# **District Human Development Report**







Department of Agricultural Economics CSK Himachal Pradesh Agricultural University







Planning Department Himachal Pradesh



## PREM KUMAR DHUMAL CHIEF MINISTER



## Message

I am pleased to release the Human Development Report of Kangra district, which is the first ever for any district in the State. Enlarging people's choices particularly, to live a long and healthy life; to have decent level of education and to have access to resources is the main objective of the process of human development. This imparts multidimensional parlance to the process of human development. Human Development is an important aspect that requires integration with the planning process as the objective of all the development initiatives is to maximize people's welfare.

Himachal Pradesh has already earned a distinction of being a model state to have made high achievements in the field of education, health, infrastructure and other social sectors. Power being harnessed in the State not only meets local needs but also meets demand from the neighbouring states and earns revenue for the State. Himachal Pradesh has been the only state to have forgone all the revenues by imposing a blanket ban on the green felling and has hence taken lead in providing clean environment to the population living downstream as well.

Vertical and horizontal distribution of the benefits of development has been relatively equitable in the State. However, much still remains to be achieved. Now the time has come for the State to consolidate on the achievements already made to avoid any corrosion of the milestones achieved. Probably the best way for further consolidation is through active participation of the communities and elected representatives at local level in the overall process of planning. Periodic preparation of district human development reports would be a useful input for preparing district plans by the District Planning Committees.

I would like to express my gratitude to the Planning Commission, Government of India and the United Nations Development Programme for consistently supporting the State Government's efforts in furthering the cause of human development. I also appreciate the inputs provided by the State Planning Department, CSK Krishi Vishav Vidyalaya, Palampur and the Department of Economics and Statistics in finalizing the Report.

7<sup>th</sup>November, 2009

(Prem Kumar Dhumal)

## **Foreword**

Taking lead from the developments made in the field of human development at national and international levels during the past one and a half decades, present effort has been to project a development path which addresses the multidimensional issues of human development in Kangra district. The policies followed by the State government since the State of Himachal Pradesh came into existence i.e. the year 1971, have been aimed at enhancing human capabilities enabling them to exercise choice over larger available opportunities. Supplemented by the spontaneous and overwhelming support from the people, the policies have yielded encouraging results as reflected by high achievements made in social sector. Relatively high human development indices in the State owe their position to the people of the State who actively participated in furthering the cause of human development in the State. The development strategy adopted during the Eleventh Five Year Plan also focuses on maximizing people's welfare through their participation taking lead from the 'inclusive growth' approach. Current effort in summarizing the achievements made in different fields related to human development and identifying the gaps between 'what it is' and 'what it ought to be' would be helpful in achieving the overall objective of inclusive growth in Kangra district.

The task of preparing this report was entrusted to the Department of Agriculture Economics, CSK Himachal Pradesh Agricultural University, Palampur in district Kangra. The report analyzes the conventional aspects of education, health and some of the economic indicators. Additional chapter each has been dedicated to the gender issues and those related to the livelihoods in Kangra. Various indicators related to human development and some other economic indicators related to all the fourteen development blocks of the district have been compared and these development blocks have been ranked based in terms of these indicators. No attempt has been made to work out the human development indices due to non availability of reliable and consistent data on economic indicators like income and poverty at the development block level. Moreover, the conventional human development index does not reflect any aspect related to human development other than the health, education and income.

The results and inferences drawn from the investigation reveal that Baijnath, Nagrota Surian, Bhawarna and Lambagaon block of the district are at the top of the ranking list in terms of health indicators. On the other hand, Indora, Rait, Fatehpur and Pragpur are the lowest performers on the health score sheet. First four rankings in terms of education attainment are occupied by Lambagaon, Panchrukhi, Sulah and Bhawarna development blocks in that order, whereas, Dehra, Nurpur, Rait and Indora occupy the lower half of the ranking sheet. Similarly, Pragpur, Dehra, Kangra and Nagrota Bagwan occupy the top four positions on Composite Livelihood Index in that order. However, these rankings

are required to be interpreted with a little caution as these reflect relative achievements on various fronts of different development blocks of Kangra districts and may not be treated as inter-block comparisons for any quantitative analysis. Severe limitations in terms of quality and reliable data availability not withstanding, these findings are going to be of great help to the planners for redesigning and reorienting the policies at the grass root levels of governance. Besides, this document will satisfy the cravings of those academicians and researchers who have an appetite for investigations on the development issues.

I wish to thank the Planning Commission, Government of India and the United Nations Development Programme for providing technical and finańcial assistance to the Government of Himachal Pradesh under the Project-Strengthening State Plans for Human Development of which, bringing out this document is a component. I also appreciate the efforts made by the Planning Department, Himachal Pradesh which is the nodal department for implementing the project, in bringing out this document. Inputs provided by the Department of Economics and Statistics, Himachal Pradesh also deserve a mention here. The coordination done by the District Administration and the District Planning Cell of Kangra district in compiling this document needs special appreciation. I hope that the findings as summarized in the document will go a long way in meeting development needs of the people of Kangra after the same are streamlined into the planning process at the local level.

Ajay Tyagi
Principal Secretary (Planning)
Government of Himachal Pradesh
Shimla 171 002

## The Team

## CSK Himachal Pradesh Agricultural University

Dr. S.C. Sharma

## **Principal Investigator**

Virender Kumar

## **Co-Investigators**

R. K. Sharma H.R. Sharma

## Planning Department, Himachal Pradesh

Basu Sood, Deputy Director Ravinder Kumar DPO, Kangra Sanjeev Sood, ARO

## Contents

Massaga	
Message Foreword	
List of Tables, Boxes and Figures	i-iii
Chapter 1: Human Development Report- A Prologue	1-111
<u> </u>	
1.1: Human Development-Definition and Concept	2 3
1.2: Measuring Human Development	_
1.3: District Human Development Report of Kangra	3
Chapter 2: Kangra District- An Introduction	5-13
2.1: A Glimpse into the History of Kangra	6-9
2.2: Administrative Set Up	9-10
2.3: Demographic Profile	11-13
Chapter 3: Physiography, Natural Resources and Land Use	14-31
3.1: Topography	14
3.2: Climate	15
3.3: Forest Resources	15-16
3.3.1: Forest area by legal status	16-17
3.4: Water Resources and Drainage	17
3.4.1: <i>Kuhl</i> Irrigation	17-19
3.4.2: Lakes and Reservoirs	19-20
3.4.3: Ground Water	20
3.5: Soils	21-22
3.6: Mineral Resources	22-24
3.6.1: Slates	23
3.6.2: Limestone	23
3.6.3: Oil and Natural Gas	23
3.6.4: Sand, stone and <i>bajri</i>	24
3.6.5: Iron and coal	24
3.7: Livestock Resources	24-25
3.8: Land Utilization Pattern	25-28
3.8.1: Agriculture-Main Livelihood Option	28-29
Chapter 4: Economy and Infrastructure	32-40
4.1: The Economy	32-34
4.2: Infrastructure	35
4.2.1: Road Density	35-36
4.2.2: Transportation Facility	36
4.2.3: Electricity Facility	36
4.2.4: Access to Banking Facility	36
4.2.5: Access to Cooperative Societies	36
4.2.6: Access to Postal Facilities	37
4.2.7: Irrigation Facility	37
4.2.8: Fair Price Shops	38
4.2.9: Composite Infrastructure Index (CII)	38-40
Chapter 5: Human Resources in the District	41-51
5.1: General Demography	42-43
5.1.1: Sex Ratio	43-44

5.1.2: Scheduled Caste (SC) and Scheduled Tribe (ST) Population	45
5.2: Workers and their Classification	46
5.2.1: Main Workers and Marginal Workers	48-50
5.3: The Other Side of Human Resources	50-51
Chapter 6: Health Status in the District	52-58
6.1: Health Facilities in the District	53-54
6.2: Important Health Indicators at the Block Level	54
6.2.1: Accessibility to Health Institutions (PHC)	55
6.2.2: Population per Health Institution	55
6.2.3: Population Served per Doctor	55
6.2.4: Population Served per Health Staff	56
6.2.5: Family Health Centres per Unit of Population	56
6.2.6: Private Practitioners per Unit of Population	57
6.2.7: Birth Rate	57
6.2.8: Death Rate	57
6.3: Composite Health Index	57-58
Chapter 7: Status of Education in the District	60-70
7.1: Broad Educational Scenario in the District	60-63
7.2: Important Indicators of Education at Block Level	64
7.2.1: Literacy	65
7.2.2: Pupil – Teacher Ratio (PTR)	65-66
7.2.3: Accessibility to Primary Schooling	66
7.2.4: Population per School (all schools)	66
7.2.5: Proportion of Schools with <i>Kuchcha</i> Buildings	67
7.2.6: Girls Enrollment (Primary)	67
7.3: Composite Education Index (CEI)	67-69
Chapter 8: Gender Issues in the District	71-82
8.1: Age-wise Distribution of Female Population	71
8.2: Sex Ratio	72
8.3: Women Empowerment through Self-Help Groups (SHGs)	73
8.4: Role of NGOs in Women Empowerment	74
8.5: Role of Department of Social Justice and Empowerment	76-78
8.6: Women in Panchayati Raj Institutions	78-82
Chapter 9: Composite Livelihood Index and Human Development in	
the District	83-88
9.1: Per Capita Income	83
9.2: Incidence of Poverty	83
9.3: Work Participation Rate (WPR)	84
9.4: Composite Livelihood Index (CLI)	84-85
9.5: Human Development in the District	86-88
Chapter 10: Human Development and the Way Ahead-An Epilogue	89-91
Fact Files	92-121
Appendix I	122
Appendix II	123-125
References	126-127

## List of Tables, Boxes and Figures

## 1. Tables

Table	Title			
No.				
2.1	Administrative Set Up of District Kangra, 2006.	10		
2.2	Block-wise Number of Panchayats and Villages.			
2.3	Demographic Profile of District Kangra, 2001.	11		
2.4	Population of the District, 1971-2001	13		
2.5	Decadal Growth Rate of Population in Kangra, 1971-2001 (Per cent)	13		
3.1	Average Annual Rainfall, 1989-2003 in District Kangra.	15		
3.2	Forest Area in Kangra by Legal Classification, 2002-03.	17		
3.3	Main Tributaries of Beas River in Kangra District.	18		
3.4	Net Area Irrigated by Source in Kangra, 2002-03.	18		
3.5	Salient Features of the Pong Reservoir.	20		
3.6	Production of Slates in Kangra, 1972-96.	23		
3.7	Extraction/Production of Sand, Stone And Bajri in Kangra District	24		
	(H.P).			
3.8	Changing Livestock Composition in District Kangra, 1972-2003.	25		
3.9	Land Utilization Pattern in Kangra District, 2002-03.	26		
3.10	Land Utilization Pattern in Different Blocks.	27		
3.11	Area Under Different Crops in Kangra District, 2003-04.	28		
3.12	Production of Major Crops in Kangra District, 2002-03.	29		
3.13	Cropping Pattern in Kangra District 2002-03.	29		
4.1	Gross and Net District Domestic Product of Kangra, 1993-94-2001-	32		
	02.			
4.2	Per Capita Income in Kangra District, 1993-94 to 2001-02.	33		
4.3	Ranking of Kangra District on the basis of Per Capita Income, 1993-	34		
	94 to 2001-02.			
4.4	Composition of GDDP of Kangra, 1993-94 And 2001-02.	34		
4.5	Infrastructure Across Blocks in Kangra, 2001.	37		
4.6	Composite Infrastructure Index (CFI) Across Blocks in Kangra.	39		
5.1	Social Sector Expenditure in HP,1990-91 to 2004-05	41		
5.2	Population, Area and Density across Blocks, 2001	43		
5.3	Sex-wise Distribution of Population Across Blocks, 2001.	44		
5.4	Block-wise Population in Age Groups 0-6 Years, 2001.	44		
5.5	Block-wise Scheduled Caste Population, 2001.	45		
5.6	Block-wise Scheduled Tribe Population, 2001.	46		
5.7	Sex-wise Distribution of Total Workers Across Blocks, 2001.	47		
5.8	Sex-wise Work Population Rate (WPR) Across Blocks, 2001.	47		
5.9	Block-wise Classification of Workers, 2001.	48		
5.10	Industrial Categories of Main Workers, 2001.	49		
5.11	Industrial Categories of Marginal Workers, 2001.	50		

5.12	Educational Background of the Candidates Registered with the	51
	Employment Exchanges in the District, 1994-2001.	
6.1	Important Health Statistics in Kangra, 2005-06.	54
6.2	Block-wise Health Indicators in Kangra.	56
6.3	Block-wise Composite Health Index (CHI) in Kangra.	57
7.1	Expenditure on Education in H.P, 2000-01 to 2005-06.	60
7.2	Salient Educational Statistics in Kangra, 2005-06.	61
7.3	Facilities Available in Primary Schools, 2005-06.	63
7.4	Block-wise Educational Indicators in Kangra.	65
7.5	Block-wise Composite Education Index (CEI) in Kangra.	68
8.1	Age-wise Distribution of Female Population in Kangra, 2001	71
8.2	Temporal Changes in Sex Ratio in Kangra, 1971-2001.	72
8.3	Sex Ratio At Block Level, 2001.	73
8.4	Self Help Groups (SHGs) in District Kangra.	74
8.5	SHGs and Non Governmental Organizations in Kangra	76
8.6	Anganwari Centres, SHGs and Workers in Kangra, 2005-06.	78
8.7	Block-wise Number of Panchayat Officials, 2001.	79
8.8	Reservation Details of Panchayat Samiti Members.	80
8.9	Reservation Details of Panchayat Pradhans.	80
8.10	Reservation Details of Zila Parishad Members.	81
8.11	Reservation Details of Panchayat Samiti Chairpersons.	81
8.12	Reservation Details of Panchayat Members.	82
9.1	Ranking of Blocks According to Composite Livelihood Index.	84
9.2	Human Development across Blocks in Kangra District.	87

## 2. Boxes

Box	Title		
No.		No.	
2.1	The Tribes of Kangra	12	
3.1	Changing Paradigm of Water Rights	19	
3.2	Crop Diversification in Chhota Bhangal: A Success Story	30	
3.3	Tea- A Promising Option	31	
7.1	Sarva Shiksha Abhiyan	64	
8.1	Chinmaya Organisation for Rural Development (CORD), Sidhbari	75	
8.2	Samridhi Mahila Cooperative Society Ltd. (SMCS), Thakurdwara	77	

## 3. Figures

Figure	Title	Page No.
No.		No.
4.1	Block-wise Composite Infrastructure Index (CII) in the District	40
5.1	Social Sector Expenditure in Himachal Pradesh, 1990-91 to 2004-05	42
6.1	Block-wise Composite Health Index (CHI) in the District	58
7.1	Block-wise Composite Education Index (CEI) in the District	69
9.1	Block-wise Composite Livelihood Index (CLI) in the District	85
9.2	Human Development in Kangra	88

## Chapter 1

## **Human Development Report-A Prologue**

The issue of 'human development' has occupied the centrestage of discussions in development literature during the past one and a half decades or so. The credit for this digression in development discourse goes to the United Nations Development Programme (UNDP) which through its various Human Development Reports (HDRs) has re-brought into focus the 'human face' of the development paradigm. The first Human Development Report (HDR) was published by the UNDP in May, 1990. Since then the preparation of HDRs at various levels viz. world, region, country and state, has become a fairly regular feature and more than 400 HDRs have been brought out across the globe till date. The rediscovery of the 'well being' of the humanity is not new to the human civilization. In fact, Aristotle (384-322 B.C.) argued that "wealth is evidently not the good we are seeking, for it is merely useful and for the sake of something else". Later on, the idea of 'human development' was ingrained in the writings of several philosophers and economists like Immanuel Kant, Adam Smith, Robert Malthus, Karl Marx and John Stuart Mill. Further down the history, the intellectual antecedents of human development may be traced to the 'basic needs' approach of the ILO and the World Bank (Fukuda-Parr and Kumar, 2003). But in the recent past, the reappearance of the emphasis on 'human development' is traceable in the Sen's concept of capabilities (Sen, 1984). According to this concept, the process of economic development can be seen as a "process of expanding the capabilities of the people". But the credit for the unprecedented success of the HDRs goes to Dr. Mahbub ul Haq who along with a host of economists and social scientists pioneered the preparation of HDRs under the auspices of the UNDP.

