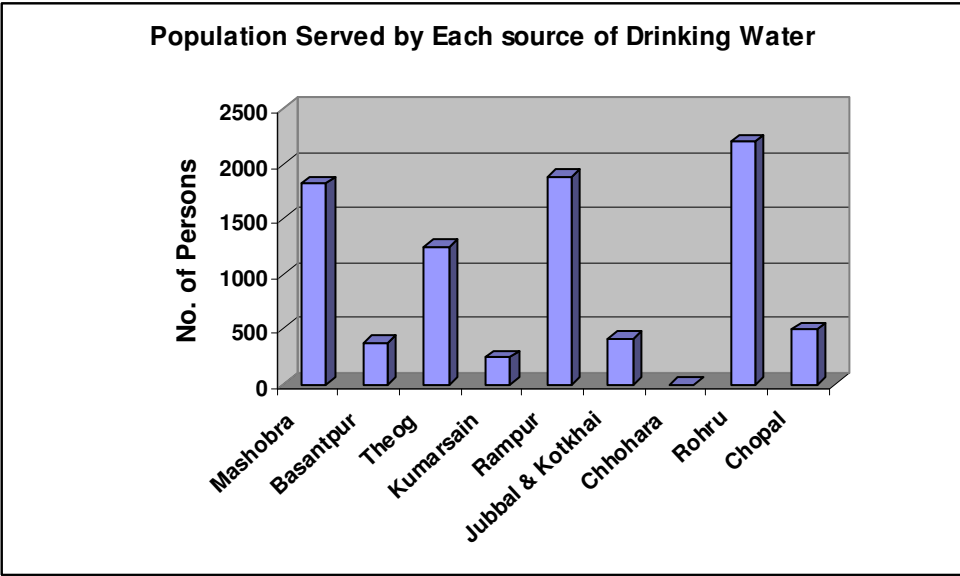


Fig. 7(a)

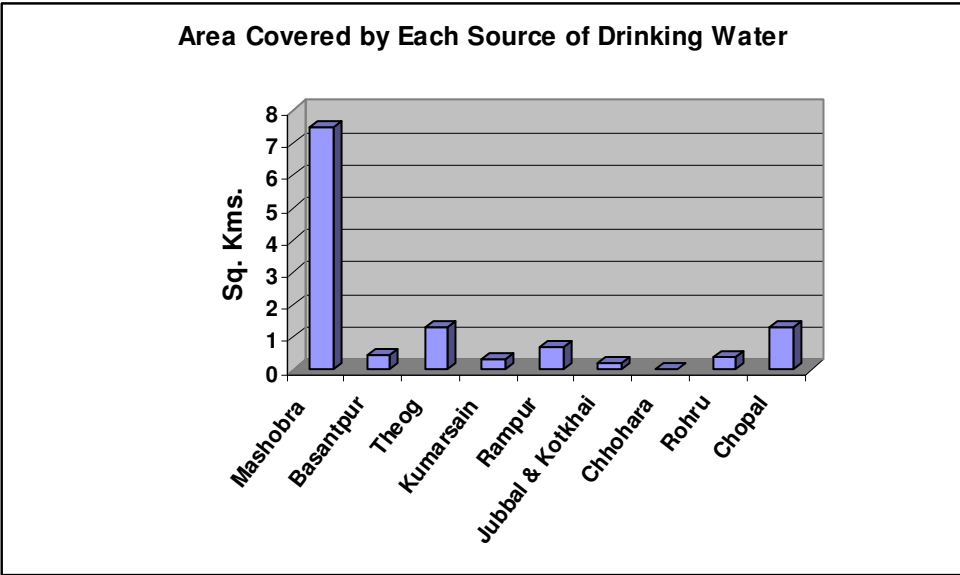


Fig. 7(b)

6.4 Credit Infrastructure

Whether it is farm sector or industrial sector, the availability of credit is crucial for financing the development activities. As the nature of

farming is becoming increasingly commercial, the farmers often have to resort to commercial borrowings for financing their short or long term credit needs. Realizing this importance of credit infrastructure, an attempt has been made to analyze the availability of credit infrastructure in the form of commercial banks, agricultural credits societies and non-agricultural and other credit societies. The results of analysis have been presented in table-6.8, which indicates that number of commercial banks per hundred square kilometers in district Shimla, on an average were 3.83 in each block. The highest concentration of commercial banks was in Narkanda block where there were 8.21 commercial banks per hundred square kilometers of the geographical area. Jubbal-Kotkhai (5.37) followed by Mashobra block (4.87) recorded second and third highest number of commercial bank branches per hundred square kilometers of area. Chhohara was last placed in respect of number of commercial bank branches with only 1.14 branches per hundred square kilometer of geographical area. Each commercial bank branch served on an average 4387 persons in district Shimla. The lowest number of persons being served by each commercial bank branch was in Rampur block (899 persons) and the worst position was in Chhohara block where this number is as high as 7529 persons, followed by Chopal (7262 persons). The extent of inter-block variation with respect to spread and population covered by each commercial bank branch turned out to be moderate i.e. 53.44 and 48.57 per cent respectively.

The farm credit, in addition to commercial banks, is also taken care of by agriculture credit societies. Many times the agriculture credit societies are more relevant to agricultural sector as compared with commercial banks. The analysis indicates that the number of agricultural credit societies per hundred square kilometer of the geographical area was on an average 1.69 in district Shimla. The highest concentration was in Jubbal-Kotkhai block with 4.25 agricultural credit societies per hundred square kilometer of area and least being in

Narkanda block where this number was 0.43 only. The co-efficient of variation turned out to be 69.59 per cent, indicating wide variations in spread of agricultural credit societies in district Shimla. The population being served by each society is quite high and on an average turned out to be 8825 persons in district Shimla. The highest population being served by each society was in Rampur block (13883) and least was in Narkanda block (2536 persons). Thus, Narkanda block is well placed in this respect and the position in Rampur block is most unsatisfactory.

In addition to commercial banks and agricultural credit societies, the analysis also takes into account the number of non-agricultural and other credit societies existing in different blocks. The analysis indicates that on an average there were 1.56 non-agricultural and other credit societies per 100 sq. kms. in each block of the district. In Narkanda block there were no non-agricultural and other credit societies but in Jubbal and Kotkhai block there were 6.03 non agricultural and other credit societies per 100 sq. kms, indicating large variation in this respect (111.68 per cent). Due to very small number of non-agricultural and other credit societies, each society has to serve large number of population, as is evident from the table 6.8. In Chhohara block each non-agricultural society had to serve a population of 22588 persons, being the highest. This is followed by Mashobra block where each society served a population of 21486 persons. The best placed block in this respect is Jubbal and Kotkhai where each society serves only a population of 2511 persons. The value of coefficient of variation showing the extent of inter-block disparities with respect to population covered by each non-agricultural credit society stood at 74.11 per cent. On an average each non-agricultural society in the district has to serve a population as high as 11385 persons, it is therefore indicated that the scenario of credit institutions is not up to the desired level in the district.

Table- 6.8
Credit Infrastructure

Block	Commercial Banks		Agricultural Credit Societies		Non-Agriculture and Other Credit Societies	
	No./100K m ²	Population Covered by Each	No./100K m ²	Population Covered by Each	No./100K m ²	Population Covered by Each
Mashobra	4.87	5297	3.17	6611	0.97	21486
Basantpur	2.79	3928	1.05	10475	1.39	7856
Theog	3.18	5197	1.27	12992	2.55	6496
Narkanda	8.21	2126	0.43	2536	0	0
Rampur	2.34	899	0.75	13883	0.75	13883
Jubbal & Kotkhai	5.37	2825	4.25	3569	6.03	2511
Chhohara	1.14	7529	0.76	11294	0.38	22588
Rohru	4.35	4421	2.01	9579	1.00	19159
Chopal	2.22	7262	1.54	8490	1.03	8490
Mean	3.83	4387	1.69	8825	1.56	11385
C.V.	53.44	48.57	69.59	43.57	111.68	74.11

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

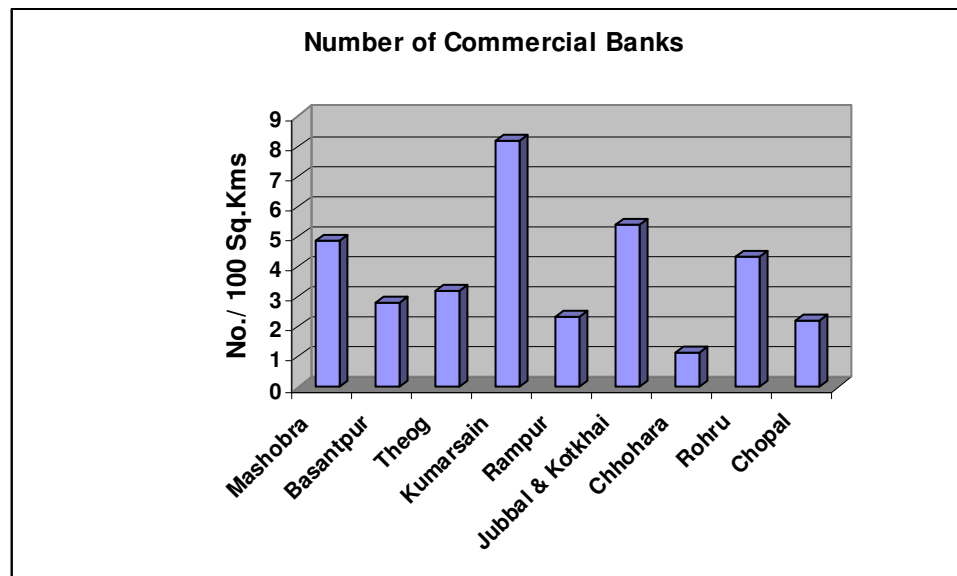


Fig. 8(a)

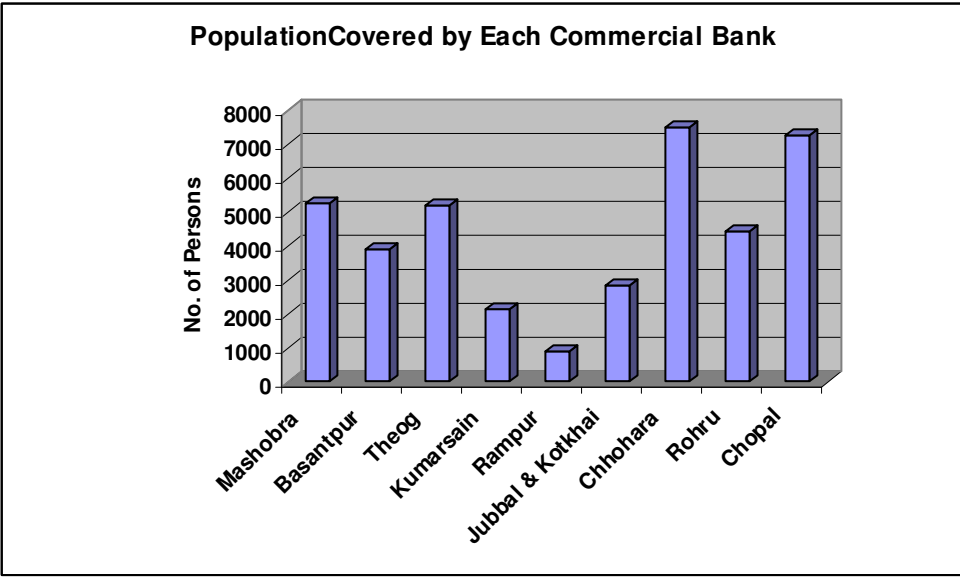


Fig. 8(b)