The evolution of HDR has been exemplary. While the first HDR (UNDP, 1990) dealt exhaustively the 'concept and measurement' of human development, the latest focuses attention on 'power, poverty and water crisis' (UNDP, 2006). In between, the HDR has examined an array of themes of global importance such as financing human development, global dimensions of human development, people's participation, international dimensions of human development, human security, gender, economic growth poverty, consumption, human rights, etc. These HDRs exerted tremendous pressure on the global policy dialogue and have become instruments of change for the international institutions,

governments, donors, NGOs and the civil society at large. The HDR has been prescribed as a text in most of the leading universities. It has greatly influenced the global search for new development paradigms that are people-centred and environmentally sound. Further, it has helped in launching new policy proposals. For example, it has focused on the human costs of military spending, especially for the poor countries and came out with proposals for reaping a peace dividend by investing in people rather than in arms. Finally, the impact of HDR is clearly visible in the reorientation of the development strategies by the several developing countries that now are paying greater attention to the 'human element' in all their development programmes.

### 1.1. Human Development- Definition and Concept

The United Nations Development Programme (UNDP) has defined human development as "a process of enlarging people's choices" (UNDP, 1990). These choices are enlarged by expanding the human capabilities and functionings. At all levels of development the three essential capabilities for human development are: to have long and healthy lives, to be knowledgeable and to have access to the resources needed for a decent standard of living. When these fundamental capabilities are not achieved, many choices are simply not available and many opportunities remain inaccessible. But this is not all. The concept of human development goes beyond this and includes such areas of choice that may range from political, economic and social opportunities for being creative and productive to enjoying self-respect, empowerment and a sense of belonging to a community. Income is certainly one of the main means of expanding choices and well - being. But it is not the sum total of people's lives. Further, the idea of human development has been related to such issues as human rights - economic, social and cultural, and not merely civil and political; collective well – being; equity concerns applied not only to wealth or income but also in basic capabilities and opportunities for all in the areas of education, health, political rights, and the sustainability implying thereby both the intergenerational and intergenerational equity. All these issues have emphasized the need for people-centred development, with concern for human empowerment, participation, gender equality, equitable growth, poverty reduction and long-term sustainability (UNDP, 1998).

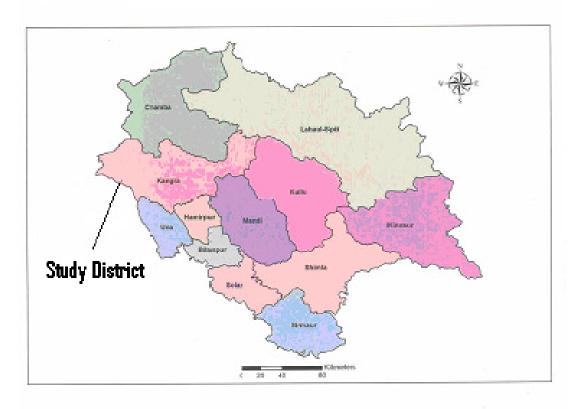
#### 1.2. Measuring Human Development

Human development in these Human Development Reports has been captured by the famous tool called Human Development Index (HDI). It recognizes, however, that the concept of human development is much broader than the HDI. It is impossible to come up with a comprehensive measure or even a comprehensive set of indicators because many vital dimensions of human development are not quantifiable. But a simple composite measure of human development can draw attention to the issues quite effectively. The HDI is not a substitute for the fuller treatment of the richness of the concerns of the human development perspective. The HDI measures the overall achievements in a country in three basic dimensions of human development ----longevity, knowledge and a decent standard of living. It is measured by life expectancy, educational attainment (adult literacy and combined primary, secondary and tertiary enrolment) and adjusted income. The detailed methodology for constructing HDI is given in Technical Note (Appendix I).

### 1.3. District Human Development Report of Kangra

Ever since then the publishing of the first Human Development Report (HDR) in 1990, the HDRs are being prepared at a higher frequency and at more disaggregated levels. The state of Himachal Pradesh (HP), which has been regarded a model of development planning by various agencies, both governmental and non-governmental, more than once, brought out its first HDR in 2003. After this, an MOU was signed by the State Government of Himachal Pradesh with the UNDP and the Planning Commission, Government of India (GOI) to implement the UNDP assisted project "Strengthening of State Plans for Human Development". Under the *aegis* of this project, now when the state is in the process of preparing its second report, it has simultaneously started preparing HDRs at the district level. In the first phase, three districts of Kangra, Mandi and Shimla have been chosen for the preparation of district level HDRs. The task of preparing the DHDR for Kangra was entrusted to the Department of Agricultural Economics, CSK HP Agricultural University, Palampur in June, 2006.

# HIMACHAL PRADESH



## Chapter 2

## **Kangra District- An Introduction**

Kangra district lies between 31° 21′ to 32° 59′ N latitude and 75° 47′ 55″ to 77° 45′ E longitude. It is situated on the southern escarpment of the *Himalayas*. The entire area of the district is traversed by the varying altitude of the Shivaliks, Dhauladhar and the Himalayas from north-west to south-east. The altitude varies from 500 metres above mean sea level (amsl) to around 5000 metres amsl. It is encapsulated in the north by the districts of Chamba and Lahaul and Spiti, in the south by Hamirpur and Una, in the east by Mandi and in the west by Gurdaspur district of Punjab. The present Kangra district came into existence on the 1<sup>st</sup> September, 1972 consequent upon the re-organisation of districts by the Government of Himachal Pradesh. It was the largest district of the composite Punjab in terms of area till it was transferred to Himachal Pradesh on the 1st November, 1966 and had six tehsils namely Nurpur, Kangra, Palampur, Dehragopipur, Hamirpur and Una. Kullu was also a tehsil of Kangra district up to 1962 and Lahaul & Spiti which also formed a part of Kangra was carved out as a separate district in 1960. On the re-organisation of composite Punjab on the 1<sup>st</sup> November, 1966 the area constituting Kangra district were transferred to Himachal Pradesh along with the districts of Shimla, Kullu and Lahaul and Spiti and tehsils of Una and Nalagarh and three villages of Gurdaspur district.

Kangra district derives its name from Kangra town that was known as Nagarkot in ancient times. Kangra proper originally was a part of the ancient *Trigarta* (Jullundur), which comprises of the area lying between the river "*Shatadroo*" (probably Sutlej) and Ravi. A tract of land to the east of Sutlej that probably is the area of Sirhind in Punjab also formed a part of *Trigrata*. Trigrata had two provinces. One in the plains with headquarters at Jullundur and other in the hills with headquarters at Nagarkot (the present Kangra).

## 2.1. A Glimpse into the History of Kangra<sup>1</sup>

The history of Pre-Aryan and Aryan eras is mainly based on the epics like Vedas, Puranas, Mahabharata, etc. In Rigveda, reference of Arijikya (Beas) flowing through this area has been made. This region, commonly named as *Dev Bhumi* is believed to be the abode of gods. According to the *Vedas*, some non-Aryan tribes inhabited this region before the arrival of Aryans. There is a mention of Trigarta (Kangra) kingdom in Mahabharata. Sir Lepel Griffin refers to the Rajput dynasties of the hills of whom the Katochs' are the oldest. In Mahabharata there is a mention of King Susharama Chandra, who sided with the Kaurvas. He is said to be the founder of this dynasty. At that time, Kangra was probably named as *Bhim Kot*. The reference to prosperous Kingdom of Trigarta (Kangra) is also found in the Panani literature that was written sometimes between the seventh and fourth centuries B.C. The mention of Kangra (Nagarkot) was found in the works of Ferishta.

Heun Tsang, a Chinese traveller, visited India from AD 629 to 644 during Harshvardhana's rule. In his accounts, he has mentioned about many kings ruling in this region. It is also gathered that king Harshvardhana annexed the state of Kangra. It was in the beginning when these outsiders tried to establish their power that the kings of the area stood in their way. He also found the Jullundur monarchy still undivided. At some later period, perhaps that of the Muhammadan invasion, the Katoch princes were driven into the hills, where Kangra already existed as one of their chief fortress. In spite of constant invasions, the little Hindu kingdoms, secure within their Himalayan glens, long held out against the aggressive Muhammadan power. In 1009, the riches of the Nagarkot temple attracted the attention of Mahmud of Ghazni, who defeated the Hindu princes at Peshawar, seized the fort of Kangra and plundered the shrine of an immense booty in gold, silver and jewels. From this time, Kangra does not reappear in general history till 1360, when the emperor Firoz Tughlak again led a force against it. The Raja gave in his submission, and was permitted to retain his dominions; but the Muhammadans once more plundered the temple.

\_

<sup>&</sup>lt;sup>1</sup> Adopted from "Inventory of Resources, Kangra District, Himachal Pradesh" by S C Tiwari and O P Awasthi, Himachal Pradesh Krishi Vishva Vidyalaya, College of Agriculture, Palampur (Kangra).

In 1556, Akbar launched an expedition into the hills, and occupied the fort of Kangra. The fruitful valley became an imperial demesne, and only the barren hills remained in the possession of the native chiefs. In the graphic language of Todar Mal, Akbar's minister, 'he cut off the meat and left the bones.' Yet the remoteness of the imperial capital and the natural strength of the mountain fastnesses encouraged the Rajput princes to rebel; and it was not until after the imperial forces have been twice repulsed that the fort of Kangra was starved into surrender to an army commanded by prince Khurram in person (1620). At one time Jahangir intended to build a residence in the valley, and the site of the proposed palace is still pointed out in the lands of the village of Gargari. Probably, the superior attractions of Kashmir, which the emperor shortly afterwards visited, led to the abandonment of his design. At the accession of Shah Jahan the hill Rajas had quietly settled down into the position of tributaries, and the commands of the emperor were received and executed with read obedience. Letters patent (sanadas) are still extant, issued between the reign of Akbar and Aurangzeb, appointing individuals to various judicial and revenue offices, such as that of kazi, kanungo, or chaudhri. In some instances the present representatives of the family continue to enjoy privileges and powers conferred on their ancestors by the Mughal emperors, the honorary appellation being retained even where the duties have become obsolete. During the period of Muhammadan ascendancy, the hill princes appear to have been treated liberally. They still enjoyed a considerable share of power, and ruled unmolested over the extensive tracts which remained to them. They built forts, waged wars upon each other, and wielded the functions of petty sovereigns. The loyalty of the hill Rajas appears to have won the favour and confidence of their conquerors, and they were frequently deputed on hazardous expeditions and appointed to places of high trust in the service of the empire. For instance, in 1758 Raja Ghamand Chand of Kangra was appointed governor of the Jullundur Doab and the hill country between the Sutluj and the Ravi.

In 1752, the Katoch principalities nominally formed part of the territories ceded to Ahmad Shah Durrani by the declining Delhi court. But the native chieftains, emboldened by the prevailing anarchy, resumed their practical independence, and left little to the Durrani monarch or the deputy who still held the isolated fort of Kangra for the Mughal empire. In 1774, the Sikh chieftain, Jai Singh, obtained the fort by stratagem, but

relinquished it in 1785 to Sansar Chand, the legitimate Rajput prince of Kangra, to whom the State was thus restored about two centuries after its occupation by Akbar. This prince, by his vigorous measures, made himself supreme throughout the whole Katoch country and levied tribute from his fellow chieftains in all the neighbouring States. For twenty years he reigned supreme through out these hills, and raised his name to a height of renown never attained by any ancestor of his race. He found himself unable, however, to cope with the Sikhs, and two descents upon the Sikh possessions in the plains, in 1803 and 1804, were repelled by Ranjit Singh. In 1805, Sansar Chand attacked the hill State of Bilaspur (Kahlur), which called in the dangerous aid of the Gurkhas, already masters of the wide tract between the Gogra and the Sutlej. The Gurkhas responded by crossing the latter river and attacking the Katochs at Mahal Mori, in May, 1806. The invaders gained a complete victory, overran a large part of the hill country of Kangra, and kept up a constant warfare with the Rajput chieftains who still retained the remainder. The people fled as refugees to the plains, while the minor princes aggravated the general disorder by acts of anarchy on their own account. The horrors of the Gurkha invasion still burn in the memories of the people. The country ran with blood, not a blade of cultivation was to be seen, and grass grew and tigers whelped in the streets of the deserted towns. At length, after three years of anarchy, Sansar Chand determined to invoke the assistance of the Sikhs. Ranjit Singh, always ready to seize upon every opportunity for aggression, entered Kangra and gave battle to the Gurkhas in August, 1809. After a long and furious contest, the Maharaja was successful, and the Gurkhas abandoned their conquests beyond the Sutlej. Ranjit Singh at first guaranteed to Sansar Chand, the possession of all his dominions except the fort of Kangra and 66 villages, allotted for the support of the garrison; but he gradually made encroachments upon all the hill chieftains. Sansar Chand died in 1824, an obsequious tributary of Lahore. His son, Anrudh Chand, succeeded him, but after a reign of four years abandoned his throne, and retired to Hardwar, rather than submit to a demand from Ranjit Singh for the hand of his sister in marriage to a son of the Sikh minister Dhian Singh. Immediately after Anrudh's flight in 1828, Ranjit Singh attached the whole of his territory, and the last portion of the once powerful Kangra State came finally into the possession of the Sikhs.

Kangra passed to the British at the end of the first Sikh War in 1846 and there were several revolts against the British. Ram Singh, a Pathania Rajput, invaded the British garrison at Shahpur. The British immediately rushed their forces, which surrounded Shahpur fort. Ram Singh finding himself at a disadvantageous position sneaked into the nearby forest to rearm himself. After the outbreak of the Mutiny in 1857, some disturbances took place in the Kulu subdivision; but the vigorous measures of precaution adopted by the local authorities, and the summary execution of the six ring leaders and imprisonment of others on the occasion of the first over act of rebellion, effectually subdued any tendency to lawlessness. The disarming of the native troops in the forts of Kangra and Nurpur was effected quietly and without opposition.

The national movement in Kangra district was spearheaded by Comrade Ram Chandra, Thakur Panchan Chandra and Baba Kanshi Ram. Baba Kanshi Ram did a great deal for liberation movement in Kangra district. He was responsible for the liberation wave in hills. He was given the title of "Hill Gandhi" by Jawahar Lal Nehru for his work and "Bulbule Hills" for his melodious throat by Sarojini Naidu. With the freedom of British India, Kangra district automatically threw away the foreign yoke and entered into the era of democracy.

### 2.2. Administrative Set Up

Administratively, the district has been divided into eight sub-divisions (Table 2.1). It has 14 tehsils besides 5 sub-tehsils. For the purpose of development, the district has been divided in 14 development blocks, of which two blocks of Fatehpur and Sulah have been carved out recently (2001). It may however be mentioned here that the blocks, tehsils and the assembly constituencies are not synchronous/co-terminus. There are 760 *gram panchayats*. Besides, the district has 9 towns and 4 Municipal Committees. The district has 3,868 villages of which 219 are uninhabited. There is one cantonment as well at Yol. The block wise distribution of panchayats and villages both inhabited and uninhabited is given in Table 2.2. Pragpur block had highest number (75) of panchayats followed by Kangra (67) and Dehra (64). On the other hand, Panchrukhi had only 37 panchayats, followed by Bhawarna (46) and Sulah (47). Similarly, Dehra block had highest number of inhabited villages (507), followed by Fatehpur (294) and Kangra (290).

Table 2.1: Administrative Set Up of District Kangra, 2006

Sr. No.	Particulars	Kangra	Himachal Pradesh
1.	No. of Sub-Divisions	8	51
2.	No. of Tehsils	17	75
3.	No. of Sub -Tehsils	4	34
4.	No. of Development Blocks	14	77
5.	No. of Inhabited Villages	3,619	17,495
	Uninhabited	249	2,623
	Total villages	3,868	20,118
6.	No. of Gram Panchayats	760	3,243
7.	No. of Assembly constituencies	16	68
8.	No. of Towns	9	57
9.	No. of Municipal	4	21
	Committees/corps		
10.	No. of Nagar Panchayats	3	28
11.	No. of cantonments	1	7

Source:1. Statistical Outline of Himachal Pradesh, 2007-08, 2. Districts in Figures, 2007; Department of Economics and Statistics, Government of Himachal Pradesh, Shimla.

Table 2.2:Block-wise Number of Panchayats and Villages

Block	No. of	Total	Inhabited	Uninhabited
	Panchayats	Villages	Villages	Villages
1.Baijnath	51	214	195	19
2.Bhawarna	46	168	162	6
3.Dehra	64	538	507	31
4.Fatehpur	54	307	292	15
5.Indora	49	210	193	17
6.Kangra	67	304	290	14
7.Lambagaon	55	292	283	9
8.Nagrota Bagwan	54	311	282	29
9.Nagrota Surian	48	212	190	22
10.Nurpur	52	303	284	19
11.Panchrukhi	37	136	132	4
12.Pragpur	75	304	266	38
13.Rait	61	291	274	17
14.Sulah	47	278	269	9
Total of Distt. Kangra	760	3868	3619	249

Source:1. Census of India, 2001; 2. Block-wise Development Indicators in District Kangra, 2006, District Statistical Office, District Kangra (at Dharamshala).

#### 2.3. Demographic Profile

The total geographical area of Kangra district is 5,739 sq km, which is 10.31 per cent of the total area of the state (Table 2.3). Area-wise district Kangra is next only to Lahaul and Spiti (13,835 sq km), Chamba (6,528 sq km) and Kinnaur (6,401sq km). At 13.39 lakhs, the district accounted for the highest share (22.01 per cent) of the total population in the state. Along with Hamirpur and Mandi, this district (1,025) is among the chosen three districts that have a favourable sex ratio of above 1,000. About 94.6 per cent of the population of the district lives in 3,619 villages and the district has a fairly high population density of 233 persons per sq km as compared to the state density of 109 persons. As regards the other demographic indicators, while literacy (80.1%) in the district was higher than state (76.1%) figure, it performed below the state with respect to birth rate and death rate statistics. Average population per village stood at 350 persons in the district.

Table 2.3: Demographic Profile of District Kangra, 2001

Sr. No.	Particulars	Kangra	Himachal Pradesh
1.	Geographical Area (sq km)	5,739 (10.31)	55,673
2.	Total Population	1339030 (22.03)	6077900
	Males	661254	3087940
	Females	677776	2989960
3	Rural Population	1266745 (94.60)	5482319
4	Urban Population	72285 (5.40)	595581
5	SC Population	279540 (20.88)	1502170 (24.72)
8.	ST Population	1597 (0.12)	244587 (4.02)
9.	Number of Households of which	272487 (22.31)	1221589
	Rural Households	256490	1079797
	Urban Households	15997	141792
10.	Population Density	233	109
11.	Sex Ratio	1025	968
12.	Literacy (Overall)	80.1	76.5
	Male	87.5	85.3
	Female	73.0	67.4
13.	Average Population per Village	350*	313

Note: \* Computed on the basis of rural population.

Source: Statistical Outline of Himachal Pradesh, 2003-04; Department of Economics and Statistics, Government of Himachal Pradesh, Shimla.

According to the religion, predominant population of the district comprises of the Hindus (97.20 per cent) followed by muslims (1.19 per cent), the buddhists (0.79 per cent), the

sikhs (0.64 per cent) and the christians (0.16 per cent). The Hindus mostly constitute rajputs, brahmins and scheduled castes. The scheduled tribe population is negligible (0.12 per cent) in the district. The *Gaddis* and the *Gujjars* (Box 2.1) are the two main tribal communities found in the district. The scheduled castes account for a little over one-fifth of the total population in the district.

## **Box 2.1: The Tribes of Kangra**

#### The Gaddis

The Gaddis, a semi-nomadic tribe, are the sheep and goats rearers of Kangra and Chamba districts. The Gaddis are transhumant people. According to the most commonly held view the term 'Gaddi' derives its name from the Mount Kailash which is the seat or throne (Gaddi) of Lord Shiva and the people who found asylum and settled in Bharmaur (in district Chamba), the territory of Lord Shiva's gaddi, came to be called as the Gaddis. The Gaddis have been notified as a scheduled tribe in Himachal Pradesh. These shepherds migrate to plains and valleys areas in winters and to higher reaches in summers in order to avail green pastures. There are specific rules about the movement of the Gaddis. For instance, they should not halt with their flocks for longer than one night at any single halting place in any forest in which they have no rights of grazing. Gaddi tribe is known for its unique culture with respect to their costumes and dresses, food habits, rituals and festivals, etc. Of late, due to migration of the better of families to the plains or valleys in Kangra district and the consequent higher education and economic empowerment, their traditional life styles have undergone a see change for the betterment of the tribe.

### The Gujjars

The Gujjars is another nomadic tribe of the Kangra district. While the Hindu Gujjars have permanently settled, their Muslim counterparts are still sticking to nomadic pastoralism. They are found in Dehra, Nurpur and areas adjoining the plains (Kandi areas). The muslim gujjars are deeply attached to their tribal customs, rites and rituals. These nomads climb up the hills during summers and return to the plains in winters. The economy of these Gujjars is mainly dependent on the animal husbandry and forests. Most of them are landless and their economic status depends upon the number of buffaloes one possesses. Illiteracy has been found to be the major cause of their backwardness.

Source: Department of Agricultural Economics, CSK HPAU, Palampur.

The district population has grown by 1.67 times from 8.01 lakhs to 13.39 lakhs between 1971 and 2001 (Table 2.4). The population density in the district has increased from 139 persons per sq km to 233 persons during the same period. Overall sex ratio has also increased slightly from 1,008 in 1971 to 1,025 females per one thousand males in 2001, which is a healthy sign from the gender sensitivity perspective. As regards the urban population, it grew from 4.33 per cent to 5.40 per cent during the past three decades and is much lower than the state proportion of urban population (9.80 per cent) at present. The decadal growth of population in the district was 23.71 per cent during 1971-81 and it came down to 14.05 per cent during the decade 1991-2001 (Table 2.5). This decline in the decennial growth rate was higher than that for the state during the same period. While similar trend was observed with respect to growth rate of rural population in the district; for the urban population the decline was more severe from 41.27 per cent to 21.80 per cent.

Table 2.4: Population of the District, 1971-2001

Year	Population	Sex Ratio (Females/ 1000	Population Density (Persons /sq km)	Urban Population (Per cent)
		males)	• •	, ,
1971	8,00,863	1008	139	4.33
1981	9,90,758	1016	173	4.94
1991	11,74,072	1024	205	5.05
2001	13,39,030	1025	233	5.40

Source: Statistical Outline of Himachal Pradesh (Various Issues), Department of Economics and Statistics, Government of Himachal Pradesh, Shimla.

Table 2.5: Decadal Growth Rate of Population in Kangra, 1971-2001 (Per cent)

Decade	Kangra			Him	achal Prado	esh
	Rural	Urban	Total	Rural	Urban	Total
1971-1981	22.92	41.27	23.71	22.88	34.76	23.71
1981-1991	18.36	21.27	18.50	19.39	37.80	20.79
1991-2001	13.64	21.80	14.05	16.11	32.59	17.54

Source: Social Statistics of Himachal Pradesh, 2002; Department of Economics and Statistics, Government of Himachal Pradesh, Shimla.

#### Chapter 3

### Physiography, Natural Resources and Land Use

The picturesque valley of Kangra sheltered by the sublime Dhauladhar range is nestled in the Western part of the lower Himalayas. The varying altitudinal range provides a mosaic of physiographic features resulting in highly diverse natural vegetation intercepted by serpentine perennial streams at times. These natural resources constitute the lifeline of the people. The importance of the forests for the livelihood of the hill people in providing them firewood, timber, fodder, herbs and several other raw materials for certain industries can hardly be overemphasized. In addition to these direct benefits, the forests help in perpetuating the ecological sustainability through lessened soil erosion and flash floods. Further, the natural vegetation augments the aesthetic value of Kangra valley when gushing streams traverse these greenwoods at places. Eco-tourism and adventure sports are other spillovers of these natural resource endowments. In the present chapter, an endeavour has been made to sketch out some of these features.

### 3.1.Topography

Kangra district has a mountainous terrain with highly undulating landforms. The altitude ranges from about 550 metres to 5,500 metres above mean sea level (amsl), the rise being gradual to about 1,500 metres amsl whence after it becomes abrupt. The district has a maximum length of about 150 km from Baijnath block to Indora block in east-west direction. It extends to a distance of about 100 km from Rait to Pragpur block in the north-south direction. The entire territory is mountainous with the exception of the erstwhile Nurpur tehsil (covering the blocks of Nurpur, Indora, Fatehpur and parts of Nagrota Surian), which accounts for roughly 15 per cent of the total area of the district. Deep valleys lying between ranges of varying elevations characterize the mountainous portion, which comprises the bulk of the territory. Altitudinally, the district has three distinct zones. These are:

- 1. Low hills and valley areas up to an elevation of about 900 metres a.m.s.l. This portion accounts for about 49.0 per cent of the total area in the district.
- 2. Mid hills extending from 900 metres to 1,500 metres a.m.s.l. This is nearly 16.0 per cent of the district area.

3. High hills rising from about 1,500 metres to 5500 metres a.m.s.l account for the remaining 35.0 per cent of the entire area.

#### 3.2. Climate

The climate of the district varies from sub-tropical in low hills and valleys to sub-humid in the mid hills, and getting temperate in high hills. The district receives an average annual rainfall of about 205 cm that goes up from about 100 cm in southern parts to about 250 cm in northeastern areas. Most of the rainfall, about 80 per cent, is received during June to September months. Average annual rainfall in the district during the last one and a half decade is given in Table 3.1. In contrast, the average annual rainfall in the state during the same period was 1254.6 mm. Snowfall is also received in northern parts around Dharamshala, Palampur and Baijnath areas. Average maximum temperature ranges from about 35.0 degree Celsius in southern parts to around 25.0 degree Celsius in northern areas.

Table 3.1: Average Annual Rainfall, 1989-2003 in Kangra District

Year	Rain	fall (mm)
	Kangra	Himachal Pradesh
1989	2387.4	1169.7
1990	2490.0	1518.6
1991	1945.5	1010.2
1992	2128.0	1344.3
1993	2173.3	1152.4
1994	2814.8	1417.7
1995	2290.5	1451.7
1996	1941.7	1310.9
1997	2308.5	1469.3
1998	2416.5	1460.3
1999	1905.6	1277.6
2000	1353.4	1052.4
2001	1818.4	1067.5
2002	1101.5	984.8
2003	1679.4	1131.7
Average	2050.3	1254.6

Source: Statistical Outline of Himachal Pradesh (Various Issues). Department of Economics and Statistics, Government of Himachal Pradesh, Shimla.

#### 3.3. Forest Resources

Kangra district has four forests divisions, namely, Dharamshala, Dehra, Nurpur and Palampur. In addition, two forest blocks are under the control of Una forest division. The forests of the district can be classified into seven broad types as follows:

- i) Dry Alpine Forests: These forests are mainly concentrated in Chhota Bhangal and Bara Bhangal areas of Baijnath block. The vegetation in these open forests is primarily xerophytic e.g. *Juniper, Artemesia, Lonicera, Cotoneaster*.
- ii) Moist Alpine Scrub Forests: These forests are found below the snow-line but above the tree growth line. Generally, grass is found on the sourthern aspect and scrub on the northern aspect. *Salix, Lonicera* and *Viburnum* are the main plant species found in these forests. Many medicinal herbs and plants like *guggal, karru and aconite* are found in these forests.
- iii) Sub-Alpine Forests: These forests occur below the moist Alpine forests but above the altitude of 3,500m. *Betula utilis* and Kharsu are the two main species found in these forests. At certain heights, Himalayan temperate park lands, which are characterized by grassland having scattered mis-shapen and often moribund trees of Kharsu oak, maple, etc., are used as grazing grounds by migratory herds of sheep and goats.
- iv) Himalayan Moist Temperate Forests: A large area of the district, having an elevation of more than 1,500 m above mean sea level, is covered with Himalayan moist temperate forests. *Cedrus deodara* is the most valuable species of these forests. Spruce and silver fir are also found in areas of mixed coniferous forests. Such forests occur in Kangra and Palampur tehsils.
- v) Wet Temperate Forests: These forests are found mainly in Dharamshala, Kangra and Palampur areas. *Chil* and *Kail* are two important species of these wet hill slopes. Ban oak and silver fir are also found at certain places. Deodar is also found in association with these trees at many places. Bamboo groves are also found on the lower west slopes.
- vi) Sub-Tropical Pine Forests: These forests of *Pinus roxburghii* occur at elevations between 1,000 to 2,200 m above mean sea level. Lower or Shiwalik chil pine and upper or Himalayan *chil* pine occur extensively in Kangra, Dehra and Nurpur areas.
- vii) Sub-Tropical Broad-Leaved Hill Forests: These forests occur in the sub-tropical areas of the district below 1,000 m above mean sea level, *viz*. Dehra, Pragpur and Indora areas. *Khair, tun, siris, kachnar, beul, bamboo* and other broad-leaved plants dominate these forests.
- **3.3.1. Forest area by legal status:** According to legal classification, the area under forests in the district is 284.18 thousand hectares which is 49.2 per cent of the total geographical area (Table 3.2). But the actual forest area is 143.3 thousand hectares which accounts for a quarter of the total geographical area in the district.

Table 3.2: Forest Area in Kangra by Legal Classification, 2002-03 (ha)

Sr.	Classification		Total			
No.		Dharamshala	Dehra	Nurpur	Palampur	
1	Reserved forest	139	3310	4152	1	7601
2	Demarcated protected forest	33339	2737	5965	13761	55802
3	Un-demarcated protected forest	27035	7745	26345	102457	163582
4	Road strip	216	66	54	101	437
5	Railway strip	213	184	53	296	746
6	Others*	200	20077	16729	19007	56013
Total		61142	34119	53298	135622	284181

<sup>\*</sup> Include un-classed forest, area under section 38 I.F.A, LPA & HP PVT. forest, municipal forest and cantonment forests.