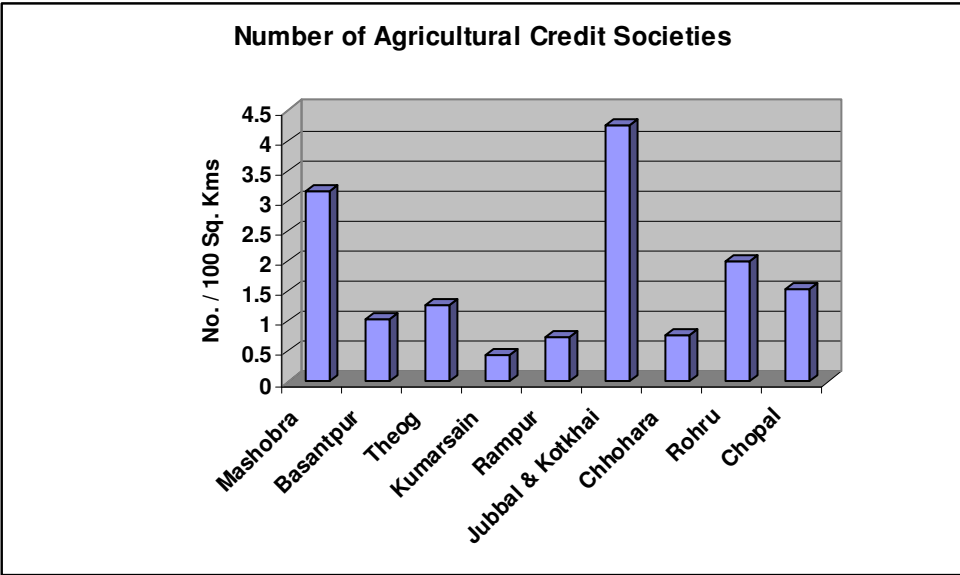


Fig. 8(c)

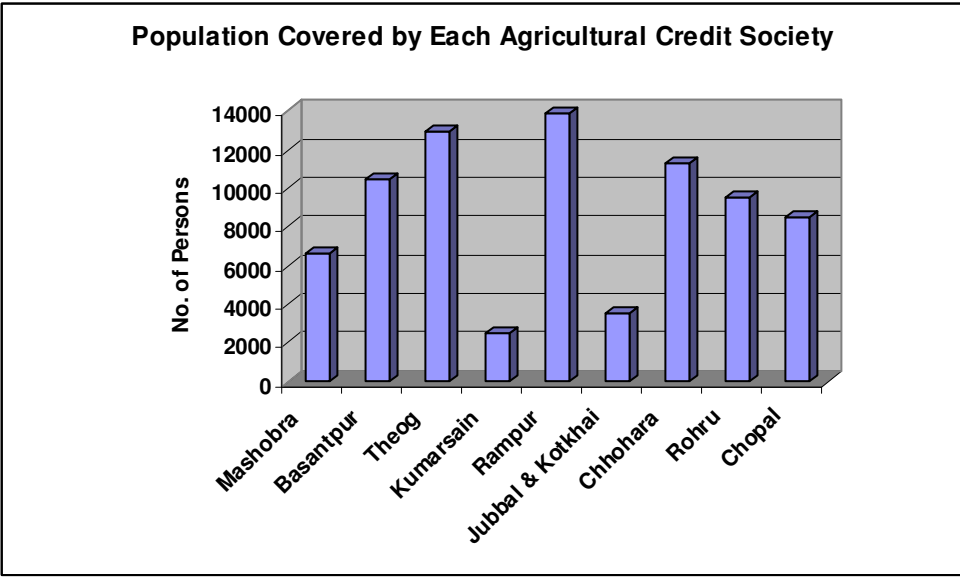


Fig. 8(d)

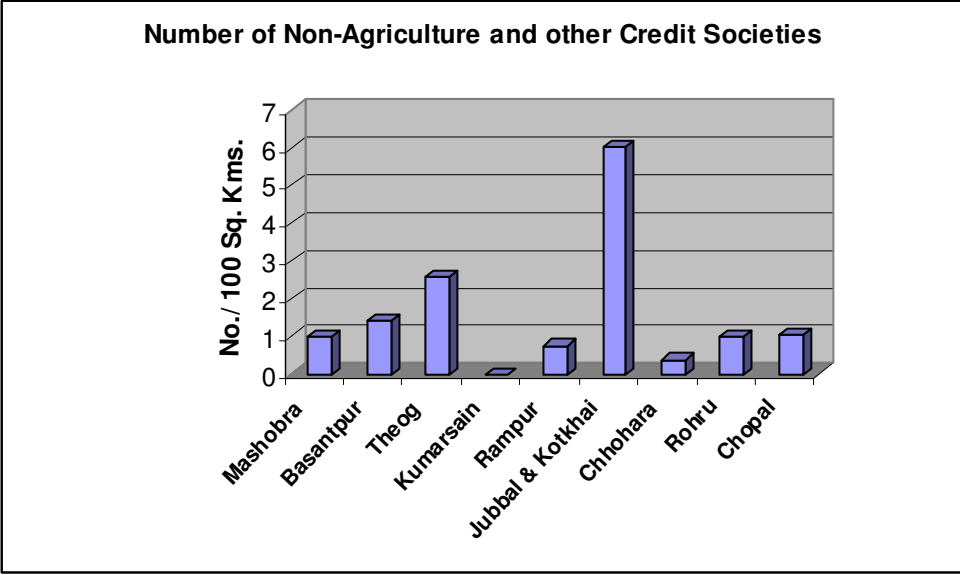


Fig. 8(e)

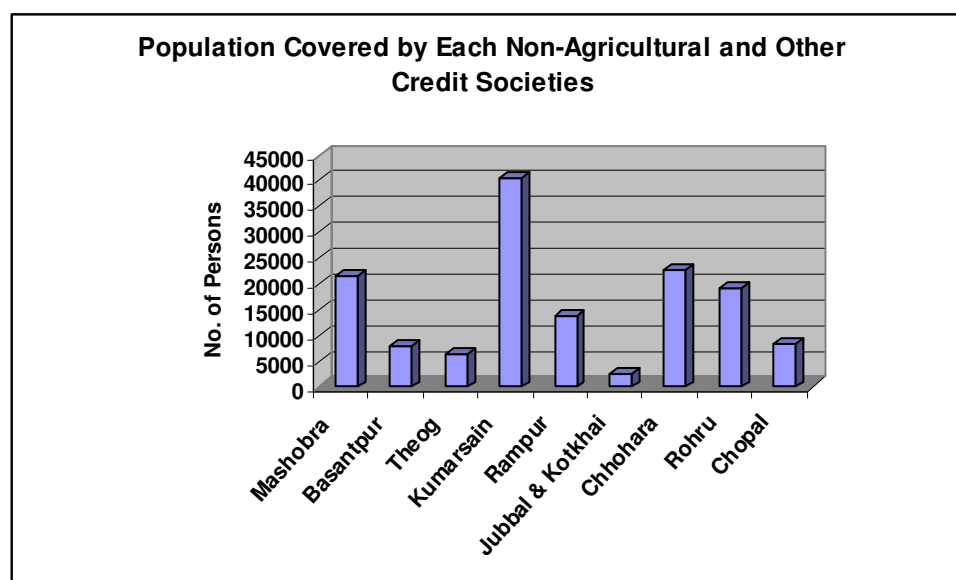


Fig. 8(f)

Banking Infrastructure

The analysis of banking infrastructure indicates that as on June 2006, in the district as whole there were 190 bank branches located in urban as well as rural areas. This includes the cooperative and land development bank branches. The average total deposits stood at Rs. 5900 lakhs against which the banks had advanced the loans worth Rs. 3983 lakhs. In addition to this, the banks had advanced loans worth Rs. 1494.63 Crores to priority sectors, Rs. 537.68 Crores to agriculture sector, Rs. 161.30 Crores to weaker sections of the society and Rs. 2.11 lakhs as loans on differential rates of interest. The indicator for judging the efficacy of banking system to the ordinary consumer of banking services is the credit-deposit ratio (C-D ratio). It is heartening to note that the C-D ratio for the district as a whole was 61 per cent, indicating that 61 per cent of the total deposits were advanced as loans to clients/entrepreneurs. The highest C-D ratio was in Chopal block (81 per cent) and least in Mashobra block (33 per cent) as shown in Table 6.9. Other blocks having low C-D ratios were Basantpur (35 per cent), Chhohara (37 per cent), Jubbal-Kotkhai (42 per cent), Rohru (43 per

cent) and Narkanda (45 per cent) which needs special attention by banks to enhance advances for productive purposes.

Loans advanced by banks showed a much higher co-efficient of variation (227.70 per cent) as compared to deposits (185.04 per cent), indicating a wide variation in loans advanced in some of the blocks. Though, overall C-D ratio for District Shimla had improved from 18 per cent in the year 2000 to 61 per cent in the year 2006.

TABLE-6.9
DEPOSITS, ADVANCES AND C-D RATIOS IN
DISTRICT SHIMLA

Block	Deposits	Advances	(Rs. In Lakhs)
			C-D ratio (%)
Mashobra	1926	629	33
Basantpur	1782	631	35
Theog	2114	1109	52
Narkanda	2526	1143	45
Rampur	1016	614	60
Jubbals & Kotkhair	1728	729	42
Chhohara	3133	1157	37
Rohru	3953	1686	43
Chopal	34928	28150	81
Mean	5900.67	3983.11	47.56
C.V.	185.04	227.70	31.82

Source: Lead Bank Office, UCO Bank, Shimla, 2006.

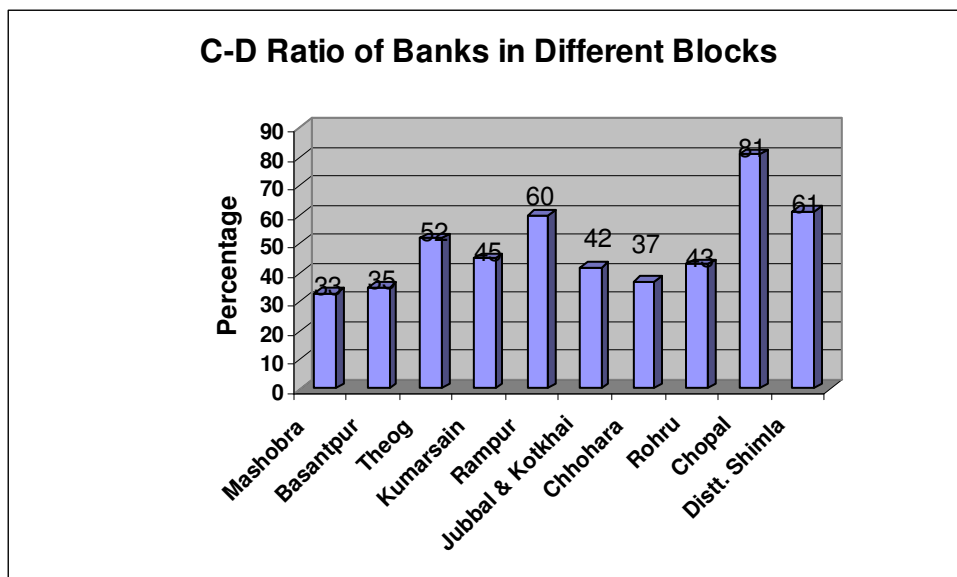


Fig. 9

6.5 Recreational Facilities

The importance of recreational facilities is very appropriately explained by an old idiom *All work and no play makes Jack a dull boy*. It not only has the psychological implications but from economic angle, the poor psychological make-up of entrepreneurs, as a result of fatigue and boredom, is reflected in poor work performance and hence resulting in low output per worker. This can have significant negative consequences, not only for the individual families, but for the economy as a whole. This fact makes the existence of such facilities a desirable aspect from economic point of view. The existence of recreational facilities is a positive indicator from development point of view. This, in the form of cinema and video parlours, sports clubs and stadia and auditoria, has been analyzed for all the villages located in different blocks of district Shimla. The results of analysis have been presented in Table 6.10.

The analysis indicates that the availability of recreational facilities is not up to the desired level in the district. In about 13 per cent of the villages the recreational facilities were not available at all. The percentage of villages that could enjoy the recreational facilities within a

distance of five kilometers ranged between about three to six per cent. About seven to 11 per cent villages had these facilities within a radius of 5 to 10 kilometers. However, majority of the villages, (from 70 to 75 per cent), could avail these facilities by traveling more than 10 kilometers. This is as good as not having these facilities at all. It is clearly indicated that majority of the villagers are not enjoying recreational facilities in the district. The picture emerging at district level is a composite of situation present in individual blocks, which has been presented for individual blocks in the following text :

Mashobra: In rural areas of Himachal Pradesh, the most common form of recreation is Cinema and Video Parlors. The percentage of villages having access to Cinema and Video Parlor facilities within 5 kilometers was quite less i.e. 5.10 per cent. Those within a range of 5 to 10 kilometers were 8.28 per cent and majority of them (79.62 per cent) had to travel a distance of more than 10 kilometers to avail of these facilities. The facilities of Sports Club and Stadia and Auditoria were available to very few vilages i.e. 0.76 and 1.52 per cent respectively within a range of 5 kms. More than 80 per cent of these facilities were available at a distance of 10 kms.

Basantpur : Information was not avaiialbe in respect of Cinema and Video Parlors, Sports Clubs, Stadia and Auditoria for 7, 12.10 and 12.11 per cent of villages of Basantpur block. Facilities of Cinema and Video Parlors were available to 5.10 and 8.28 per cent of villages with in a range of 5 kms., 5 to 10 kms. respectively. The percentage of villages having these facilities at a distance of more than 10 kms. was available to 79.62 per cent of villages. These percentages were 86.94 and 80.57 per cent in case of Sports Club, Stadia and Auditoria respectively.

Theog : There were mixed type of recretiioinal facilities within a range of 5 kms. in Theog block i.e. 3.91 per cent villages had access to Cinema and Video Parlors, 4.60 per cent had access to Sports Club and 1.38 per

cent had access to Stadia and Auditoria. This block was better placed within the range of 5 to 10 kms. i.e. 17.47, 7.36 and 19.08 per cent of villages had the facilities of Cinema and Video Parlors, Sports Club, Stadia and Auditoria.

Narkanda : Narkanda was better placed block in respect of access to recreational facilities. Here 16.67 per cent and 17.74 per cent villages had access to Cinema and Video Parlors, and Sports Clubs respectively within a range of 5 kms. This percentage had turned out to be 62.90 and 64.52 for a distance of more than 10 kms.

Rampur : For more than a quarter of villages, this information was not available. Cinema and Video Parlors facilities were available to 5.73, 4.97 and 64.29 per cent villages within a range of 5 kms., 5 to 10 kms. and more than 10 kms. respectively.

Jubbal – Kotkhai : More than 15 per cent of the villages were deprived of any recreational facility. Around 12 per cent of the villages had these facilities at a distance of less than 5 kms. and nearly 20 per cent had these located within a distance of 5 to 10 kms. In more than 50 per cent of the villages, these facilities were available after travelling a distance of 10 kms.

Chhohara : In this block, the listed recreational facilities were not available to about 25 per cent of the villages. Within a radius of 5 kms., there was not even a single Stadia and Auditoria. Sports Clubs were existing in only 0.56 per cent of the villages and Cinema and Video Parlors were available to less than 5 per cent of the villages. Within a distance of 5 to 10 kms. and more than 10 kms., Cinema and Video Parlors were available to 11.80 and 57.87 per cent villages respectively.

Rohru: The villages ranging between 10 to 12 per cent had no access to the listed facilities and in about 6 per cent of the villages, the facilities could be enjoyed within a distance of 5 kms. from the village. In about 9 per cent of the villages, one had to travel a distance of 5 to 10 kms. to enjoy these facilities. However, in about 72 to 74 per cent of the villages,

one had to travel a distance of more than 10 kms. to enjoy these recreational facilities.

Chopal: No information was available regarding recreational facilities in about 15 per cent of the villages. Access to Cinema and Video Parlors were available to 5.28, 10.31 and 69.05 per cent of the villages within a distance of 5 kms., 5 to 10 kms. and more than 10 kms. respectively. In Chopal block also, like others, the overwhelming majority of villages had these facilities at a distance of more than 10 kms. only.

It can be gathered that the recreational facilities like Cinemas, Sports Clubs and Stadiums etc. existed at a level far below the desired level in different blocks of district Shimla. One is dismayed to observe that about 75 per cent of the villages had no such facilities. As leisure is an integral part of the production activities, one can assume that monotony of work leads to lower production efficiency. It is always recommended that such monotony could be broken with indulgence in recreational activities, but sadly, such facilities are not available for majority of the rural people. The creation of such facilities will definitely increase the production efficiency and hence the income levels.

**Table-6.10
Recreational Facilities in District Shimla**

(Per cent of Villages)			
Availability within	Cinema & Video Parlors	Sports Club	Stadia and Auditoria
Mashobra			
Not available	0	5.90	6.08
< 5 Kms	5.10	0.76	1.52
5-10 Kms	8.28	5.51	11.22
> 10 Kms	79.62	87.83	81.18
Basantpur			
Not available	7.00	12.10	12.11
< 5 Kms	5.10	0.00	3.18
5-10 Kms	8.28	0.96	4.14
> 10 Kms	79.62	86.94	80.57
Theog			
Not available	8.05	7.81	8.05

< 5 Kms	3.91	4.60	1.38
5-10 Kms	17.47	7.36	19.08
> 10 Kms	70.57	80.23	71.49
Narkanda			
Not available	11.29	12.90	10.75
< 5 Kms	16.67	17.74	1.08
5-10 Kms	9.14	4.84	2.15
> 10 Kms	62.90	64.52	86.02
Rampur			
Not available	27.01	25.47	25.47
< 5 Kms	5.73	1.24	1.86
5-10 Kms	4.97	1.86	1.24
> 10 Kms	64.29	71.43	71.43
Jubbal-Kotkhai			
Not available	15.00	15.84	15.83
< 5 Kms	12.78	12.22	12.50
5-10 Kms	20.78	19.72	21.67
> 10 Kms	51.94	52.22	50.00
Chhohara			
Not available	25.84	25.28	24.72
< 5 Kms	4.49	0.56	0.00
5-10 Kms	11.80	3.37	2.81
> 10 Kms	57.87	70.79	72.47
Rohru			
Not available	12.30	10.16	11.23
< 5 Kms	5.88	5.88	5.88
5-10 Kms	9.09	9.63	8.02
> 10 Kms	72.73	74.33	74.87
Chopal			
Not available	14.87	15.34	15.35
< 5 Kms	5.28	2.16	1.20
5-10 Kms	10.31	6.00	2.16
> 10 Kms	69.05	76.50	81.29
Overall			
Not available	13.61	13.67	13.44
< 5 Kms	5.71	4.31	3.18
5-10 Kms	11.04	6.60	9.23
> 10 Kms	69.64	75.42	74.15

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

Extent of Coverage Provided by Existing Recreational Facilities

Only two blocks viz. Mashobra and Chopal had the facility of cinema halls and these covered an area of about 20 and 25 sq. kms, respectively (Table 6.11). All other blocks lacked this recreational facility. The other facility which was existing in almost all blocks except Narkanda, Chhohara and Chopal, was the existence of auditoria and sports club. It appeared, that there were number of sports club existing in different blocks and the area covered by each auditoria or sports club was as low as 0.64 square kilometers in Jubbal and Kotkhai block and as high as 3.74 square kilometers in Mashobra block. Thus, the analysis clearly indicates that though quite a few number of Sports Club and auditoria existed in most of the blocks but there is almost complete absence of Cinema halls in these. This is probably due to the fact that the population is thinly spread within the blocks, which makes the establishment of cinema halls a commercially unviable proposition.