Source: Annual Administration Report for the Year, 2002-03, Forest Department, Himachal Pradesh

#### 3.4. Water Resources and Drainage

River Beas and its tributaries constitute the main drainage system in Kangra district except for the extreme north-eastern part in Bara Bhangal area where it forms a part of the river, Ravi. Generally, the drainage system is marked by structural and slope conditions. The Beas river enters the district near village Harsi from the east and flows towards the west before it leaves Kangra (and Himachal Pradesh) at Mirthal in Punjab. The major southernly flowing tributaries are Neugal, Awa, Binnu, Baner, Naker, Gaj and Dehar *khads*. All these *khads* being snowfed are perennial. Northernly flowing streams are ephemeral. The various khads/streams and their catchment areas are given in Table 3.3. Banganga, Dehar, Neogal and Awa originate from high Dhauladhar ranges in the north. Banganga, Gaj, Dehar, Bohl and Nand Khads join the Pong reservoir directly, while Neugal and Awa join the Beas river in the upstream of Nadaun. These khads have deep valleys in the hilly area. The valleys are wide in the Kangra valley region where the slope/gradient of the rivers is gentle. The course of these rivers is structurally controlled. The gradient and flow are being utilized both for irrigation and power generations. A number of micro hydel projects are under construction on these khads. The water of these rivers is also used for irrigation by diverting its flows through kuhls (gravity channels). The northernly flowing tributaries 'choes' are ephemeral and have flash floods during the monsoons. The width of these stream channels varies from less than a kilometre to more than 2 km. The channel areas are generally devoid of vegetation. The important *khads* are Pragpur, Nalsuha, Chanour and Dada Siba.

Table 3.3: Main Tributaries of Beas River in Kangra District

Sr.No.	Name of River/ Khad	Catchment Area (sq km)	Remarks
1.	Nand khad	39	Joins directly
2.	Buhl khad	104	Pong Ram Dam
3.	Dehar khad	477	Pong Ram Dam
4.	Gaj khad	616	Pong Ram Dam
5.	Bunner khad (Banganga khad)	782	Pong Ram Dam
6.	Pola khad	47	Pong Ram Dam
7.	Naker khad	184	Joins Beas river
8.	Neogal khad		Joins Beas river
9.	Binno		Joins Beas river

Source: Central Groundwater Board, Regional Office, Dharamshala

**3.4.1.** *Kuhl* **Irrigation:** The major source of irrigation in district Kangra is the ageold method of directing water from various streams, rivulets and springs through small rills or channels to the cultivated fields. Despite the changing paradigm of water rights (Box 3.1), this method continues to be the most suitable to the local conditions. However, the existing system offers good scope for improvement by way of innovations in the field of cheaper lining material thereby reducing losses by seepage.

Leaving aside the tribal districts of Lahaul and Spiti and Kinnaur, Kangra district has the second highest proportion of area under irrigation in the state of Himachal Pradesh after Sirmaur. The net irrigated area is 33,528 hectares, which is 28.7 per cent of the net sown area in the district (Table 3.4). The main source of irrigation in the district is *kuhls*. While nearly 89.0 per cent of the net irrigated area is watered by these private kuhls, six per cent is through the private wells and another 2.0 per cent by private tubewells. The remaining 3.0 per cent is accounted for by private lift irrigation schemes.

Table 3.4: Net Area Irrigated by Source in Kangra, 2002-03 (ha)

Table 5.4. Net Area Hillgated by Source in Kangra, 2002-05 (na)					
Sr No.	Source of Irrigation	Kangra	HP		
1	Government canals	-	3,510 (3.43)		
2	Government tube wells	-	6,395 (6.25)		
3	Private tube wells	700 (2.09)	3,824 (3.74)		
4	Tanks		267 (0.26)		
5	Kuhls of which	29,767(88.78)	81,735 (79.93)		
	a) Government	-	3,758 (3.68)		
	b) Private	29,767	77,977 (76.25)		
6	Govt. Lift Irrigation Schemes	-	1,341(1.31)		
7	Private Lift Irrigation Schemes	1,005 (3.00)	1,596 (1.56)		
8	Govt. wells	-	203 (0.20)		
9	Private wells	2,056 (6.13)	3,392 (3.32)		
10	Total	33,528 (100.00)	1,02,263 (100.00)		

Source: Annual Season and Crop Report, 2002-03, Department of

Economics and Statistics, Government of Himachal Pradesh, Shimla..

### **Box 3.1. Changing Paradigm of Water Rights**

The ageold system of kuhl irrigation in Kangra district is famous for its well defined water rights and management of these kuhls. This system of defining private water rights on a water source, be it an irrigation system, a natural stream or any other source was known as "Riwaz-I-Abpashi" or custom in irrigation. The water rights of the famous kuhls of Palampur tehsil such as the The Diwan Chand Kuhl, Kripal Chand Kuhl, the Dai-di-Kuhl, the Kusmal Kuhl, etc. were defined under this system. It was defined for each village and was an important record of rights included in the claims of individuals and communities of the village during the process of land settlements. The "Riwaz-I-Abpashi" generally records, and or all of the following:

- History of 'Kuhl', and also the name of beneficiary villages or individuals.
- Description of the method of diversion, reconstruction of the diversion structure of the 'Kuhl', it also mentions penalties to be levied for non-participation in maintenance chores;
- Water distribution and rotation modalities;
- Attestation by beneficiaries for the correctness of the record. This is done to verify the correctness of the contents of the record of rights and is signed by all prominent persons of the command area of the system.

### New Developments on Water Rights

However, with the enactment of the Minor Canal Act, 1976, the systems of irrigation have undergone a major change. Now the land records prepared for all holdings under the Land Revenue Act serve as a record of irrigation rights and also provide a statement of customs reflecting right and liabilities in the state. This statement of customs is presumed to provide a record of customary rights of the water for irrigation or for the working of mills. These provisions of water rights will further undergo a change after the amended Himachal Pradesh Irrigation Act comes into force and for which bill is under consideration. In addition to these, once the concepts of Water Users Associations (WUAs) and the Participatory Irrigation Management (PIM), are introduced, the domain of water rights will further witness changes.

Source: State of the Environment Report-Himachal Pradesh (2000), State Council for Science, Technology and Environment, Shimla (Himachal Pradesh).

**3.4.2. Lakes and Reservoirs:** Dal and Kareri are the two natural lakes in the district. These are located in the upper reaches of Gaj *khad* at an altitude of 2,083 m and 3,000 m amsl, respectively. The former, which is located in Mecleodganj area of Dharamshala has been affected by the process of urbanization and has been reduced to a small pool. The other lake, Kareri, which used to be perennial lake has also been silted up and contains water during rainy season only. A few glacier lakes in Bara Bhangal area are also identified in the catchment of Beas river at altitudes of 4,650m to 4,850m amsl. A

reservoir on the Beas river has been constructed in 1974 near a village Pong in Terrace. This is also known as Pong Reservoir. The salient features of the reservoir are given in the Table 3.5. The normal flow of the Beas river upto Pandoh is diverted to Sutlej river (Govind Sagar-Bhakra Dam) through a diversion channel. This flow is also utilized for power generation. The surplus water of Beas river during rainy season is released downstream of Pandoh Dam to augment the flows for impoundment in Pong Reservoir.

**Table 3.5: Salient Features of the Pong Reservoir** 

Full Reservoir Level	426.72 metres amsl
Water Spread areas (At full reservoir level)	260.0 sq km
Length of water spread	42.0 km
Full Storage Volume	8579.99 million M <sup>3</sup>
Life Storage	7291.22 M <sup>3</sup>
Dead Storage	1287.77 M <sup>3</sup>
Catchment area	12562 km
Length of Beas river	230 km
Average rainfall in the catchment	1143 mm

Source: Central Groundwater Board, Regional Office, Dharamshala

**3.4.3. Ground Water:** For long term monitoring of ground water level in district Kangra, first Hydrograph Network Station was established by the Geological Survey of India (GSI) in 1969. Since then a number of hydrological studies (mostly pertaining to Nurpur and Indora area) have been conducted in the district by the Central Ground Water Board (CGWB). The water levels are being monitored by CGWB four times in a year. The dynamic ground water resource estimates have been computed only for Indora and Nurpur area. The utilizable ground water reserves are put at 60.96 MCM and the net amount draft is 13.54 MCM. This leaves a surplus of 47.42 MCM for further use. The stage of developments was 22.2 per cent and the area was put under 'white' category in 1992. By 1997 the projected stage of ground water development was set at 24 per cent. Utilisable irrigation potential for development from natural recharge has been estimated to be 12,830 hectares. The ground water resources of Palampur and Kangra valley fills are yet to be estimated. The perennial kuhls in these areas continually recharge the ground water. Of late the handpumps dug in these areas are using the ground water. Similarly, the ground water developments for domestic and agricultural use are yet to take off in the Dehra area.

### **3.5.** Soils<sup>2</sup>

Soils of the district are mainly derived from lesser or outer Himalayas and Shivalik formations. Slate, gneiss, phyllites, sandstone and quartitle are the important rock types of the lesser Himalayas, while calcareous conglomerates, sandstone, shale and unassorted alluvial deposits are present in the Shivalik formations. The soils in the foothills of Dhauladhar range show well developed, deep, fine texture and both A &B horizons, which are distinctly expressed. In case of the soils of Shivalik formations, shallow to moderately deep profiles with relatively less expressed horizons and coarse to medium texture are found. In other words, climate and topography play a dominant role in determining the soil characteristics.

In general, the soils are neutral in reaction with the exception of those of Baijnath, Panchrukhi, Bhawarna, Nagrota, Kangra and Rait blocks. Available phosphorus is medium to low and deficiency is particularly noticed on maize, wheat and soybean crops in blocks of Baijnath, Panchrukhi, Bhawarna, Nagrota, Kangra and Rait where soil pH is in acidic range. Organic carbon is low to medium in Dehra, Nurpur, Indora and Lambagoan blocks, while medium to high in rest of the blocks. Available potassium is medium to high. Soil description, in details, is given below:

i) Low-hill soil zone: This type of soil extends upto an elevation of 910 m above mean sea level and covers the area of Nurpur, Indora, Paragpur, Nagrota Surian, Dehra and part of Rait blocks. Since these soils have been deposited by running water in foothill zone, the soils are shallow and are embedded with gravel, pebbles and stones. The *choes* in some of the areas of this zone have deposited vast expanse of coarse sand. Only at certain favoured spots in valley bottoms along the river courses alluvial soils are found. These alluvial soils contain large quantities of clay. Besides, these soils are rich in organic matter, lime and iron but lack in phosphorus and nitrogen contents. The particles of this alluvium are fairly fine and it is quite suitable for the cultivation of rice, wheat and vegetables. Soil reaction in this soil zone is neutral with a ratio of 10:1 of carbon and nitrogen.

ii) Mid-hill soil zone: This soil zone is found in areas having elevations between 910 to 1,517 m above mean sea level and covers parts of Kangra and Rait blocks. These soils are developed mainly in areas of chil pine trees and mixed deciduous forests. Soils are well drained, greyish-brown in colour, loam, clay-loam in texture. These are quite rich in iron, potash, carbon and nitrogen but lack in lime and phosphorus. The ratio of carbon-

<sup>2</sup> Adopted from "Inventory of Resources, Kangra District, Himachal Pradesh" by S C Tiwari and O P Awasthi, Himachal Pradesh Krishi Vishva Vidyalaya, College of Agriculture, Palampur (Kangra)

21

nitrogen in these soils in 10:1 to 12:1. These soils are neutral to slightly acidic in reaction and are very suitable for the cultivation of maize, wheat and tobacco.

- iii) High-hill soil zone: The high-hill soil zone extends over areas having elevations between 1,517 to 2,122 m above mean sea level. These soils have also developed in areas of mixed forests but on steep slopes with good drainage. These dark brown soils range from silty-loam to clay-loam in texture. Organic matter is medium to high. These soils are rich in nitrogen but lack in potash and phosphorus. Soil is acidic to neutral.
- iv) Mountainous soil zone: This soil zone covers the mountain areas ranging in elevations from 2,122 to 3,034 m above mean sea level. This soil zone extends over the central Palampur sub-division, parts of Kangra and Nagrota blocks. The soils are light and dark brown in colour, their texture varies from loamy to silty-loam. Soil reaction is slightly to moderately acidic. The soils are rich in iron and carbon, but lack in salts and other mineral constituents.
- v) Dry-hill soil zone: These soils exist in Bara and Chhota Benghal area of Baijnath block. The organic content in the soil is medium to high. The soils are infertile.

#### 3.6. Mineral Resources

The rock types commonly seen in the district are shale, clay and sandstones of Shiwalik group, green shales and fossil rich limestones of Subathu formation, gneissic and granitic rocks of Dhauladhar group, slates, phyllites, schists and limestones of Salooni formation, quartzite, phyllite and limestone of Manjir formation and older rocks comprising slate, schist, quartzite, basic lava flows, salt, marl and dolomite belonging to Jutogh, Sundernagar and Shali formations.

The Jutogh is the oldest group of rocks and is seen in a long stretch from east of Bir to Dharmkot. The Sundernagar formation is well exposed between Luni and Sansal *khads* and north of Tundi *khad* in *Chakki nala*. The basic lava flows, known as Mandi-Darla volcanics, occur in small patches in Bir *khad*, Sansal *khad*, Luni *Khad*. The cement grade limestone and salt grits of Dharamkot belong to Shale formation. The rocks of Manji formation can be seen between Bara Banghal and Kankarna Got along the foot track. Salooni formation is exposed at Dhamsar pass near Palachak bridge, Jalta and in the east of Kurkarni Got. The granitic rocks of Dhauladhar occur in a width of five kilometers across Dhauladhar ridge. The rocks of Subathu formation are observed between Manji and Manuni, near Rakh, Bhanjerl and Karti. The rocks of Shiwalik group occur as several mile wide hill ranges with steeper scraps towards north and can be studied around Damtal, Nurpur, Kotla, Kangra, Jawalamukhi and Dehra Gopipur. Though various

economically significant rock formations are found in the district, yet only the slates and limestone deposits are of any commercial consequence. Various minerals found in the district are described below.

**3.6.1. Slates:** Slates are extensively used as roofing material in Himachal Pradesh. Roofing slates are being quarried at Khaniara, Bhagsunath, Thatri, Kareti and Narwana. Slate mining in the area dates back to the 1880s. Mining is confined to the Chandpur formation which consists of phyllites and slates. These quarries were operated by local contractors on contract from the local panchayats who held mineral rights. But recently, the Government has taken over mineral rights and efforts are being made to organise these mines on scientific and systematic mining methods. However, most of the area under mining falls in a Reserve Forest for which permission of the Ministry of Environment and Forests is required under the Forest Conservation Act, 1980 to divert forest land for non forest use. The production of slates in Kangra is given in Table 3.6.

Table 3.6: Production of Slates in Kangra 1972-96.

Year	Number of slates	Quantity (tonnes)
1972	1,20,00,492	630
1973	1,56,37,949	590
1974	2,63,25,136	547
1975	1,43,52,864	465
1996	33,28,816	-

Source: Office of the District Mining Officer, Dharamsala.

**3.6.2. Limestone:** The Dharamkot limestone deposit is located two kilometres north of McLeodganj. This limestone belongs to the Shale formation and comprises of pink limestone, dark grey limestone, dolomatic limestone and shales. The pink limestone and dark grey limestone are of cement grade. The total estimated reserves are about 19 million tonnes. The proven reserves of pink limestone are 8.1million tonnes and of grey limestone are 1.5 million tonnes.

**3.6.3. Oil and Natural Gas:** Oil and natural gas is reported to occur in Jawalamukhi area. The tertiary basin is considered most promising from the point of view of petroleum exploration. This inference is supported by a thick sequence (six to eight kilometres) of sedimentary rocks, surface oil and gas seepages and well developed structural features. Drilling was started here in 1955-56 by ONGC in consultation with Soviet experts. However, no promising results were achieved by drilling of these wells. Ever since, several exploratory wells have been drilled even to a depth of 6,500 metres, but could not reach the targeted Subathu formation which is likely to contain oil and

natural gas. Super deep drilling machine capable of drilling upto 8,000 meters can only prove or disprove the presence of oil and natural gas in the region.

**3.6.4. Sand, stone and** *bajri:* There are 155 crushers in the district which are extracting 4.28 lakh tonnes of sand, stone and *bajri* annually from the *khads/*rivers. Total direct employment in these crushers is estimated to be around 2000 persons. The extraction has grown more than five times during the last thirty years (Table 3.7)

Table 3.7: Extraction/Production of Sand, Stone and *Bajri* in Kangra District, Himachal Pradesh (tonnes)

Sr.No.	Name of Minerals	1975	2005-06	<b>Times Increase</b>
1	Building stone	23,518	1,25,280	5.33
2	Ordinary sand	31,583	1,48,297	4.7
3	Bazri (both raw and crushed)	26,493	1,55,135	5.85
4	Total	81,594	4,28,712	5.25

Source: Office of the District Mining Officer, Dharamshala.

**3.6.5. Iron and coal:** Iron and coal are the other minerals found in district Kangra. An iron ore deposit is reported from the Uhl valley. A band with an average outcrop width of 20 metres is exposed for about 2,500 metres from Multhan to Kothi Kohar. It has a magnesite content of approximately 5 per cent to 10 per cent. Lignitic coal deposits are reported from Dehra Gopipur and Nurpur area. But these deposits are too small for any economically viable extraction.

#### 3.7. Livestock Resources

Livestock farming has been an integral component of agriculture since times immemorial. Of late, it has emerged as a strong component of agricultural diversification with its concomitant implications for food security, employment, ecology and exports in the new economic regime. And unlike plains, it is more so for the hilly regions that have scant livelihood options. Besides milk, meat and related livestock products, in hills it provides draught power to till the land and perform other agricultural operations such as threshing and transportation. The latter become all the more important as the scope of mechanization is constrained by the hostile physiography and poor economic endowments of the hill peasantry.

Livestock sector contributed around 22.0 per cent to the Gross District Domestic Product (GDDP) in Kangra in 1999-2000. However, as a proportion of domestic product originating in agriculture and allied sectors, livestock contribution was highest at 60.6 per

cent in Kangra district in 1999-2000 (Kumar, *et al.*, 2004). The corresponding figure for the state as a whole was only 40.4 per cent. Thus, the importance of livestock can hardly be overemphasized in Kangra.

While the total livestock population in the state increased by about 7.30 per cent over 1972-2003 period, it witnessed an increase of 24.0 per cent in Kangra district during the same period (Table 3.8). Of the 8.85 lakh animals in the district in 2003, 44.79 per cent were cattle, 23.62 per cent goats, 18.37 per cent buffaloes and 12.15 per cent were sheep. While the population of cattle has declined in the district by about 9.0 per cent points since 1972, that of goats have gone up by more than 7.0 per cent points. The population of sheep and buffaloes exhibited an increase of about one per cent each in their respective shares. The most notable achievement has been with respect to poultry wherein the district has witnessed higher growth as compared to the state. The share of poultry in the district increased from 29.92 per cent (of the state) in 1972 to 34.44 per cent in 2003.

Table 3.8: Changing Livestock Composition in Kangra District, 1972-2003

Particulars	1972		2003	
	Kangra	HP	Kangra	HP
1. Cattle	3,87,832	21,75,690	3,96,557	21,96,538
	(54.30)	(46.27)	(44.79)	(43.53)
a) Indigenous	-	-	2,43,546	15,45,795
b) Improved	-	-	1,53,011	6,50,743
			{38.58}*	{29.63}*
2. Buffalo	1,21,521	5,43,887	1,62,695	7,73,229
	(17.02)	(11.56)	(18.37)	(15.32)
3. Sheep	81,570	10,39,946	1,07,627	9,06,027
_	(11.42)	(22.11)	(12.15)	(17.96)
4. Goats	1,14,416	9,06,415	2,09,086	11,15,587
	(16.02)	(19.28)	(23.62)	(22.11)
5. Others	8,832 (1.24)	36,518 (0.78)	9,490 (1.07)	54,643
				(1.08)
Total Livestock	7,14,171	47,02,456	8,85,455	50,46,024
	(100.0)	(100.0)	(100.0)	(100.0)
6. Poultry	56,449	1,88,649	2,63,202	7,64,136

Note: 1. Figures in parentheses are the percentages of column totals.

Source: 1.Livestock Census, 2003, Directorate of Land Records, Government of HP.

2. Statistical Outline of Himachal Pradesh (1976), Department of Economics and Statistics, Government of Himachal Pradesh, Shimla.

#### 3.8. Land Utilization Pattern

Land utilization pattern in Kangra district is given in Table 3.9. As may be seen in this table, two-fifths of the total area in the district is under forests, which is much higher as compared to the state average of 24.20 per cent. This is illustrative of the fact that the

<sup>2. \*</sup> Denotes the proportion in total cattle population.

district has immense stock of natural resources. The area not available for cultivation in the district accounts for 16.54 per cent of the total area. This is much lower as seen against the state proportion of 24.19 per cent. Within this unavailable category, however, the proportion of land put to non-agricultural uses in the district is almost twice (at 13.42 per cent) of the proportion at the state level. The area under the plough in the district is one-fifth of the geographical area which is almost twice of the proportion of the net sown area at the state level. This can be attributed to the fact a large tract of the area in the district is either close to the plain areas or most of it is in the form of valleys. The district has a cropping intensity of 185 per cent which is higher than the state cropping intensity (174 per cent). This reflects the fact that nearly two crops a year is the most commonly observed farming sequence in the district.

Table 3.9: Land Utilization Pattern in Kangra District, 2002-03 ('000 ha)

Sr.	Particulars	Kangra	Himachal
No.			Pradesh
1.	Total Geographical area		
	By Professional survey	573.9	5567.3
	By Village papers	578.0	4543.1
2.	Forests	232.1	1099.4 (24.20)
		(40.16)	
3.	Area not available for cultivation of which	95.6 (16.54)	1124.1(24.75)
4.	Barren and unculturable land	18.0 (3.11)	806.3 (17.75)
5.	Land put to non-agricultural uses	77.6 (13.42)	319.2 (7.03)
6.	Other uncultivated land excluding current	122.6	1698.2(37.38)
	fallows	(21.21)	
7.	Culturable waste	27.4 (4.74)	122.2 (2.69)
8.	Permanent pastures and other grazing lands	87.5 (15.14)	1518.0 (33.41)
9.	Land under miscellaneous tree crops	7.7 (1.33)	58.0 (1.28)
10.	Fallow lands of which	11.0 (1.90)	75.4 (1.66)
11.	Current fallows	10.6 (1.83)	60.3 (1.33)
12.	Other fallows	0.4 (0.07)	15.1(0.33)
13.	Net sown area	116.7	544.6 (11.99)
		(20.19)	
14.	Total cropped area	216.0	945.2 (20.21)
	_	(37.37)	
15.	Cropping Intensity (%)	185	174

Source: Annual Season and Crop Report, 2002-03; Directorate of Land Records, Government of Himachal Pradesh, Shimla.

The land utilization pattern in different blocks of Kangra presented in Table 3.10 revealed that Baijnath having the highest geographical area was almost nine times of the smallest block of Panchrukhi. Dehra block came next in terms of geographical area followed by

Table 3.10: Land Utilization Pattern in Different Blocks (Area in ha)

	Lanu Umizano				1	(Alta III	,	
Block	Total Geographical Area	Forests	Total Irrigated Area	Area Not Available for Cultivation	Culturable Wastes	Unirrigated Area	Total Cultivated Area	Net Irri. Area (%)
Baijnath	127442	80944	2697	35583	4760	3458	6155	43.82
-		(63.51)	(2.12)	(27.92)	(3.74)	(2.71)	(4.83)	
Bhawarna	25133	13643	4548	3671	2175	1096	5644	80.58
		(54.28)	(18.10)	(14.61)	(8.65)	(4.36)	(22.46)	
Dehra	71505	11582	179	34739	13222	11783	11962	1.50
		(16.20)	(0.25)	(48.58)	(18.49)	(16.48)	(16.73)	
Fatehpur	39575	6156	1159	9020	11770	11470	12629	9.18
		(15.56)	(2.93)	(22.79)	(29.74)	(28.98)	(31.91)	
Indora	40749	10245	3430	8166	7208	11700	15130	22.67
		(25.14)	(8.42)	(20.04)	(17.69)	(28.71)	(37.13)	
Kangra	33918	16310	3892	4907	4470	4339	8231	47.28
		(48.09)	(11.47)	(14.47)	(13.18)	(12.79)	(24.27)	
Lambagaon	22037	3982	384	6641	5526	5504	5888	6.52
		(18.07)	(1.74)	(30.14)	(25.08)	(24.98)	(26.72)	
Nagrota Bagwan	25997	11636	4504	3138	4128	2591	7095	63.48
		(44.76)	(17.33)	(12.07)	(15.88)	(9.97)	(27.29)	
Nagrota Surian	30877	15708	313	3817	3925	7114	7427	4.21
		(50.87)	(1.01)	(12.36)	(12.71)	(23.04)	(24.05)	
Nurpur	37452	14748	961	4541	4513	12689	13650	7.04
		(39.38)	(2.57)	(12.12)	(12.05)	(33.88)	(36.45)	
Panchrukhi	14652	3621	4020	2045	3018	1948	5968	67.36
		(24.71)	(27.44)	(13.96)	(20.60)	(13.30)	(40.73)	
Pragpur	41638	9481	1616	12169	9646	8726	10342	15.63
		(22.77)	(3.88)	(29.23)	(23.17)	(20.96)	(24.84)	
Rait	46503	30793	4613	3668	3795	3634	8247	55.94
		(66.22)	(9.92)	(7.89)	(8.16)	(7.81)	(17.73)	
Sulah	17152	4621	3074	2852	4011	2594	5668	54.23
		(26.94)	(17.92)	(16.63)	(23.39)	(15.12)	(33.05)	
Total	574630	233470	35390	134957	82167	88646	124036	28.53
Note: Figures is		(40.63)	(6.16)	(23.49)	(14.30)	(15.43)	(21.59)	l

Note: Figures in parentheses are percentage of respective total geographical area.

Source: Census, 2001.

Rait. The area available for cultivation as a proportion of total geographical area in the blocks was not in consonance with distribution of geographical area in different blocks. For instance, the area available for cultivation was highest in Panchrukhi (40.73%)

followed by Indora (37.13%) and Nurpur (36.45%). On the other side, it was quite low in Baijnath (4.83%), Rait (7.81%) and Dehra (16.73%). As far as the irrigation facilities are concerned, in Bhawarna 80.58 per cent of cultivated area was found to be irrigated. Panchrukhi, Nagrota Bagwan, Rait and Sulah were found to have irrigation over more than 50.0 per cent of the respective cultivated area. The irrigation facilities were almost negligible in Dehra (1.50%), followed by Nagrota Surian (4.21%), Lambagaon (6.52 %) and Nurpur (7.04 %). With regards to forest area, Rait (66.22%) had highest proportion of geographical area under forests followed by Baijnath (63.51%) and Bhawarna (54.28%). The blocks of Fatehpur (15.56%), Dehra (16.20%) and Lambagaon (18.07%) were found to have least forest cover in the district. The proportions of culturable waste lands were quite high in Fatehpur (29.74%), Lambagaon (25.08%), Sulah (23.39%) and Pragpur (23.17%). The area not available for cultivation was very high in Dehra (48.58%) followed by Lambagaon (30.14%), Pragpur (29.23%) and Baijnath (27.92%).

**3.8.1. Agriculture-Main Livelihood Option:** The contribution of district Kangra to the Himachal agriculture is immense. As may be seen in Table3.11, it accounts for almost one-fourth of the foodgrain area in the state. Individual crop-wise, the contribution of the district is quite high at 45.0 per cent for rice and 20.0 and 26.0 per cent for maize and wheat, respectively. The area under pulses is 14.0 per cent of the state area. As regards the non-foodgrain crops, the district contributes 39.0, 20.0 and 12.0 percent to the state

Table 3.11: Area under Different Crops in Kangra District, 2003-04

Sr. No.	Crops	Area (ha) in 2002-03			
		Kangra	Himachal Pradesh		
1	Rice	37144 (44.60)	83273		
2	Maize	58685 (20.02)	292801		
3	Wheat	91775 (25.53)	359439		
4	Barley	2575 (10.91)	23596		
5	Pulses	4100 (13.61)	30128		
8	Total Foodgrains	194728 (24.05)	809753		
9	Oilseeds	6623 (38.76)	17089		
10	Vegetables (all)*	7392** (11.85)	62356		
11	Fruits	45523(20.41)	223035		

Note: \* includes potato and ginger; \*\* For the year 2004-05; Figures in parentheses indicate proportions of state totals.

Source: Department of Agriculture, Directorate of Land Records and Department of Economics and Statistics, Government of Himachal Pradesh.

area under oilseeds, fruits and vegetable crops, respectively. While the larger share in case of oilseeds is attributable to the paddy-linseed rotation in the *Palam* valley of the district, the area under fruits is mainly accounted for sub-tropical fruits like mango, orange, kinnow and litchi, etc in the blocks with relatively plane topography. On the

production front (Table 3.12), while the production of rice, wheat, barley, foodgrains, oilseeds and vegetables is commensurate with the corresponding area under these crops/crop groups, the production of maize, pulses and fruits is dismally low in the district. As regards the cropping pattern in the district, the foodgrain crops account for over 90.17 per cent of the total cropped area in the district (Table 3.13). The respective shares of the major cereals of wheat, rice and maize are 42.0, 17.0 and 27.0 percent, respectively. Off late crop diversification to off-season vegetable crops has also picked up in the district. Besides the

Table 3.12: Production of Major Crops in Kangra District, 2003-04

Sr.	Crop	Production (tonnes)					
No.		Kangra	Himachal Pradesh				
1	Rice	34219(39.95)	85653				
2	Maize	68040 (14.08)	483333				
3	Wheat	122476(24.71)	495557				
4	Barley	3013(9.84)	30615				
5	Pulses	1406(7.32)	19206				
8	Total Foodgrains	229250(20.46)	1120185				
9	Oilseeds	3758(46.60)	8065				
10	Vegetables (all)*	108170(10.83)	998926				
11	Fruits@	29111(6.33)	459623				

Note: \* includes potato and ginger; \*\* For the year 2004-05; Figures in parentheses indicate proportions of state totals.

Source: Department of Agriculture, Directorate of Land Records and Department of Economics and Statistics, Government of Himachal Pradesh.