Table-6.11
Coverage Provided by Existing Recreational Facilities

Block	Area Served per Cinema Hall	Area Served per Auditorium & Sports Club
Mashobra	19.96	3.74
Basantpur	0	1.76
Theog	0	2.00
Narkanda	0	0
Rampur	0	1.04
Jubbal & Kotkhai	0	0.64
Chhohara	0	0
Rohru	0	1.07
Chopal	25.03	0

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

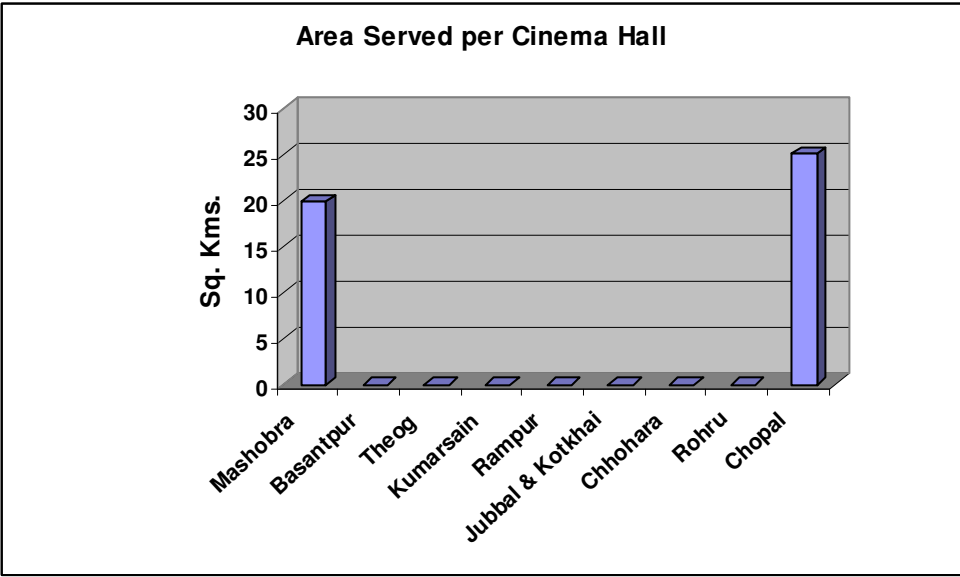


Fig.-11(a)

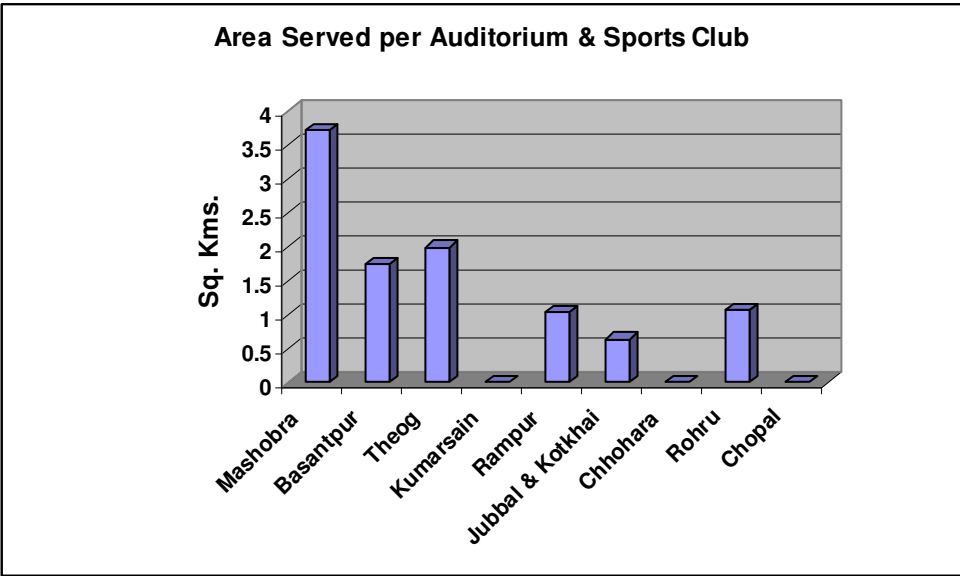


Fig.-11(b)

6.6 Entertainment and Print Media

Although there are many facilities which provide entertainment, but in the present context institutions like cinema and video halls, sports

club, stadium and auditorium have been considered as facilities providing entertainment. As already mentioned, the facility of cinema halls is there only in Mashobra and Chopal blocks in the district. However, there are number of video halls in different blocks of the district (barring Theog and Rohru). As cinema and video halls serve, by and large, the same objective, therefore, area served by each cinema/video hall is shown in Table 6.12. Each cinema/video hall in the district, on an average served 279 sq. kms of area. Area served by each cinema/video hall stood lowest in Chopal block (194 sq. kms.), followed by Narkanda (231.41 sq. kms.). On the contrary, in Chhohara block, followed by Jubbal and Kotkhai, each cinema/video hall served maximum of geographical area i.e. 523.06 and 447.22 sq. kms. respectively.

Next in the list was the sports club, which in addition to providing entertainment, is also important for the physical and mental development of the population. But the position in this regard is also not very satisfactory. There was one sports club in an area of about 181 square kilometers in the district as a whole, indicating poor coverage being provided by the sports clubs. There were no sports clubs in blocks like Basantpur, Theog, Rampur and Rohru. In rest of the blocks, each sports club had to serve an area ranging between 58 square kilometers in Narkanda block to about 523 square kilometers in Chhohara block.

Stadia and auditoria were existing only in Basantpur and Rampur blocks, where each of these was serving an area of about 286 and 938 square kilometers respectively. Thus, there existed exceptionally high inter-block variations with respect to availability of sports clubs (121.23 per cent), stadium and auditorium (231.83 per cent) in the district.

The next indicator in this respect is the percentage of villages having access to magazines. The analysis in this respect indicates that the percentage of villages where the magazines were available was only 26.78 per cent in the district as a whole. This figure varied from 3.93 per

cent in Chhohara block which was last placed in respect of availability of magazines, to 49.46 per cent in Narkanda block being highest placed in this respect. There was not much variation observed among different blocks with respect to percentage of villages having access to magazines.

Table-6.12
Entertainment and Print Media

Block	Area Served by Each (in sq. kms.)			% of Villages Having Access to Magazines
	Cinema & Video Hall	Sports Club	Stadium & Auditorium	
Mashobra	410.25	410.25	0	38.59
Basantpur	285.50	0	285.89	26.11
Theog	0	0	0	27.58
Narkanda	231.41	57.85	0	49.46
Rampur	312.62	0	937.86	17.39
Jubbal & Kotkhai	447.22	447.22	0	33.33
Chhohara	523.06	523.06	0	3.93
Rohru	0	0	0	23.52
Chopal	194	194	0	21.10
Mean	267.12	181.37	135.97	26.78
C.V.	68.79	121.23	231.83	45.61

Source: Village Directory, Amenities and Land Use, Census of India, 2001.

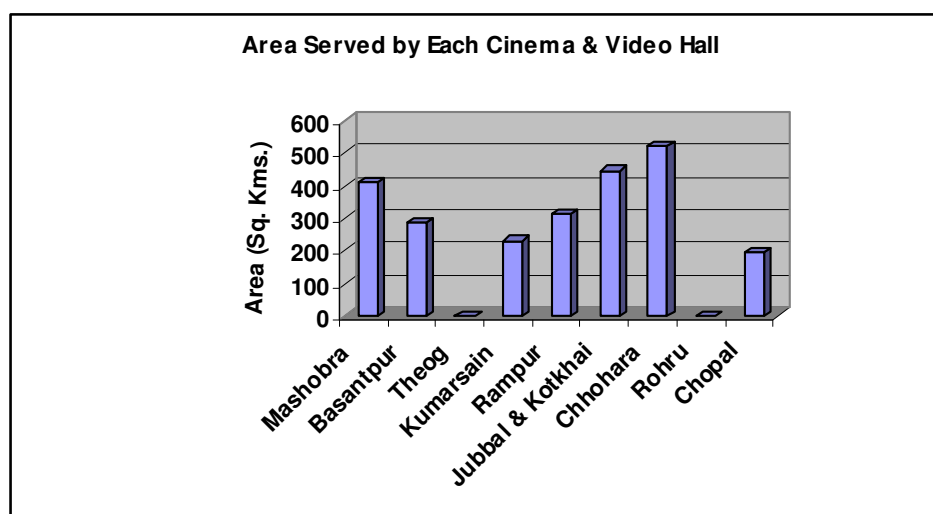


Fig.-12(a)

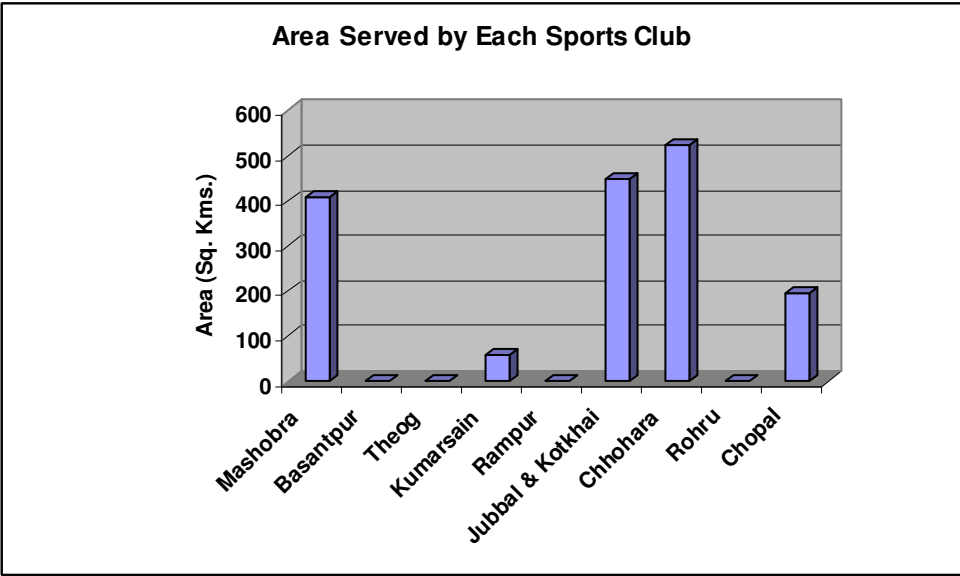


Fig.-12(b)

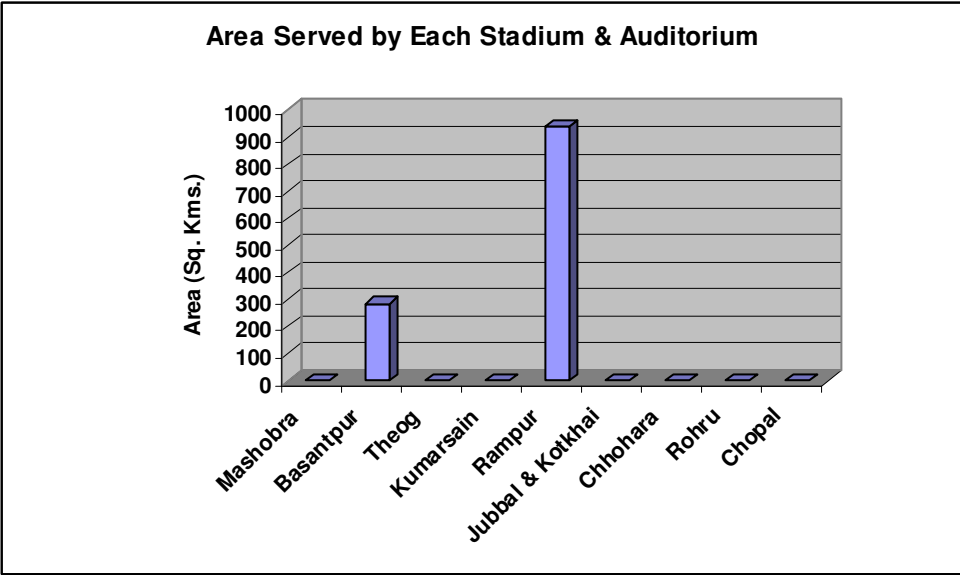


Fig.-12(c)