Table 3.13: Cropping Pattern in Kangra District, 2003-04

Sr. No.	Crops	Area (ha), 2002-03
1	Rice	37144 (17.20)
2	Maize	58685 (27.17)
3	Wheat	91775 (42.50)
4	Barley	2575 (1.19)
5	Pulses	4100 (1.90)
8	Total Foodgrains	194728 (90.17)
9	Total Non-foodgrains of which	21233 (9.83)
10	Vegetables	2403 (1.11)
11	Fruits	6277(2.90)
12	Oilseeds	6623(3.07)
13	Fodder	2970 (1.38)
14	Tea	2321 (1.07)

Source: Annual Season and Crop Report, 2002-03, Directorate of Land Records, Government of HP, Shimla

traditional vegetable growing areas such as Nagrota Bagwan, Kangra, Shahpur, etc., new areas such as Lambagaon and Chhota Bhangal have made it big in the off-season vegetable cultivation (Box 3.2). Among other non-foodgrain crops, tea which is grown over 2321 hectares is a traditional crop and a promising option (Box 3.3) in the district.

#### Box 3.2. Crop Diversification in Chhota Bhangal: A Success Story

Chhota and Bara Bhangal area of Baijnath block is the most reclusive hill tract of Kangra district. The area has been divided into eight panchayats namely, Multhan, Dhramman, Kothikohar and Baragran in Kothikohar valley; Luwai, Polling, and Sawar in Kothi Sawar valley and Bara Bhangal in Bara Bhangal valley. There are 38 inhabited villages in these panchayats. Bara Bhangal Panchayat is situated about 72 km from Baragran panchayat. It has not been connected by road so far. It takes three days of arduous journey through gorges and glacial cleavages to reach Bara Bhangal from Baragran. The population is 7,498 (3809 males and 3689 females). The total geographical area is 101,766 hectares. The gross cropped area is 1,358 hectares and the cropping intensity is 100 per cent. There is only one crop season from April to October and it remains under snow for the remaining six months. Till 2001-02, the cropping pattern in this area was dominated by potato (with more than half of the total cropped area), maize, rajmash (broad bean), minor millets, amaranthus, buckwheat and wheat. The crop yields were, however, very low. Because of endemic poverty, most of the villagers used to migrate to lower areas for 3-4 months in search of manual jobs on roads, construction sites, tree felling, etc. To quote a local farmer, 'the income earned from these activities was barely sufficient to fulfill our basic subsistence needs and we could not save enough to reach back home'.

The story of crop diversification in these panchayats started six years back in 2000-01 when a farmer from Lahaul and Spiti came to Kothi Kohar village and leased-in land from the villagers. The villagers gave him land for cultivation free of any rent but with the conditions that he would hire local labour for vegetable cultivation and teach them about the methods of growing these crops. He stayed in the village for two crop seasons. Likewise, another farmer from Banjar area of Kullu district also came to the village in 2001-02 and leased-in land on nominal rent for growing vegetable crops for one season. These two farmers successfully raised cabbage and cauliflower and made handsome profits. The local villagers after getting convinced about the profitability of these crops and learning some basic principles of growing these crops, started cultivating them in the year 2002-03. By 2006, all farmers, including marginal and sub-marginal with land as low as 0.2 ha (5 kanals), have switched over to the cultivation of off-season vegetables.

While the process of transformation towards these crops is nearly complete in most of the villages in three panchayats, namely, Kothikohar, Baragran and Dharmman, it is fast catching up in the remaining panchayats except Bara Bhangal. The main crops grown are cabbage, cauliflower, radish, rajmash and potato. Among these crops, cabbage is the most important crop and Sanjeevani, Pushkar and Pragati are the important hybrids. Cauliflower comes next and Shweta, Chandani and Paheja are the common varieties grown. These crops together account for more than 90 per cent of the total cropped area. The area under potato has now decreased to around 15 per cent. These crops are grown at an elevation of 1800 - 3000 metres a.m.s.l. The use of fertilizers and chemicals is very low. The average yield of cauliflower, cabbage and radish is 220 q/ha, 250q/ha and 300q/ha, respectively. The average yield of rajmash (broad bean) is 7q/ha. The area has a huge potential of growing organic rajmash (broad bean) because of negligible use of inorganic fertilisers. According to one estimate, these panchayats sold vegetables worth Rs.1.25 crores in the year 2005 which is expected to increase to more than Rs.2.5 crores this year. More recently, the State Department of Agriculture has started supplying necessary inputs like seeds and chemicals and technical guidance to the local farmers and the efforts are on to introduce new crops like peas, beetroot and broccoli in the area. The marketing system is in the process of evolution. Local youths from different villages have formed small informal groups and have started marketing these crops in nearby towns namely, JoginderNagar, Baijnath, Mandi, Sundernagar, Palampur, Kangra, Pathankot, Jasoor, Jalandhar and Ganganagar. Around one-half of the produce is marketed through this channel. The remaining half is sold in the villages to traders both local and from outside.

The cultivation of these crops has made a perceptible impact on the living conditions of local people. Since the incidence of landlessness in these panchayats is negligible, practically every household has benefited from the cultivation of these crops. On an average, even a sub-marginal farmer having land as low as 0.2 hectare earns a net income of fifteen to twenty thousand rupees per crop season and is in a position to meet his basic needs. In the words of Shankar Dev, a local farmer of village Kothikohar, 'the net impact of the cultivation of these crops has been that since their introduction no family of the village migrates to lower areas in search of livelihoods during winter season. Since these families now have sufficient income to meet their basic needs, they stay back in their villages'. There are other noticeable impacts in terms of better houses, coming up of three private schools in the area to which local people have started sending their children, purchase of maxi cabs, installation of dish antennas, increase in the number of telephones (both landlines and cellular), and so on.

The success story is not without its share of problems. Firstly, notwithstanding the huge irrigation potential in the form of snowfed perennial streams, lack of irrigation facilities is the most important problem. Secondly, lack of an all weather road adds to the woes of the farmers as it gets blocked due to heavy rains and landslides during rainy season that happens to be main marketing season. In sum, the moral of the story is: given the right kind of institutions, infrastructure and bundle of support services like technology and extension, the farmers, even in the remote mountainous regions, respond quickly by making extensive changes in their cropping pattern

Source: Department of Agricultural Economics, CSK HPAU, Palampur.

#### **Box 3.3. Tea- A Promising Option**

Tea cultivation in Himachal Pradesh dates back to the visit of Dr. Jameson, the then Superintendent of Botanical Gardens Peshawar, to Kangra district in 1849 who recommended the lower slopes of Dhauladhar range, lying between 900-1400 metres above mean sea level with annual rainfall ranging from 1500-2500m and soil ph below 6.0, ideally suitable for tea cultivation. The first commercial plantation mainly with China type was established as Hailey Nagar Tea Estate at Holta in 1852 at an elevation of 1291 m amsl. By 1880, many plantations were developed covering an area of 4,180 hectares extending from Jogindernagar (Mandi) to Shahpur (Kangra). The quality of tea produced from these plantations appeared to be excellent as evinced by various gold and silver medals won in Amsterdam and London markets from 1886-1895. The great earthquake of 1905 ruined this flourishing industry. The panic stricken British sold their plantations to the locals, who could not maintain the same because of the lack of technical know-how, poor processing facilities, fragmentation of land holdings and low returns with the result that many plantations were either uprooted or abandoned.

The state government and Tea Board of India initiated steps to revive the sick industry. In 1962, Tea Experiment Station was provided financial assistance by the Tea Board to identify the problems and generate technology to improve tea plantations. Keeping in view, the poor quality of the product processed through old machinery by individual planters, the Himachal Government established four co-operative Tea Factories at Bir, Baijnath, Palampur and Sidhbari with a total capacity of 10.0 lakh kg of made tea. The technology generated through research efforts by the CSK H.P. Agricultural University, Palampur and quality product processed through Co-operative Tea Factories have placed "Kangra Tea" once again on the national and international scene for its quality. Total tea production after having crossed the peak figure of 17.11 lakhs kg in 1998, as against about 7.0 lakhs kg a decade earlier, is once again back to its old level of 6-7 lakh kg. Though the tea industry has shown good performance, with average productivity of 1,362 kg of made tea per hectare, yet the potential yield of 3,000 kg is to be achieved. This industry is earning revenue of about Rs. 9.41 crore per annum besides providing employment to approximately 6,000 workers directly or indirectly associated with this procession. More area (about 7,700 hectares) has been identified as the non- traditional area suitable for tea cultivation in the districts of Kangra, Chamba and Mandi.

Kangra district accounts for about 92.0 per cent of the total area under tea in HP. Also, it accounts for the largest share (80.0 per cent) in the neglected tea area as well as abandoned tea area (88.0 per cent) in the state. The prospective non-traditional area, in the district is, however estimated to be only about 32.0 of the potential of the state. The present status of area under tea along with the potential area in Himachal Pradesh is given below.

#### Area under Tea in Himachal Pradesh

District	Tehsil	Total area (ha)	Neglected area (ha)	Abandoned area (ha)	Non-traditional area suitable for tea cultivation
Kangra	(a) Palampur (b) Baijnath	1256 564	258 91	154 313	(ha) <b>2500</b>
	( c ) Dharamshala	232	26	42	
	(d) Kangra	66	1	44	
Mandi	Jogindernagar	193	94	73	2000
Chamba	Bhatiyat	1	-	-	3200
	Total	2312	470	626	7700

Source: Department of Tea Husbandry and Technology, CSK HPAU, Palampur.

# **Chapter 4**

## **Economy and Infrastructure**

Kangra, being the largest district accounting for more than a fifth of the state population and 10.31 per cent of the total geographical area, plays an important role in the economy of this hilly state. The economy of district is primarily agrarian with two-thirds of the population directly dependent on agriculture. An attempt has been made in the present chapter to examine the economic standing of the district *vis-a vis* other districts. Further, since physical infrastructure is central to the development of the economy and the people, an attempt has also been made to measure the level of infrastructure development across different blocks in the district.

## 4.1. The Economy

The economy of Kangra district is primarily agrarian with 66.06 per cent of the working population directly dependent on agriculture. It contributed 18.63 per cent of the Gross State Domestic Product (GSDP) in 2001-02 and its share in GSDP has not changed much during 1993-2001 period (Table 4.1). However, the district domestic product grew at an annual rate of about 13.0 per cent between 1993-94 and 2001-02 which was almost of the

Table 4.1: Gross and Net District Domestic Product of Kangra, 1993-94-2001-02
(At current prices in Rs. Lakhs)

Year		Kan	Himacha	l Pradesh		
		Per cent of		Per cent of		
	GDDP	GSDP	NDDP	NSDP	GSDP	NSDP
1993-94	93639	19.58	84930	19.98	478268	425003
1994-95	111103	19.07	101131	19.48	582503	519246
1995-96	126101	18.83	114267	19.27	669828	593024
1996-97	142309	18.35	128653	18.91	775527	680287
1997-98	166975	18.89	151263	19.38	883731	780698
1998-99	202350	18.92	185125	19.47	1069623	950746
1999-00	234999	19.22	214261	19.69	1222946	1088150
2000-01	247465	18.33	225917	18.79	1350391	1202266
2001-02	278407	18.63	254448	19.10	1494307	1331996
Annual Change						
(per cent)	12.87		12.97		13.49	13.53

Source: Directorate of Economics and Statistics, Government of Himachal Pradesh, Shimla.

same order as was for the State Domestic Product. The per capita income (PCI) in Kangra (at current prices) increased from Rs 6,927 in 1993-94 to Rs 18,127 in 2001-02 registering an increase of 11.28 per cent per annum (Table 4.2). In contrast, PCI at the state level grew @11.84 per cent per annum. Thus, the growth of the PCI has been marginally slower in Kangra as against that of the state.

Table 4.2: Per Capita Income in Kangra District, 1993-94 to 2001-02 (At current prices in Rupees)

Year	Kangra	Himachal Pradesh
1993-94	6927	7870
1994-95	8103	9451
1995-96	8997	10607
1996-97	9958	11960
1997-98	11512	13488
1998-99	13846	16144
1999-00	15743	18160
2000-01	16370	19784
2001-02	18121	21543
Annual Change ( per cent)	11.28	11.84

Source: Directorate of Economics and Statistics, Government of Himachal Pradesh, Shimla.

A cursory look at the PCIs of all the districts at these two points of time revealed that Kangra was ranked at ninth position both in 1993-94 as well as 2001-02 (Table 4.3). But an interesting revelation is that the PCI of Lahaul and Spiti, the district with the highest PCI in the state, had almost there times PCI in comparison to Kangra in 1993-94. This, however, got reduced to slightly over two times in 2001-02. An analysis of the sectoral composition of the Gross District Domestic Product (GDDP) revealed that the share of the primary sector declined from 39.39 per cent to 32.76 per cent whereas that of secondary sector went up from 20.79 to 27.46 per cent during 1993-2001 (Table 4.4). Surprisingly, the contribution of service sector remained stagnant at around 40.0 per cent which was contrary to the national trends wherein service sector has shown impressive growth during the decade of 1990s.

Table 4.3: Ranking of Kangra District on the basis of Per Capita Income (PCI), 1993-94 to 2001-02, (At current prices in Rupees)

	,	(=== =================================					
District	1993-94		2001-02				
	PCI	Rank	PCI	Rank			
1. Bilaspur	8080	VII	24287	V			
2. Chamba	8081	VI	19537	VIII			
3.Hamirpur	4776	XI	13949	XI			
4.Kangra	6927	IX	18121	IX			
5.Kinnaur	13729	II	31928	III			
6.Kullu	9246	V	22812	VI			
7.Lahaul and Spiti	19436	I	39240	I			
8. Mandi	6028	X	17158	X			
9.Shimla	12047	III	28481	IV			
10.Sirmaur	7499	VIII	22704	VII			
11.Solan	11030	IV	39062	II			
12.Una	4404	XII	13884	XII			

Source: Directorate of Economics and Statistics, Government of Himachal Pradesh, Shimla.

Table 4.4: Composition of GDDP of Kangra, 1993-94 and 2001-02 (Rs. Lakh)

Sector	1993-94		2001-02	
	Kangra	HP	Kangra	HP
1. Agriculture &	31388	118702	83722	325506
Animal Husbandry				
2. Forestry & Logging	4631	33195	8914	63893
3.Fishing	666	1867	1102	3208
4.Mining & Quarrying	198	2903	222	10919
Primary	36883 (39.39)	156667(32.76)	93960(33.75)	403526(27.00)
5.Manufacturing	2552	42220	13446	206995
6.Construction	12902	66848	43375	201876
7.Electricity, Gas	4014	22274	15540	88866
& Water Supply				
Secondary	19468 (20.79)	131342(27.46)	72361(25.99)	497737(33.31)
8.Transport, Storage	2779	16050	10189	70285
& Communication				
9.Trade, Hotels	8542	40836	27154	129806
& Restaurants				
10.Banking &Insurance	3298	18749	10011	56920
11.Real Estate	6668	31489	10971	53371
12. Public Administration	6570	37990	22256	124878
13. Other Services	9431	45145	31505	157784
Tertiary	37288(39.82)	190259(39.78)	112086(40.26)	593044(39.69)
GDDP	93639	478268	278407	1494307

Source: Directorate of Economics and Statistics, Government of Himachal Pradesh

#### 4.2. Infrastructure

Infrastructure plays an important role in the economic upliftment of the people. It has strong backward and forward linkages and thus acts as a major driver of growth across the economy. The creation of road networks, electricity generation and distribution networks, creation of telecommunication facilities, construction activities, banking and financing, etc. in the first instance leads to the generation of livelihood opportunities to the vast skilled as well as unskilled labour force. Once this process is over, it leads to the higher connectivity and facilitates the integration of hitherto unconnected economic systems into the mainstream economy. As regards the creation of infrastructure in the hilly state of Himachal Pradesh, its performance on this score has been lauded by one and all. The credit for this transformation goes to the first Chief Minister of Himachal Pradesh, Dr. Y S Parmar, who repeated his development mantra, "paharon mein sirf sadak de do, vikas apne aap ho jayega" (just provide roads in the hills, development will automatically follow) every now and then. The successive governments have followed this mantra with utmost sincerity and the results are there for everybody to see.

An attempt has been made in the following paragraphs to assess the status of infrastructure across blocks in Kangra district. For doing so, as many as eight indicators related to infrastructure were considered. These included road connectivity (paved and mud roads), availability of transport facility in the villages, availability of cooperative society, commercial bank and post office within 5 km of distance, proportion of villages having power facility, number of fair price shops (FPS) per 10,000 of population and the net irrigated area. The achievement of the blocks with respect to these indicators has been described below (Table 4.5).

**4.2.1. Road Density:** The results revealed that the road density (length of paved roads and mud roads, taken together per 100 sq km of area) for the district was 110.61km. There was very high variation across different blocks: the highest road density in Lambagaon block (324.45 km) was 19 times of the lowest road density in Baijnath block (17.26 km). The density of roads was found markedly higher in Nurpur (209.33 km), Fatehpur (204.67) and Sulah (202.31km). However, besides Baijnath, the density of roads

was relatively lower in Dehra (61.15 km), Bhawarna (77.19 km) and Nagrota Surian (92.95 km).

- **4.2.2. Transportation Facility:** The important role of transportation in the modernization and development of any area can hardly be overemphasized. The transport facilities not only save time but also make the things available at proper place. The efficient transportation facilities have a major role to play in the marketing of produce. Looking across the blocks, in Sulah 71.42 per cent of villages had transport facility available within a distance of 5 km. This was followed by Panchrukhi (67.66 per cent) and Bhawarna (61.39 per cent). On the other side, Fatehpur (41.04 per cent), Rait (46.38 per cent) and Nagrota Surian (47.64 per cent) availability of transportation facility was lowest in the district.
- **4.2.3. Electricity Facility:** Most of the villages (93.17 per cent) in Kangra district have been electrified. More than ninety five per cent of the villages in Panchrukhi, Bhawarna, Lambagaon and Sulah have been electrified. However, the proportion of villages where power facility is available is slightly lower in Pragpur (87.5 per cent), Baijnath (89.09 per cent) and Nagrota Surian (89.15 per cent) as compared to other blocks.
- **4.2.4.** Access to Banking Facility: The accessibility to banking facilities in the villages has a bearing on the well being of masses, particularly the resource poor people. The financial support in the form of credit helps the people in undertaking productive ventures. Access to banking also helps in augmenting rural savings. This could come from commercial banks or the cooperative societies and alike. The perusal of the results revealed that in Panchrukhi, Bhawarna and Lambagaon the percentage of the villages that had access to commercial banks at a distance of less than 5 km was highest at 65.86, 60.75 and 56.04 per cent, respectively. Contrarily, in Indora (26.19 per cent), Nagrota Bagwan (39.87 per cent) and Pragpur (41.44 per cent) the proportion of villages having commercial banks at less than 5 km range was the least.
- **4.2.5.** Access to Cooperative Societies: As regards the cooperative credit societies, 75.32 per cent of the villages in Kangra block had agricultural credit society located within a radial distance of 5km. This was closely followed by Panchrukhi (73.65 per cent) and Bhawarna (71.51 per cent). In Dehra, Pragpur and Nagrota Surian the

percentage of villages having a cooperative society within a distance of 5 km was lowest at 47.76, 49.34 and 50.47 per cent, respectively.

**4.2.6.** Access to Postal Facilities: Till the ushering in of the telecommunication revolution in India, the post offices have played a crucial role in the development of rural areas. And this has been truer for the hilly areas where accessibility has been one of the main problems. The availability of postal facilities in different blocks of district Kangra revealed that in Dehra, Fatehpur and Sulah, 79.55, 75.24 and 73.21 per cent of the villages had such facility within a distance of 5 km. On the other side, the proportion of such villages was lowest in Nagrota Surian (26.41 per cent), Pragpur (58.22 per cent) and Rait (58.62 per cent) blocks.

Table 4.5: Infrastructure across Blocks in Kangra

1 abic 4.5. 11	Table 4.5. Init astructure across blocks in Kangra							
Block	Road Density	Trans Faci.	Power	Comm. Bank	Coop. Soc.	РО	Irri.	FPS
Baijnath	17.26	53.55	89.09	48.81	64.92	60.66	2.11	8.07
Bhawarna	77.19	61.39	97.46	60.75	71.51	61.39	18.09	10.07
Dehra	61.15	49.25	93.68	48.14	47.76	79.55	0.25	8.70
Fatehpur	204.67	41.04	94.13	52.11	69.38	75.24	2.92	4.15
Indora	138.85	50.95	91.42	26.19	57.61	68.57	8.42	7.36
Kangra	104.96	54.93	95.39	50.98	75.32	61.51	11.47	5.12
Lambagaon	324.45	60.07	96.33	56.04	56.41	71.42	1.74	10.57
Nagrota Bagwan	143.48	57.87	90.67	39.87	63.02	64.63	17.32	6.94
Nagrota Surian	92.95	47.64	89.15	43.39	50.47	26.41	1.01	5.29
Nurpur	209.33	59.4	93.06	42.9	59.07	71.94	2.56	7.97
Panchrukhi	128.31	67.66	96.4	65.86	73.65	67.06	27.43	6.96
Pragpur	152.26	60.85	87.5	41.44	49.34	58.22	3.88	5.44
Rait	95.69	46.38	93.79	43.44	56.55	58.62	9.91	8.27
Sulah	202.31	71.42	96.42	52.14	65.36	73.21	17.92	9.23
District Kangra	110.61	55.29	93.12	47.44	44.07	67.86	6.16	7.27

Source: Census, 2001

**4.2.7. Irrigation Facility:** Irrigation is crucial for the development of agriculture. The district, as has been described earlier, is known for its *kuhl* system of irrigation. Irrigation facility was seen in terms of the net irrigated area in different blocks. It varied

from 0.25 per cent of the total geographical area in Dehra block to 27.43 per cent in Panchrukhi block. It was quite low in Nagrota Surian (1.01 per cent), Lambagaon (1.74 per cent) and Baijnath (2.11 per cent) blocks. Besides Panchrukhi, Bhawarna (18.09 per cent), Sulah (17.92 per cent) and Nagrota Bagwan (17.32 per cent) had highest irrigation facility.

**4.2.8. Fair Price Shops:** Public distribution system (PDS) has come to occupy a very important role in the lives of rural folks. The fair price shops of the PDS supply the essential eatables to the poor people at subsidized prices. The outreach of the PDS in the district was captured by computing the number of fair price shops per ten thousand of people. The number of FPSs per 10,000 of population was highest in Lambagaon (10.57), Bhawarna (10.07) and Sulah (9.23). Contrarily, it was lowest in Fatehpur (4.15), Kangra (5.12) and Nagrota Surian (5.29).

### 4.3. Composite Infrastructure Index (CII)

For the above mentioned infrastructure parameters, Composite Infrastructure Index (CII) was computed using the Zero-to-One Scoring Transformation. For this these indicators were grouped into two categories. Group I included those indicators whose values increase with a decrease (from more developed to less developed) in the blocks. Here, the blocks having the lowest value were given the rank one and *vice versa*. The other group, Group II, included indicators whose values increase with increase (from less developed to more developed) in the level of performance. In this case the blocks having the highest value were given the topmost rank one and *vice versa*. For aggregating the indicators of these two groups, the value score of each indicator was transformed in such a way that each indicator has the common property: an increase in score of an indicator corresponds to an increase in performance among the blocks.

Let X ij be the value of jth indicator in the ith block.

Let  $Max_i = Max(X_{ij})$  and  $Min_i = Min(X_{ij})$  correspondingly denote the maximum and minimum values over 14 blocks of the jth indicator.

In Group I the value of each indicator was transformed by the formula,

$$d_{ij} = \frac{(Max_i - X_{ij})}{(Max_i - Min_i)}$$

where  $d_{ij}$  is the score of corresponding Xij. This transformation will give value one to the smallest and zero to the largest, and others being between zero and one: an increase in value implies decrease in score.

For Group II,

$$d_{ij} = \frac{(X_{ij} \cdot Min_i)}{(Max_i - Min_i)}$$

This gives zero to the smallest value and one to the largest value, and others being between zero and one: increase in value implies increase in score. All scores are free of units of measurement and vary from zero to one. The rank scores were then aggregated horizontally for all the indicators and the final score was computed for each of the blocks. Finally, the blocks were arranged according to their scores in the ascending order i.e. Rank 1 was given to the block with the highest cumulative score.

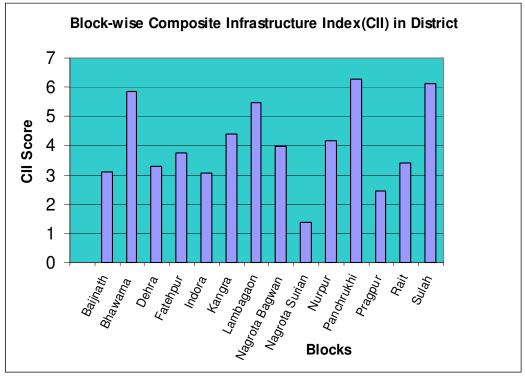
Table 4.6: Composite Infrastructure Index (CII) across Blocks in Kangra

Block	Road Density	Tran Faci.	Power	Comm. Bank	Coop Soc.	PO	Irri	FPS	Total Score	Rank
Baijnath	0.000	0.412	0.160	0.570	0.623	0.645	0.068	0.611	3.088	11
Bhawarna	0.195	0.670	1.000	0.871	0.862	0.658	0.656	0.922	5.835	3
Dehra	0.143	0.270	0.620	0.553	0.000	1.000	0.000	0.709	3.296	10
Fatehpur	0.610	0.000	0.666	0.653	0.784	0.919	0.098	0.000	3.730	8
Indora	0.396	0.326	0.394	0.000	0.357	0.793	0.301	0.501	3.068	12
Kangra	0.285	0.457	0.792	0.625	1.000	0.661	0.413	0.152	4.385	5
Lambagaon	1.000	0.626	0.887	0.752	0.314	0.847	0.055	1.000	5.481	4
Nagrota	0.411	0.554	0.318	0.345	0.554	0.719	0.628	0.435		
Bagwan									3.964	7
Nagrota	0.246	0.217	0.166	0.434	0.098	0.000	0.028	0.178		
Surian									1.367	14
Nurpur	0.625	0.604	0.558	0.421	0.410	0.857	0.085	0.595	4.156	6
Panchrukhi	0.362	0.876	0.894	1.000	0.939	0.765	1.000	0.438	6.274	1
Pragpur	0.439	0.652	0.000	0.384	0.057	0.599	0.134	0.201	2.467	13
Rait	0.255	0.176	0.632	0.435	0.319	0.606	0.355	0.641	3.419	9
Sulah	0.602	1.000	0.896	0.654	0.639	0.881	0.650	0.792	6.113	2

Source: Derived from the data given in Table 4.5.

Based on the above methodology, the Composite Infrastructure Index (CII) was worked out and the results have been given in Table 4.6 and have been depicted in Figure 4.1. In order to know where policy interventions are needed more with respect to infrastructure, the median value of the CII scores was computed and it was found to be 3.85. Based on this value, the blocks having values higher than the median value were classified as those having better infrastructure and those having value lower than this value were regarded as less developed among all the blocks. Thus, the infrastructure in the blocks of Panchrukhi, Sulah, Bhawarna, Lambagaon, Kangra, Nurpur and Nagrota Bagwan was relatively better as compared to Nagrota Surian, Pragpur, Indora, Baijnath, Dehra, Rait and Fatehpur blocks. So there is a need to have more policy interventions related to the development of infrastructure in the latter set of the blocks in the district.

Figure 4.1



## Chapter 5

## **Human Resources in the District**

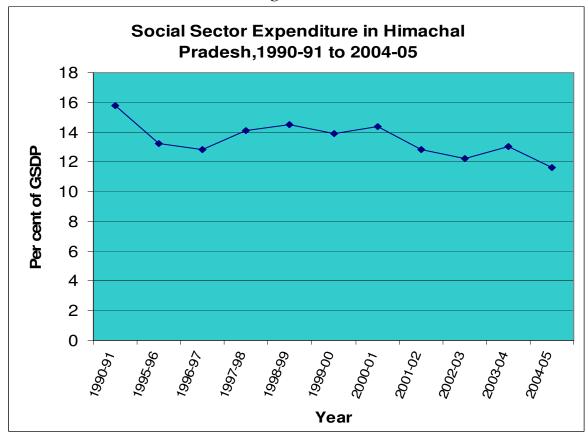
The idea of human development is easily traced back to the great philosopher Aristotle (384-322 B.C.) who argued that "wealth is evidently not the good we are seeking, for it is merely useful and for the sake of something else". Down the history, Immanuel Kant (1724-1804 A.D.) argued the need of treating human beings as ends in themselves rather than as means to other ends when he observed: "So act as to treat humanity, whether in thine own person or in that of any other, in every case as an end withal, never as means only". Thus human beings are the agents, beneficiaries and adjudicators of progress, but they also happen to be-directly or indirectly- the primary means of all production (Sen as quoted in Parr and Kumar, 2003). In simplest words, one of the ways to know of the efforts of the government towards building up of the human resources is to know about its spending on social sector. Social sector expenditure may be defined as the expenditure on social and economic services under revenue expenditure and capital outlays on similar social and economic services as well as loans and advances by state governments on various items of social and economic services. According to this criterion, as a per cent share of GSDP, it has come down from 15.8 per cent in 1990-91 to 11.6 per cent in 2004-05 in the state of Himachal Pradesh (Table 5.1 and Fig.5.1). It is really a matter of concern if the state is to further improve its performance on the human resources front.

Table 5.1: Social Sector Expenditure in Himachal Pradesh, 1990-91 to 2004-05

Year	Amount (in Rs. Crore at	Per cent of Gross State
	current prices)	Domestic Product
1990-91	444	15.8
1995-96	881	13.2
1996-97	994	12.8
1997-98	1242	14.1
1998-99	1553	14.5
1999-00	1701	13.9
2000-01	1963	14.4
2001-02	1912	12.8
2002-03	1973	12.2
2003-04	2348	13.0
2004-05	2328	11.6
2005-06 (RE)	2647	-
2006-07(BE)	2697	-

Source: Economic and Political Weekly, March 10, 2007, p. 803.

Figure 5.1



Keeping this in view, the present chapter has been devoted to study the general demographic features of the human resources across the blocks in the district. These include population, households, sex ratio, workers and their classification, etc.

## 5.1. General Demography

The broad demographic profile across different blocks is given in Table 5.2. As may be seen in this table, Kangra block had highest population (1,20, 992) followed by Dehra (1,12,601) and Rait (1,04,017). On the other hand, Sulah (62,285), Panchrukhi (66,075) and Lambagaon (69,058) were least populous among all the blocks. There was lot of variation with respect to total geographical area among the blocks. Baijnath block having the largest geographical area (1,27,442 ha) was almost nine times larger than the smallest block of Panchrukhi (14,652 ha). Dehra was another big block with an area of 71,465 ha. Comparatively, besides Panchrukhi, Sulah (17,152 ha) and Lambagaon (22,037 ha) were

other blocks with smaller geographical area. The population density was quite high in Panchrukhi (451 persons per sq km), Sulah (366 persons) and Kangra (357 persons) blocks as compared to the district figure of 221 persons per sq km. Baijnath had the lowest density of 58 persons per sq km. In all, there were 2, 72,487 households out of which 2, 56,490 were rural households and 15,997 urban households. The average family size in the district and across most of the blocks was 5 persons.