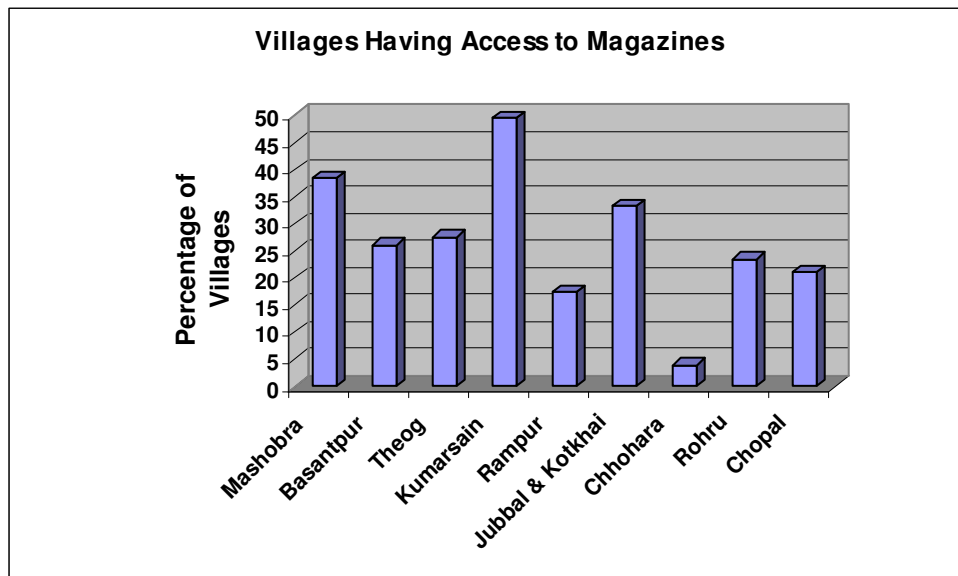


Fig.-12(d)

Summing Up

It is very difficult to develop a single statistic on the basis of which the current position of basic amenities could be evaluated and inter-block comparisons could be made. The position of different amenities in various blocks was different and under such circumstances the best alternative available was to rank the development blocks on the basis of different indicators and draw conclusions on the basis of these ranks. The ranks assigned to different blocks on the basis of important indicators have been presented in Table 6.13. It could be seen that on the basis of number of persons per census home, Rampur block was at the top and Chopal at the bottom as Rampur had the smallest family size. On the basis of percentage of villages having paved roads, Basantpur block was leading and Chhohara was at the end. Availability of bus facility was another important basic amenity and Narkanda block was at first rank in this respect and Chhohara block was at the bottom. The indicators of infrastructure development viz. number of post

Table-6.13: Ranks of Development Blocks on the Basis of Selected important Indicators of Basic Amenities.

Block	Persons/ Census Home	% of Villages Having		Communication Infrastructure (No. per 100 sq. kms.)			% of villages with Tapped Water	Credit Infrastructure (No. per 100 sq.kms.)			C-D Ratio of Commer- cial Banks
		Paved Roads	Bus Facility	Post Office	Telegraph Office	Telephone Connections		Commer- cial Banks	Agril. Societies	Non-Ag. Societies	
Mashobra	5	2	4	5	3	1	1	3	2	6	9
Basantpur	7	1	3	6	6	6	5	6	6	3	8
Theog	6	3	8	2	5	5	2	5	5	2	3
Narkanda	2	4	1	1	1	3	3	1	9	9	4
Rampur	1	5	7	8	2	9	9	7	8	7	2
Jubbal & Kotkhai	3	6	5	4	4	2	7	2	1	1	6
Chhohara	8	9	9	7	8	8	8	9	7	8	7
Rohru	4	7	6	2	7	4	4	4	3	5	5
Chopal	9	8	2	9	9	7	6	8	4	4	1

Source : Compiled on the basis of earlier Tables.

offices, telegraph offices and telephone connections per 100 sq. kms of geographical area presented a mixed trend, but Narkanda block appeared to be the best placed in terms of number of post and telegraph offices and third in respect of number of telephone connections. Chopal block appeared to be at the bottom in this respect. Mashobra block had the highest percentage of villages with tap water whereas Rampur performed worst in this respect. The ranking of basic amenities in terms of commercial banks, agricultural and non-agricultural credit societies, indicated that Narkanda block was at the top in terms of number of commercial banks per 100 sq. kms of area, whereas it had least number of agricultural and non-agricultural credit societies. The banks C-D ratio was the highest in Chopal block and least in Mashobra and hence could be ranked accordingly.

On the whole, Narkanda block occupied first rank in respect of existence of bus facilities, post offices, telegraph offices and commercial banks. Narkanda was followed by Jubbal-Kotkhai and Mashobra blocks. **Lesser developed blocks in terms of basic amenities were Chhohara and Chopal which needed high dozes of public investment in strengthening basic amenities.**

CHAPTER - VII

CONCLUSIONS AND POLICY SUGGESTIONS

In order to experience a balanced form of development, a region, a state, or even a country has to perform well; both in the matter of social sector development as well as in economic growth. Being more progressive in respect of one but lagging behind in respect of the other would not generate a balanced and a harmonious form of development. Exercises carried out to rank the states of the Indian Union in terms of different performance criteria help to bring out the pattern of development of various states. During the last couple of years, a popular weekly-India Today-has been ranking states of the country in terms of its own performance indices. This exercise of India Today has unambiguously ranked Himachal Pradesh among the leading states of the country in respect of primary health, education and literacy (the state's rank being second, first and second respectively, in the year 2005). Thus, the weekly had ranked Himachal Pradesh as third socially most developed state of the country in 2004 (see India Today, August 16, 2004⁴⁸, p.40, August 15, 2005⁴⁹). Himachal Pradesh overtook Kerala in Primary Education in 2004 and still retains top position. It overtook Kerala in Primary Health in 2006 and secured first position⁵⁰. It is second in infrastructure next to Punjab and catching up fast with it.

However, this state's performance in terms of economic parameters and economic growth are not equally impressive. Rather, in respect of this dimension of development, the state's performance has been somewhat of an average kind. For example, with regard to agricultural development, the state was able to muster a mere 16th rank according to

⁴⁸ *India Today*, August 16, 2004.

⁴⁹ *India Today*, August 15, 2005.

⁵⁰ *India Today*, August 15, 2006.

India Today, both during the years 2004 and 2005. In the matter of economic growth, although Himachal Pradesh has not been performing poorly, yet compared to its high rankings among states in respect of social sector development, its accomplishments have not been as outstanding. Himachal Pradesh's rank was 8th in respect of per capita NSDP at current prices (2002-03)⁵¹ among 25 states of the country.

Himachal Pradesh's excellent social sector development vis-à-vis other states needs to be viewed as a pre-existing potential instrument for faster economic growth of the state. Amartya Sen refers to it as "enabling social changes". According to him, such pre-existing stock of resources generated by education and health facilities empirically explains the rapid economic growth experienced by China and other East Asian countries in their post-reform periods. Similar views are expressed by UNDP when it says that "Social investments are required for sustained economic growth". And also "Big gains in health and education are required before per capita incomes can be raised substantially" (UNDP, 2003)⁵². There exists a strong potential for accelerating the rate of economic growth in Himachal Pradesh. Another component of such a potential that exists in the state is relatively related to more developed physical infrastructure. According to **India Today**, Himachal Pradesh ranked 2nd in this respect among the big states of the country during both 2004 and 2005.

The necessary big investments in creating social infrastructure for education and health care as well as providing physical infrastructure in the form of roads, power projects, telecommunications, etc. have already been made. Efficient use of such a pre-existing potential will result in a much higher rate of economic growth. Once this has been done, the hill state would come to be counted among the top ranking progressive states exhibiting features of balanced and harmonious development.

⁵¹ Government of India (2004). *Economic Survey 2003-04*, New Delhi, p. S-4.

⁵² UNDP, *Human Development Report 2003*. Oxford University Press, New Delhi.

The concept of Human Development focuses on the ends rather than the means of 'development' and progress. The real objective of development should be to create an enabling environment for people to enjoy long, healthy and creative lives. Though this may appear to be a simple truth, it is often forgotten in the immediate concern with the accumulation of commodities and wealth.

Planning Commission of India and UNDP has made it mandatory for all the states to make its State Human Development Report. Human Development Reports can be defined as "tools of action", as they help in focusing on Human Development issues and influencing interventions. In a large country as India, where regional disparities have long persisted, it is essential to focus human development analysis at a more disaggregated level.

After preparing State Human Development Reports, comprehensively analyzing inter-disparities in human development attainment, it is a natural corollary that District Human Development Reports (DHDRS) be prepared in order to gain deeper understanding of the issues at the districts level. Moreover the 73rd and 74th constitutional Amendment Acts mandates the preparation of district level plans. According to these amendments, the involvement of PRIs and other stakeholders in preparing district plans is mandatory. Preparation of DHDR has given an opportunity for preparing district plans from a human development and area specific perspective.

District level Human Development Indices (HDIs) in Himachal Pradesh were worked out for the first time in the **Himachal Pradesh Human Development Report 2002**. Shimla District occupied second and third rank in District-wise HDIs for the years 1991 and 1997 respectively. But at disaggregated level, Block-wise HDIs could not be calculated for Shimla district. This is primarily because the basic indicators required to calculate the HDIs are per capita income of the block, Infant Mortality Rate (IMR) of the block and gross enrolment ratio

(primary, secondary and tertiary level) and this data is not available at the block level. Whatever data is available, that is not reliable. Hence, it was decided not to prepare Block-wise Human Development Indices as they would not be comparable and meaningful.

Instead, block-wise data has been presented in different sections of this Report, dealing with health, education, agriculture, demography and basic amenities and representation in PRIs. The emphasis is on key human development indicators, access to services and utilization of services by the people. To the extent possible gender, rural-urban, social groups-wise disaggregated data analysis has been done.

Primary reason for departure is non-availability of relative and comparable block-wise data.

7.1 CONCLUSIONS

On the basis of the analysis done in the previous chapters, the following conclusions can be drawn :

The area of district Shimla is 5,131 sq. kms. It is bounded by Kinnaur district in the Northeast, by Kullu and Mandi district in the Northwest, by Solan and Sirmour districts in the Southwest and by the state of Utrakhand in the Southeast. The district comprises seven subdivisions and seventeen tehsils and sub-tehsils. For the rural development, the district has been divided into nine community development blocks namely Rampur, Narkanda, Theog, Mashobra, Chopal, Jubbal and Kothkhair, Rohru, Chhohara and Basantpur.

Agriculture is the primary occupation of the people in the district. The different types of soils and agro-climatic conditions are quite suitable for growing varied type of cereals, off season vegetables, temperate and stone fruits and other cash crops in the district. Whereas lower elevations are suitable for the production of cereal crops, stone and citrus fruits, places in higher elevations, are most suitable for the growing of seed potatoes, off season vegetables and temperate fruits.

Apple production has proved to be a major instrument in changing the economic lot of masses in the district.

Due to difficult geographical terrain, industrial sector is quite poor in the district. However the percentage share of district Shimla with respect to total fixed investment, investment in plant and machinery and in total production, made by registered modern small scale industrial units in the state, increased marginally in the year 2001-02, as compared to the year 1987-88. An examination of industrial set up in district Shimla revealed, further that both investment per unit and employment per unit (both in SSI's and in the small, medium and large scale units taken together) is quite low in the district vis-à-vis the state as a whole. Whereas, investment per small scale industrial unit has marginally moved up, employment per SSI unit has marginally declined in the district.

A decennial analysis, of growth of population in district Shimla revealed that the population recorded a positive growth, in each decade, except the decade 1901-1911. In contrast to 207 per cent increase, in male population during the last century, female population recorded marginally higher i.e. 222 per cent increase in district Shimla. Whereas in the year 1991, 79.57 per cent of total population lived in rural areas, in the year 2001, 76.85 per cent of population lived in rural areas in the district. However, as against it, the corresponding figures for the state as a whole stood at 91.31 per cent and 90.20 per cent respectively during the years 1991 and 2001.

Sex ratio has been quite unfavourable in the district right from the beginning of the last century. In the year 1901, sex ratio was 853 in the district. It was 894 in the year 1991, and marginally improved to 896 in the year 2001, yet this value is much lower, when placed against the sex ratio of 970 for the state and 933, for the country as a whole. Among different blocks, overall sex ratio

stood highest in Basantpur block followed by Chhohara block. On the contrary, it was lowest in Mashobra and Rampur block.

An important observation made with respect to sex ratio is that as compared to overall sex ratio, sex ratio in the age group of 0-6 years, on an average stand on a better footing in the district as per 2001 Population Census. However, it was not so in case of all the blocks of the district. In all the blocks, in rural areas, overall sex ratio stood higher than in urban areas. Further, in all the block as compared, to over all sex ratio, sex ratio in SC group stood higher (except in Basantpur block). In case of SC group also, just like in overall population, in rural areas (in all the blocks) sex ratio turned out to be better vis-à-vis the urban areas. The analysis of sex ratio in ST group remained inconclusive in view of exceptionally low population figures of this group in most of the blocks in district Shimla.

Average female work participation rate stood at 44.24 per cent in the district and the corresponding value for males turned out to be 57.51 per cent. In Mashobra, gender gap in work participation rate stood highest. On the other hand, in some of the blocks like Basantpur and Chhohara there was insignificant difference in male- female work participation rate. In all the blocks, rural work participation rate stood more than urban work participation rate. Whereas in Theog and Rohru blocks, the percentage difference between rural and urban work participation rate, turned out to be highest, in Chopal and Narkanda block the gap stood lowest. Though within the rural areas, there is very little gender gap in work participation rate, but in contrast, this gap is quite substantial in the urban areas. In terms of rural-urban areas also, there existed a big gap in gender work participation rate. An analysis of the values of co-efficient of variation, revealed that there are very nominal variations among different blocks, whether it is overall work participation, overall female/male work participation rate, rural/urban

work participation rate. But in contrast, there existed large inter-block disparities, when gender gap in work participation is considered.

A study of panchayat administration in district Shimla revealed that out of total panchayat members, as against 59.42 per cent male members, the share of female members stood at only 40.58 per cent. Out of total panchayat members, 67.18 per cent of members belonged to general category and 32.77 per cent to SC category. As far as gender empowerment as reflected through the decision making power of women, on account of holding the position of pradhans in various panchayats is concerned, in contrast to 66.12 per cent male pradhans, there were only 33.88 per cent female pradhans. **The mandatory norm of 33 per cent of women participation was satisfied in all the blocks of the district.**

There was very nominal difference, among various blocks, with respect to panchayats per 100 sq. kms., as reflected through the value of co-efficient of variation. However, as compared to it, there were relatively high inter-block disparities with respect to population served per gram panchayat.

For any region and its people, educational attainments are an important factor determining its pace of economic growth as well as its level of human development. In the year 1991, Mashobra development block had the highest overall literacy rate, while Chhohara had the lowest. Further it was seen that, the female literacy rate of overall population in 1991 was less than 50 per cent in as many as six out of nine development blocks of the district. Among the disadvantaged groups of SCs are STs, Basantpur development block had the highest literacy rate, while again, Chhohara (along with Chopal) had the lowest literacy rates. It was quite shocking to know that the female literacy rate among SCs was just 10.71 per cent in the Chhohara development block, and the female literacy rate among this disadvantaged group was less than 40 per cent in as many as six development blocks. Whether one takes the

overall population, or that of the SCs and STs, the literacy rates of the urban residents were much higher than those of the rural population.

Except Mashobra and Basantpur, all other development blocks of the district have recorded impressive gains as evident from 2001 census. Male literacy rate has exceeded 84 per cent in all the development blocks, except Chhohara and Chopal blocks. And even female literacy rate is no where less than 60 per cent, except in Chhohara block. Overall, the state of literacy in Shimla district according to the 2001 population Census, seems to be quite creditable. Interestingly, in 2001, the STs had higher literacy rates than the overall population in 5 out of 9 development blocks, though the absolute number of the former group of people in Shimla district is relatively small. Another significant fact which emerged from 2001 census is that the literacy rates in rural and urban areas are not significantly different from each other. Rural males have a literacy rate of more than 73 per cent in all the development blocks. Even rural females have not lagged far behind in this respect. In six blocks, their literacy rate exceeded 60 per cent. The urban overall population has of course higher literacy rate with male literacy rate being 90 per cent or more. The urban females did not lag much behind. Their literacy rate ranges between 82 per cent and 89 per cent.

It is creditable that the SCs are closing the literacy gap with overall population both in the rural and the urban areas. Even their females seem to be acquiring literacy in increasing numbers so that even their literacy gap with the females of overall population is narrowing. But in the case of overall population, Chhohara development block has the lowest literacy rate of 58.10 per cent, and this is as much as 31.31 percentage point behind that of the highest literacy rate of Mashobra development block. Even Chopal block has been lagging behind the rest of them in this respect. In Chhohara development block, the literacy rate of SCs and STs too was the lowest.

The overall literacy gap between males and females is quite high in all development blocks of Shimla district, except the Mashobra block. As between the rural and urban areas, the overall literacy gap is much higher in the rural areas. Whether it is total literacy gap or that of rural areas, the gap is exceedingly high in Chhohara and Rohru development blocks. Even Rampur and Jubbal-Kotkhai blocks have fairly high literacy gap. **Among SCs, the total literacy gap is very high in all the development blocks. One has to bridge gender gap in literacy if one wants to do away with gender discrimination.**

In the case of Primary schools, the percentage of girls enrolled more than the boys is noted to be in six out of the 17 educational blocks. Thus, overall the position is not very happy in this regard in district Shimla. Out of the total enrolment in Primary schools in the district, that of boys is 51.05 per cent and that of girls 48.95 per cent. In the case of Middle schools, the enrolled girls outnumbered the boys only in 5 educational blocks. So, in this case too, out of total enrolled students, the percentage of boys is 51.5 per cent and that of girls 48.5 per cent. It is heartening to note that the share of the SC and ST students in total enrolment, both at the Primary and Middle school levels, is much higher than the share of these two categories of people in the total population.

Mashobra block leads the rests of blocks in the matter of educational institutions of different categories in relation to its geographical area. Even Narkanda, Rohru and Jubbal-Kotkhai development blocks have a fairly high number of Primary, Middle and High schools. Rohru block has even more Senior Secondary schools and colleges in relation to its geographical area. Chhohara development block is perhaps the most lagging area of Shimla district in the matter of educational attainments. This block has the lowest number of different categories of educational institutions in relation to its geographical area, Rampur block also falls in the same category.

In the year 2001, there are a large number of habitations about which the information about the nature of access to educational institutions is not available. It appears that, with the passage of time, more and more schools have been opened, but the distance from habitations to them has also increased. It is observed that Chopal development block had as many as 31 villages, having Primary schools at a distance of between 5 to 10 kms. And Jubbal-Kotkhai block had 3 habitations with Primary schools located at a distance of 10 or more kms. A very large number of villages in different development blocks had Middle schools at a distance of between 5 and 10 kms. Chopal block had even 18 villages with Middle schools located at a distance of 10 kms. or more.

It was observed that in Primary schools, the teacher-pupil ratio was the lowest, i.e. 15 in Basantpur development block, while on the other hand, the highest ratio, i.e. 21 was in two development blocks, viz. Chhohara and Chopal. In Middle schools, the credit of having the lowest ratio goes to Jubbal-Kotkhai development block, while the highest was in Rampur and Chhohara blocks. Among all categories of schools, the Middle schools had the lowest average teacher-pupil ratio. The average teacher-pupil ratio is relatively higher in High schools (along with the Senior Secondary schools), perhaps because the number of such schools is smaller and therefore, more and more students, after passing class eighth, join them. Among the High schools, 5 blocks had this ratio exceeding the figure of 20. As many as 7 development blocks had a teacher-pupil ratio exceeding the figure of 20 in the Senior Secondary schools.

The average teacher-pupil ratio of all categories of schools, in each development block of Shimla district is quite encouraging. A ratio of around 20 students per teacher is academically quite desirable. Mashobra development block has performed the best in terms of all except one of the indicators of educational attainment

studied in this report. This is followed by Theog and Basantpur blocks. On the other hand, the development blocks with a poor performance in educational attainments are Chhohara, Rampur, Chopal and Rohru.

As per 2001 census, Rural population is 76.75 per cent and Urban population is 23.15 per cent in District Shimla. The latest estimates for life expectancy at birth for India and Himachal Pradesh are 63 and 64 years, which shows that people expect to live more than 65 years. Crude death rate for India and Himachal Pradesh are 8.7 and 7.1 respectively. However CDR for the district has been estimated at 3.84 which is significantly lower than that of the state. The low CDR is indicative of the fact that level of health care services is good in the district, the fact easily substantiated by the wide network of health facilities, including tertiary care institutions and private hospitals.

IMR estimated for the district stands at 18.4 per thousand live births. Neo- natal mortality rate is 8.4 per thousand live births and post-neonatal mortality rate is 10.1. These figures are far less than the state and national figures and compares with the best in the Country Child Mortality Rate as 14.1 for India, 8.3 for the state and for the district is nil. Under 5 mortality rate for the state is 42.4 while the same for the district is 18.4 per thousand live births. Mortality indicators for children are indicative of good child care services available in the district.

Number of fully immunized children was 83 per cent (82 per cent female, 84 per cent male children) and 3 per cent children had no vaccination. Another significant improvement has been in institutional deliveries which shot up to 62 per cent, against the state figure of 45 per cent. Out of these, 60 per cent were carried out in government institutions and 3 per cent in private institutions. Significant decline in the fertility levels has been achieved in the state i.e. TFR at 2. However estimates of TFR for district Shimla is quite low i.e. 1.369 which is indicative of people having accepted small family norm having one or two

children. The mean age at marriage for boys was 26.3 years and for girls it was 22.2 years.

Coverage norms for opening Primary Health Care Institutions fixed by Government of India have by and large been achieved. On an average, one Sub- Centre covers population of 2243, which is less than the state norm (3000). On the other hand, population served by one Primary Health Centre is 7206 against the norm of 20,000. A large number of PHCs and Sub-Centres are functioning from private or rented buildings.

Availability of manpower is adequate in various health institutions. No institution is without doctor but there exist 23 Sub-Centres, which are without Female Health Workers. Due to shortage of specialist in the state, specialists are not available in all CHs and CHCs. This is likely to pose a serious problem in making FRUs operational under NRHM. This District has an endemic focus of plague which extends in three blocks, Jubbal-Kotkhai, Rohru and Chhohara.

Though there are 565 Primary Health Institution, including ISM institutions, not all 363 Gram Panchayats has one institution in their area. 34 Gram Panchayats are without any facility. It clearly brings out uneven distribution of health institutions as some Gram Panchayats have more than one institution. With respect to Male Health Workers, the situation was quite bad in Chirgaon, Jubbal-Kotkhai and Chopal blocks where 13,15 and 13 posts were vacant out of 20, 33 and 27 sanctioned posts respectively. Mashobra was better placed block where only 4 posts were vacant out of 42 sanctioned posts. As per as Female Health Workers are concerned, the worst blocks were Chopal and Chirgaon, where 17 and 8 posts were vacant out 28 and 20 sanctioned posts respectively.

The analysis indicated that the availability of Primacy Health Centres (PHCs) facilities in the villages was not up to the desired level. In majority of the blocks namely Mashobra, Theog, Rampur and Chhohra, there are less than 30 per cent villages having PHCs within a range of 5

km. There are only 3 blocks namely Chhohra, Narkanda and Mashobra where PHCs range between 5 to 10 km. distance in more than 30 per cent of the villages. There were more than 50 per cent villages in Chopal, Theog and Basantpur block where people had access to PHCs at a distance of more than 10 kms.

Out of nine blocks of Shimla district, only Basantpur, Rampur and Theog are having MCH facilities within a radius of 5 kms. in 8.28, 8.69 and 9.66 per cent of the villages. As far as, all health facilities at a distance of more than 10 kms. are concerned, Chopal is the single block which is having maximum number of villages i.e. 78.65 per cent, followed by Rohru (72.19 per cent), Theog (68.57 per cent) and Mashobra (64.23 per cent). This is because, Chopal block is having PHCs and MCH at a distance of more than 10 kms. in 50.36 and 56.63 per cent of villages.

There is very less inter-block variation with respect to population covered by doctors as far as PHCs is concerned i.e. 34.04 per cent. However, there is relatively high inter-block variation in the district with respect to population covered per civil hospital i.e. 73.80 per cent. This is because there are some blocks namely Basantpur, Narkanda and Chhohara where there is not even a single hospital.

Implementation of Reproductive and Child Health Programme in the district present a mixed scenario. Where as the trend of immunization of children and institutional deliveries is on the rise, the same cannot be said about maternal care and temporary methods of contraception. Women bear the double brunt of fertility and contraception. Male related methods are marginal. **The figures for institutional deliveries has gone up to 76.35 per cent in district Shimla as a result there is reduction in infant and maternal mortality. Most of the deliveries are being conducted in distantly located Civil Hospitals including Medical College Kamla Nehru Hospital Shimla. This trend reveals either low quality care provided by PHCs or expectations of people are high. But it is not cost**

effective situation. District has attained near universal immunization of infants before the turn of the century and that status is maintained.

Water borne diseases group is major burden of diseases, not only in the district but in the state also. District Shimla has an endemic focus of plague. The plague belt extends from Kharapathar and Mural forest range in Jubbal-Kotkhai block to Tangnu village in Chhohara block. A plague surveillance unit has been set up in CH Rohru which conducts surveillance activities in this belt.

On the Criteria of coverage by Primary Health Care Institution, availability of beds per one thousand population, doctor-population ratio, availability of diagnostic facilities in the block and availability of First Referral Unit (FRU) facilities in the block, ranking of the blocks was done. **On this basis, Rampur scores first rank, followed by Rohru and Mashobra. Chopal came out to be the most under served and deprived block. In this block, most of the Sub-Centres are without health workers and some of the PHCs are without doctors and diagnostic facilities are only at Block Headquarter at Chopal. All emergency patients are referred to district headquarter which is 130 kms. away. This block needs immediate attention of the authorities.**

In Shimla district agriculture is the main occupation of the people. The district has favourable agro-climatic conditions for growing temperate fruits and vegetables, which have great demand in the markets of plains in the country. Consequently, the farmers are shifting their land towards these crops.

Size of holding was slightly bigger in district Shimla than the state average. However, average size of holding among SC and ST was lesser than that of general category farmers in district Shimla. Size of holding is sharply going down over the years.

The distribution of land is quite uneven in district Shimla. Inter-block disparities with respect to number of medium and large-scale

operational holdings stood quite high in district Shimla. Net sown area was marginally more in the district than the state average as a whole. Net sown area stood very little in Chhohara block. It turned out to be highest in Rohru block. Area under forest is low than the required norms for the district as a whole (except in Rampur block and in Jubbal-Kotkhaj).

Percentage of area under wheat maize and rice was less in the district than for the state as a whole. However, in case of area under millets, ragi and pulses the vice-versa was observed. Productivity of all cereals as well as of oil seeds was very low in different blocks of the district. Due to high profitability in horticultural crops, farmers have shifted agriculture area from cereals to these crops. As a result, whereas area under cereals in Shimla district has decreased, that of area under fruits has registered a remarkable growth. Yield of maize, ragi, millets, grains and oil seed is relatively high in the district than that of state average yield.

More than 35 per cent of total production of apples in the district is coming from Jubbal-Kotkhaj block followed by Rohru, Narkanda and Rampur block. Mashobra has highest production of Apricot in the district. In the production of peach, it is again Jubbal-Kotkhaj, which is a leading block in the district. Theog is the leading block in the production of almonds in the district. There were large inter-block disparities with respect to apple production in district Shimla.

Among different vegetables, peas is a major crop, occupying about 46 per cent of total area under vegetables in the district. However, with respect to production, it is cabbage, which accounted for major share of vegetable production in the district.

Animal rearing is one the important occupations of people in Shimla district. Most of the households keep animals. Nearly 10 per cent of total livestock of the state are in district Shimla alone. Cattle population is having highest share to total livestock population in all the

blocks as well as at the district level. Among the blocks, cattle population was highest in Rohru block followed by Theog block. However, most of the cows are of indigenous breed, which have low milk productivity. Buffaloes constituted about 3.09 per cent of total live stock population in the district. Mashobra block has maximum number of buffaloes, due to comparatively warmer climate. In fact, sheep accounted for as much as 18.65 per cent of total livestock in the district. Chhohara block has maximum number of sheep in the district.

Milk production recorded a progressive increase in the district and as a result, it ranked third with respect to milk production in the state. Further, the district ranked fifth with respect to wool production in the state. About 19 per cent of honey production in the state originates from district Shimla. As far as floriculture is concerned, here also the district ranked third with respect to area under flowers in the state. Among various flowers grown in the district, Gladiolas followed by Marigold occupied highest area in the district.

With a view to improve the status of agriculture in district Shimla the most important step could be rationalisation of land use according to capabilities. Watershed development is important for water conservation purposes. Optimum utilisation of surface irrigation system is required through development of tanks and lift irrigation. Crop development strategy should be emphasised through specific high yielding varieties and proper doses of chemical fertilisers. Similarly, increasing area under high value vegetable crop, through inter cropping in orchards and adoption of improved production technology need to be emphasised. With a view to improve productivity of fruit crops, it is essential to provide good variety of planting material and increasing area under high density plantation. Above all, it is the infrastructure, which needs to be properly installed in different blocks of the district, so that horticulture and agriculture production could sustain in the years to come. Development

of agro-based industries can also help in sustaining the process of agriculture development in different blocks of the district.

Basic amenities are essential to provide a comfortable living for the residents which in turn establish the environment, congenial for undertaking the development activities by the entrepreneurs in agricultural as well as non-agricultural areas. On the basis of number of persons per census home, Rampur block (4.57) was at the top and Chopal (5.80) at the bottom as Rampur had the smallest family size among all the blocks. The accessibility of district headquarter to people from different blocks can be taken as an indicator of good quality administration as it leads to active participation of masses in the development process and finding effective solutions for their local problems. The mean distance of block headquarters from the district headquarter is about 74 kilometers. Jubbal-Kotkhai block is situated farthest at a distance of 159 kms. from district headquarter of Shimla. The railway station is located at Shimla town and hence this facility can also be considered to be present in Mashobra block. Other blocks are not so well placed in this respect except for the distance from motorable road which is existing in all the blocks.

The roads are the lifeline of development. Only about 30 per cent of the villages in majority of cases have bus facility. This was as low as 8.43 per cent villages in Chhohara block and as high 50 per cent in Narkanda block. Only about 20 per cent of the villages had paved streets. In Chhohara block, the percentage of villages having paved streets was only 2.81. Most of the villages had mud roads in the villages and the percentage of such villages having mud roads varied between 19.25 per cent in Rohru block and 53.81 per cent in Chhohara block. There was very low variation with respect to percentage of villages having mud roads (26.09 per cent) and footpaths (15.40 per cent) among different blocks in the district. However, with respect to paved roads, there were relatively higher inter-block variations in the district (49.38 per cent). It

is evident that much is still desired to improve the rural road connectivity in all the blocks of the district.

The availability of communication network is of utmost importance in the era of commercialization and globalization. District Shimla is well known for the commercial production of apples and vegetables. Only 3 Post Offices existed per 100 sq. kms. of geographical area in Chhohara block. The highest number of Post Offices was 11 per sq. kms. in Rohru and Theog blocks. There were relatively less inter-block disparities with respect to availability of Post Offices expressed in terms of population served (22.57 per cent) vis-à-vis in context to the geographical area (33.98 per cent) which clearly indicated insufficient number of Post Offices per 100 sq kms. The presence of Telegraph Offices in different blocks of district Shimla were almost negligible. Population covered by each Telegraph Office was as high as 74866 in Chopal block. The telephone connectivity is quite good in this district. On an average there about 458 telephone connections in each block of district Shimla, the highest being about 937 in Mashobra block. On an average each telephone connection served about 55 persons in each block. The best telephone connectivity was in Jubbal-Kotkhai block where each telephone was serving just 21 persons.

The provision of clean and safe drinking water is of utmost importance for ensuring the health of the population. In Rampur block, only about 66 per cent of the villages were having access to drinking water facility. The best placed block in this respect was Mashobra where about 94 per cent of the villages enjoy drinking water facility. Almost the same pattern was observed with respect to facility of tap water. But in Rampur block, one tap on an average was serving 372 persons. Same was true about Rohru and Chhohara blocks. This cannot be considered a happy situation by any standards. There was very small percentage i.e. 9.55 per cent of villages, having wells, tanks or hand pumps in the village.

As the nature of farming is becoming increasingly commercial, the farmers often have to resort to commercial borrowings for financing their short or long term credit needs. On an average, each block in district Shimla had 4 banks. The highest concentration of commercial banks was in Narkanda block (8 banks). Block Chhohara was last placed in respect of number of commercial bank branches with only one branch per hundred square kilometer of geographical area. Further, each commercial bank branch served on an average 4387 persons in district Shimla. The lowest number of persons being served by each commercial bank branch was in Rampur block (899 persons) and the worst position was in Chhohara block, where this number was as high as 7529 persons, followed by Chopal (7262 persons). The number of Agricultural Credit Societies per hundred square kms. of the geographical area was on an average 2 in district Shimla. The highest concentration was in Jubbal-Kotkhai block with 4 Agricultural Credit Societies per hundred sq. kms. of area and least being in Narkanda block, where this number was 0.43 only. The co-efficient of variation turned out to be 69.59 per cent, indicating wide variations in spread of these Societies in district Shimla. The highest population being served by each society was in Rampur block (13883) and least was in Narkanda block (2536 persons).

The analysis indicates that on an average there were 1.56 Non-agricultural and other Credit Societies per 100 sq. kms. in each block of the district. The value of co-efficient of variation showing the extent of inter-block disparities with respect to population covered by each Non-agricultural Credit Society stood at 74.11 per cent. On an average, each Non-agricultural Society in the district had to serve a population as high as 11385 persons, it is therefore evident that the scenario of credit institutions is not upto the desired level in the district.

The Credit-Deposit ratio for the district as a whole was 61 per cent, indicating that 61 per cent of the total deposits were advanced as loans to clients/entrepreneurs. Chopal block had the highest C-D ratio (81 per

cent), and Mashobra block had the least i.e. 33 per cent. **Loans advanced by banks showed a much higher co-efficient of variation (227.70 per cent), as compared to deposits (185.04 per cent), thus indicating a wide variation in loans advanced in some of the blocks. Though, overall C-D ratio for district Shimla had improved from 18 per cent in the year 2000 to 61 per cent in the year 2006.**

The analysis indicates that the availability of recreational facilities is not up to the desired level in the district. In about 13 per cent of the villages, there were no recreational facilities. The percentage of villages, that could had access to recreational facilities within a distance of 5 kms., ranged between three to six per cent. These facilities within a radius of 5 to 10 kms. were available to only 11 per cent of villages. A large number of people from villages (from 70 to 75 per cent), had to travel a distance of more than 10 kms. to avail of any kind of recreational facilities. **It was observed that the recreational facilities like Cinema, Sports Clubs and Stadiums etc., existed at a level far below the desired level in different blocks of district Shimla. One is dismayed to observe that about 75 per cent of the villages had no such facilities.**

Print media is very important source of entertainment and an instrument of spreading awareness among the rural masses. In district Shimla, there were only 26.78 per cent of villages where magazines were available. This figure was as low as 3.93 per cent in case of Chhohara block and as high as 49.46 per cent in case of Narkanda block. The variation observed among different blocks with respect to percentage of villages having access to magazines was 45.61 percent.

On the whole, Narkanda block occupied first rank in most of the basic amenities studied in this Report, followed by Jubbal-Kotkhai and Mashobra blocks. Chopal and Chhohara were the two lesser developed blocks in terms of basic amenities and needed high dose of public investment in improving these amenities.

7.2 Policy Suggestions

On the basis of the conclusions drawn, we can make the following suggestions :

Emphasis should be laid on prophylactic steps in terms of environmental sanitation, protected water supply and mass immunization against TB, Polio, etc., and measures of protection against tropical diseases such as malaria, gastroenteritis and also against malnutrition, particularly vitamin and protein- deficiency and iodine-deficiency. Infrastructural facilities and the quality of services rendered by Primary Health Institutions should be improved. For the welfare of children, it is necessary to strengthen and expand the Integrated Child Development Services (ICDS) scheme in the district. Pre-and post-maternity care for hill women, particularly those residing in remote areas, should be provided. Maximum use should be made of indigenous medical skills; apart from their intrinsic value, they have the merit of acceptability and accessibility. Research also needs to be systematically undertaken to develop these skills in their own right and as a supplement to the modern medical system. There is a need to augment the training programme for Dais.

Following steps should be taken to improve medical facilities in the villages :

- (i) At least a Health Sub-Centre with sufficient medicines should be provided in every village. Health Workers, one male and one female, should be posted in these Sub-Centres. There should be sufficient accommodation for these Sub-Centres.
- (ii) These Sub-Centres should be open for at least six days a week and that too throughout the year even in far-off and isolated villages.
- (iii) There should be sufficient medical facilities for the animals also in every village. At least one animal health worker should be posted in a village who should be provided with sufficient medicine kit and accommodation.

Economy of Himachal Pradesh is dependent primarily on agriculture and other related activities. There is a great need to develop tertiary sector. There is a dearth of skilled, technical and professional persons. Efforts have to be made to develop manpower in the technical and professional fields to ease the situation in the primary sector. It is necessary to undertake manpower planning and to link education locally to the specific needs of the hill areas.

There is a need for training and developing local carpenters, blacksmiths and other technical persons. For this we should have more rural industrial training institutes and should effectively implement programmes like, Training of Youth for Self-Employment (TRYSEM). Local markets at suitable places should also be developed and planned to enable the local artisans to sell the goods they manufacture. There is no industry worth the name in the district. Plans should be made to develop industry in accordance with the raw material available in the state.

Many parts of the district seem to be especially suited to industries that require pollution free atmosphere, cool climate and precision skills like electronics, watch-making, optical glasses, sericulture etc. A number of cottage industries like Carpet Weaving, Handlooms, Handicrafts and other village and household-based small-scale industries can be encouraged. Due to high transportation costs in these areas, industries which reduce weight and volume, but add value and increase shelf-life to the locally available raw materials will be advantageous. Large and medium industries may not generally be considered suitable except under favourable circumstances.

Tourism can be organized as an industry, with due care taken to avoid exploitative use of scarce local resources, especially water and fuel-wood.

A study should be conducted to find out better ways and means of utilising the uncultivated land. If possible and desirable, more land should be brought under cultivation.

Application of scientific inputs to agriculture and allied sectors, including identification of crops suitable for the agro-climatic zones, multi-purpose species of trees and bushes to meet requirements of the people from a well-developed small land area are of special importance. This approach is expected to spare considerable areas for permanent greening programmes, like social forestry of horticulture and serve the long term objective of enhancing production on sustainable basis.

Use of appropriate technologies to upgrade the traditional productive systems like agricultural operations, livestock rearing, arts and crafts, household and cottage industries etc., and to reduce drudgery of women in fetching water, fuel-wood, fodder and other daily domestic chores, needs to be encouraged on priority. The technologies have to be need-based, more productive, efficient, low-cost, and ecologically sustainable.

Extension services should enlighten and educate people on how to enhance productivity of both cultivated and community land on a sustainable basis in the context of increasing human and livestock pressure.

In order to reduce pressure on land, quality of livestock, including goats, sheep, pigs and poultry birds has to be improved and their numbers reduced. There is an urgent need for relating livestock population to the bearing capacity of available land. Scrub animals could be systematically culled out. The livestock and cattle improvement programmes need to be integrated with fodder and cattle-feed development, stall-feeding and scientific grazing. The land and livestock management systems have to improve rapidly. The productivity of pastures and grazing areas needs to be restored and enhanced. The effort should be to meet the requirements of food, fuel-wood, timber and fodder through scientific utilization of scarce hill resources on sustainable basis from the least land area.

There is a great need for maintaining and developing our forests, which are perennial source of timber and fuel to our people since time immemorial. Well-planned projects are needed to check the fast receding forests cover and to bring more and more areas under thick forest cover.

Development of watersheds that can meet water requirement of the people and conserve water and soil resources of the area can be taken up for integrated development. For this, a multi-disciplinary approach is considered most appropriate for creating conditions conducive to development of natural and human resources.

Food security has to be ensured on top most priority. Development of horticulture, sericulture and plantation, especially cash crops having low volume, lightweight, high value and long shelf- life, could play an important role in generating employment opportunities, higher incomes and ecologically sound development in the hilly areas. Area-specific marketing infrastructure, especially for perishable produce and its processing, storage and packaging may be set up where such surpluses are imminent or evident.

Regeneration and development of the hill environment can be achieved only with the willing and active cooperation of the people. It will be forthcoming, if the benefits from improved land, water, and forest resources reach directly and equitably to the people themselves.

In many blocks of district Shimla, men folk have migrated to towns and plains in search of employment opportunities. In such areas, women are managing land and other economic assets. The approach and policies should keep this in view, especially for reducing their burdens of daily chores like collection of fuel wood, water, and tending to livestock and other domestic animals and birds. It will be of much advantage if women extension workers are appointed in such villages.

There is an urgent need to set up Anganwaris/Balwaris in the villages itself, Primary Schools at a distance of not more than one kilometre, Middle Schools at a distance of not more than 3 kilometres

and High Schools at a distance of not more than 5 kms. These educational institutions should be provided with sufficient staff, equipment and buildings to make education effective.

State Government should construct proper roads (inner paths, jeepable link roads, proper link roads, motorable roads) so that these people are helped to shed their isolation, become accessible and enjoy the fruits of development of the state as well as of the country. By providing well-constructed and properly maintained roads, means of transportation will automatically improve.

Communication facilities should be provided in all the villages to make our villages more functional and help the villagers understand the proper meaning of life and establish contact with the outside world. For this, Branch Post Office and Public Call Offices should be made available to them at a distance of 2 to 3 kilometres. Telephone facilities will also help in establishing immediate contact in case some emergency arises.

The government should help in the construction of public places like outdoor stadiums and buildings for *Mahila Mandals* and *Yuvak Mandals*. Indoor games, library, reading room, television and radio sets should be provided in these public places. It will provide healthy recreation for the villagers and at the same time educate them about the latest developments in the world. People should be educated for contributing for the construction of these public places through monetary contribution and 'Shramdaan'. Emotional involvement of the villagers is necessary for the welfare of their village. Sports and youth welfare, social welfare and rural development departments should play greater role in this area.

Yuvak Mandals and *Mahila Mandals* should be helped and encouraged to stage dramas and skits on current social problems to provide recreation, educate people about the developments in the society, and develop local talent in this area. Song and Drama Division of

Government of India and Public Relations Department of the Government of Himachal Pradesh can play a great role in this direction.

Social response should be encouraged through *Panchayats*, *Mahila Mandals* and *Yuvak Mandals*. Where there are no *Mahila* and *Yuvak Mandals*, *Panchayati Raj* institutions should come forward for organizing them. *Panchayati Raj* institutions and these *Mandals* should come out with development plans for their villages. They should think of their own share also in the form of 'Shramdaan' and monetary contribution. They should also develop the habit of depending upon themselves and organizing themselves rather than only depending on the government and wanting the government to do every thing for them. The government, of course, should come to their rescue and should contribute liberally to the development plans made by the people. This way people can develop the habit of thinking for themselves and saving the government departments in wasting their time in preparing the plans which may not be required by the people. Care, however, has to be taken to see that people do not get into petty politics while preparing development plans and the monetary contribution made by the people is not misappropriated by the organizers themselves. Panchayati Raj Department, Rural Development Department and District Rural Development Agencies can play role in this direction.

The foregoing performance assessment of the different development blocks of Shimla district should help the state government and the district administration to identify the aspects of social attainments in which more focused policy formulation and implementation need to be directed. The development blocks that are lagging behind need greater attention in this respect so that in a couple of years these blocks move forward so as to be counted among the best performing blocks in the matter of development indicators.

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