Table 5.2.: Population, Area and Density across Blocks, 2001

Block	Population	Area	Households	<b>Population Density</b>
	-	(ha)	(No.)	(Persons per sq km)
Baijnath	74346	127442	16110	58
Bhawarna	80439	25133	17084	320
Dehra	112601	71465	21902	158
Fatehpur	94032	39575	18127	238
Indora	96411	40691	18238	237
Kangra	120992	33918	23881	357
Lambagaon	69058	22037	15706	313
Nagrota Bagwan	90753	25997	17949	349
Nagrota Surian	88839	30877	17213	288
Nurpur	101614	37452	19045	271
Panchrukhi	66075	14652	14944	451
Pragpur	104743	41638	21893	252
Rait	104017	46503	20731	224
Sulah	62825	17152	13667	366
Rural	1266745	574532	256490	220
Urban	72285	30700	15997	235
Total	1339030	605232	272487	221

Source: Census, 2001

**5.1.1. Sex Ratio:** The sex-wise distribution of the population is given in Table 5.3. In most of the blocks the females outnumbered the males. As regards the sex ratio (the number of females per thousand of males), except for Indora and Nurpur, all the blocks had favourable sex ratio. It was highly favorable in Lambagaon (1190) and Sulah (1101) blocks. The ratio in the urban population of Kangra district was just 902. The population in the age group '0-6 years' was 12.29 per cent of the total population in the district (Table 5.4). The share of this group for the rural areas was slightly higher at 12.40 per cent as compared to its urban counterpart at 10.40 per cent. Across blocks it varied from 11.10 per cent in Bhawarna to 13.67 per cent in Fatehpur.

Table 5.3: Sex-wise Distribution of Population across Blocks, 2001

Block		<b>Population</b>		Sex ratio
	Total	Male	Female	
Baijnath	74346	36528	37818	1035
Bhawarna	80439	40104	40335	1006
Dehra	112601	54430	58171	1069
Fatehpur	94032	46711	47321	1013
Indora	96411	50293	46118	917
Kangra	120992	59867	61125	1021
Lambagaon	69058	31539	37519	1190
Nagrota Bagwan	90753	44500	46253	1039
Nagrota Surian	88839	43400	45439	1047
Nurpur	101614	51224	50390	984
Panchrukhi	66075	32151	33924	1055
Pragpur	104743	51439	53304	1036
Rait	104017	51169	52848	1033
Sulah	62825	29904	32921	1101
Rural	1266745	623259	643486	1032
Urban	72285	37995	34290	902
District Total	1339030	661254	677776	1025

Source: Census, 2001

Table 5.4: Block-Wise Population in Age Group '0-6' Years, 2001

Block	Populati	Population of 0-6 Year Age Group		
	Male	Female	Total	Total
				Population
Baijnath	4790	4083	8873	11.93
Bhawarna	4945	3985	8930	11.10
Dehra	7962	6934	14896	13.23
Fatehpur	7031	5820	12851	13.67
Indora	7060	5777	12837	13.31
Kangra	7516	6443	13959	11.54
Lambagaon	4529	3657	8186	11.85
Nagrota Bagwan	5641	4816	10457	11.52
Nagrota Surian	6293	5244	11537	12.99
Nurpur	7487	6208	13695	13.48
Panchrukhi	4117	3404	7521	11.38
Pragpur	7058	5842	12900	12.32
Rait	7104	6023	13127	12.62
Sulah	4041	3237	7278	11.58
Rural	85574	71473	157047	12.40
Urban	4061	3458	7519	10.40
Total	89635	74931	164566	12.29

Source: Census, 2001

**5.1.2.** Scheduled Caste (SC) and Scheduled Tribe (ST) Population: The population of the scheduled castes in the district was 2,79,540 which was 20.88 per cent of the total population (Table 5.5). At the state level this proportion was 24.72 per cent. Across the blocks, the proportion of SC population was highly varying. While it was very high in Panchrukhi (35.19 per cent) and Lambagaon (29.50 per cent) blocks, it was quite low in Nagrota Bagwan (10.04 per cent) and Kangra (12.81 per cent) blocks. The sex ratio of SC population was less than 1,000 females per thousand males in seven out of fourteen blocks. It was quite low in Indora (919) and Nurpur (953) whereas it was reasonably favourable in Lambagaon (1124) and Sulah (1063). Furthermore, while the sex ratio was just in the rural areas of the district, it was quite adverse at 923 for the SC population living in urban areas. This was in accordance with the general rural–urban demographic scenario in the district. The scheduled tribe population in the district was just 0.12 per cent of the total population as against the state figure of 4.12 per cent and 72.64 per cent of it was confined to just one block, Baijnath (Table 5.6).

Table 5.5: Block-wise Scheduled Caste Population, 2001

Block	Total		<b>Scheduled Caste Population</b>					
	Population	Male	Female	Sex Ratio	Total	Total Population		
Baijnath	74346	8897	9417	1058	18314	24.63		
Bhawarna	80439	8010	7919	989	15929	19.80		
Dehra	112601	12069	12236	1014	24305	21.59		
Fatehpur	94032	8448	8184	969	16632	17.69		
Indora	96411	13323	12251	919	25574	26.53		
Kangra	120992	7840	7661	977	15501	12.81		
Lambagaon	69058	9592	10782	1124	20374	29.50		
Nagrota Bagwan	90753	4525	4587	1014	9112	10.04		
Nagrota Surian	88839	8090	8088	999	16178	18.21		
Nurpur	101614	11330	10798	953	22128	21.78		
Panchrukhi	66075	11420	11833	1036	23253	35.19		
Pragpur	104743	13327	12926	970	26253	25.06		
Rait	104017	11710	11797	1007	23507	22.60		
Sulah	62825	5651	6010	1063	11661	18.56		
Rural	1266745	134232	134489	1002	268721	21.21		
Urban	72285	5626	5193	923	10819	14.97		
District Total	1339030	139858	139682	999	279540	20.88		

Source: Census, 2001

Table 5.6: Block-Wise Scheduled Tribe Population, 2001

Block	Population	Schedu	led Tribe Po	pulation	Per cent of Total
		Male	Female	Total	Population
Baijnath	74346	617	543	1160	1.56
Bhawarna	80439	18	18	36	0.04
Dehra	112601	3	1	4	0.00
Fatehpur	94032	0	1	1	0.00
Indora	96411	4	1	5	0.01
Kangra	120992	55	34	89	0.07
Lambagaon	69058	12	6	18	0.03
Nagrota Bagwan	90753	3	1	4	0.00
Nagrota Surian	88839	6	1	7	0.01
Nurpur	101614	2	3	5	0.00
Panchrukhi	66075	10	2	12	0.02
Pragpur	104743	3	0	3	0.00
Rait	104017	7	5	12	0.01
Sulah	62825	8	8	16	0.03
Rural	1266745	748	624	1372	0.11
Urban	72285	121	104	225	0.31
Total	1339030	869	728	1597	0.12

Source: Census, 2001

#### 5.2. Workers and their Classification

According to 2001 Census, there were 5.89 lakhs total workers in a population of 13.39 lakhs in the district (Table 5.7). Of these 2.54 lakhs (43.12 per cent) were female workers while 3.35 lakhs (56.88 per cent) were male workers. The work participation rate (WPR) in the Census parlance is defined as the proportion of total workers (including main and marginal workers) expressed as percentage of total population. The work participation rate for the district was 44.0 per cent (Table 5.8). The male participation rate (MPR) was 50.7 per cent whereas female participation rate (FPR) was 37.4 per cent. Surprisingly, while the difference in the WPRs across rural and urban areas was very high for the females, it was almost negligible for the males in the district. Across blocks while MPR was quite high in Pragpur (62.3 per cent) and Dehra (62.0 per cent), it was lowest in Lambagaon (43.9 per cent). There was not much variation in the MPR for the remaining blocks. The FPR on the other hand exhibited a greater variation across blocks. For instance, while it was highest in Dehra (60.7 per cent) and Pragpur (59.0 per cent) blocks; it was quite low in Indora (15.1 per cent) and Nurpur (20.3 per cent).

Table 5.7: Sex-wise Distribution of Total Workers across Blocks, 2001

Block	Т	Total Population		Total Workers		
	Male	Female	Total	Male	Female	Total
Baijnath	36528	37818	74346	17224	16045	33269
Bhawarna	40104	40335	80439	19036	11462	30498
Dehra	54430	58171	112601	33722	35309	69031
Fatehpur	46711	47321	94032	23029	15913	38942
Indora	50293	46118	96411	25641	6966	32607
Kangra	59867	61125	120992	29795	24024	53819
Lambagaon	31539	37519	69058	13841	15974	29815
Nagrota Bagwan	44500	46253	90753	23265	20889	44154
Nagrota Surian	43400	45439	88839	21252	17463	38715
Nurpur	51224	50390	101614	23569	10250	33819
Panchrukhi	32151	33924	66075	14863	11189	26052
Pragpur	51439	53304	104743	32068	31463	63531
Rait	51169	52848	104017	25215	18350	43565
Sulah	29904	32921	62825	14376	13065	27441
Rural	623259	643486	1266745	316896	248362	565258
Urban	37995	34290	72285	18551	5185	23736
District Total	661254	677776	1339030	335447	253547	588994

Source: Census, 2001

Table 5.8: Sex-wise Work Participation Rate (WPR) across Blocks, 2001

Block	Work Participation Rate (per cent)			
	Male	Female	Total	
Baijnath	47.2	42.4	44.7	
Bhawarna	47.5	28.4	37.9	
Dehra	62.0	60.7	61.3	
Fatehpur	49.3	33.6	41.4	
Indora	51.0	15.1	33.8	
Kangra	49.8	39.3	44.5	
Lambagaon	43.9	42.6	43.2	
Nagrota Bagwan	52.3	45.2	48.7	
Nagrota Surian	49.0	38.4	43.6	
Nurpur	46.0	20.3	33.3	
Panchrukhi	46.2	33.0	39.4	
Pragpur	62.3	59.0	60.7	
Rait	49.3	34.7	41.9	
Sulah	48.1	39.7	43.7	
Rural	50.8	38.6	44.6	
Urban	48.8	15.1	32.8	
District Total	50.7	37.4	44.0	

Source: Census, 2001

**5.2.1. Main Workers and Marginal Workers:** The classification of workers into main and marginal workers shows the duration for which a person has been employed in a year. If one is employed for more than 183 days (six months) he is regarded as main worker. And if he is employed for less than 183 days in a year, he is categorised as marginal worker. The results showed that 57.16 per cent of these total workers were categorized as main workers and the remaining 42.84 per cent were put as marginal workers (Table 5.9). The rural-urban divide was clearly observable in this classification of main and marginal workers. Because their relative proportions for rural areas were 55.80 and 44.20 per cent, respectively whereas these were 89.43 and 10.57 per cent for urban areas. Across blocks the proportion of marginal workers, who are vulnerable to employment insecurity, was higher in Lambagaon (54.56 per cent), Sulah (54.18 per cent), Nagrota Surian (52.52 per cent) and Fatehpur (52.07 per cent).

Table 5.9: Block-wise Classification of Workers, 2001

	Total	Main	Per cent of	Marginal	Per cent of
Block	Workers	Workers	Total	Workers	Total
			Workers		Workers
Baijnath	33269	21414	64.37	11855	35.63
Bhawarna	30498	17267	56.62	13231	43.38
Dehra	69031	41416	60.00	27615	40.00
Fatehpur	38942	18663	47.93	20279	52.07
Indora	32607	22202	68.09	10405	31.91
Kangra	53819	32999	61.31	20820	38.69
Lambagaon	29815	13547	45.44	16268	54.56
Nagrota Bagwan	44154	25174	57.01	18980	42.99
Nagrota Surian	38715	18382	47.48	20333	52.52
Nurpur	33819	20214	59.77	13605	40.23
Panchrukhi	26052	14048	53.92	12004	46.08
Pragpur	63531	34316	54.01	29215	45.99
Rait	43565	23206	53.27	20359	46.73
Sulah	27441	12574	45.82	14867	54.18
Rural	565258	315422	55.80	249836	44.20
Urban	23736	21227	89.43	2509	10.57
Total	588994	336649	57.16	252345	42.84

Source: Census, 2001

The broad industrial classification of main workers revealed that 45.78 of the rural main workers were cultivators in the district (Table 5.10). The proportion of agricultural

labourers was 3.52 per cent. While household industry workers were also of the same order at 3.43 per cent, remaining 47.27 per cent were categorized as 'other workers'. Across blocks the proportion of cultivators was quite high in Dehra (68.43 per cent), Pragpur (56.44 per cent) and Nagrota Bagwan (52.05 per cent). On the other hand, it was quite low in Bhawarna (21.40 per cent), Panchrukhi (24.64 per cent) and Indora (32.90 per cent) blocks. The proportion of agricultural labour was quite high in Nagrota Bagwan (8.16 per cent), Indora (5.76 per cent) and Pragpur blocks (4.25 per cent). The proportion of 'other workers' which among others includes salaried employment in government and private enterprises was very high in Bhawarna (69.46 per cent), Panchrukhi (68.53 per cent) and Indora (57.33 per cent) blocks. It was quite low in Dehra, Pragpur and Nagrota Bagwan blocks.

Table 5.10: Industrial Categories of Main Workers, 2001 (Per cent)

Block	Main	Cultivators	Agricultural	Total	Household	Other
	Workers		Labourers	Agriculture	Industry	Workers
	(No.)				Workers	
Baijnath	21414	43.68	2.15	45.83	3.99	50.18
Bhawarna	17267	21.40	4.16	25.56	4.97	69.46
Dehra	41416	68.43	1.10	69.53	1.72	28.75
Fatehpur	18663	46.89	3.40	50.29	4.64	45.07
Indora	22202	32.90	5.76	38.66	4.01	57.33
Kangra	32999	45.78	3.74	49.52	2.79	47.70
Lambagaon	13547	45.97	0.97	46.75	3.26	49.80
Nagrota Bagwan	25174	52.05	8.16	60.21	3.85	35.94
Nagrota Surian	18382	42.12	3.18	45.30	4.43	50.27
Nurpur	20214	41.77	2.90	44.67	3.27	52.06
Panchrukhi	14048	24.64	2.90	27.54	3.93	68.53
Pragpur	34316	56.44	4.25	60.69	3.49	35.82
Rait	23206	36.76	3.58	40.34	2.65	57.01
Sulah	12574	39.43	2.12	41.55	3.79	54.67
Rural	315422	45.78	3.52	49.30	3.43	47.27
Urban	21227	2.12	0.78	2.90	2.04	95.07
Total	336649	43.02	3.35	46.37	3.35	50.29

Source: Census, 2001

Of the total marginal workers, however, the direct dependence on agriculture in rural areas was quite high at 87.22 per cent for the district (Table 5.11). The share of cultivators was 75.97 per cent while that of agricultural labourers was 11.25 per cent. This reflects the vulnerability of the marginal workers. Expectedly, put together, the

household industry workers and 'other workers' constituted a minuscule 12.78 per cent in the district. The proportion of cultivators ranged from as low as 34.32 per cent in Indora to as high as 91.96 per cent in Dehra. But the proportion of agricultural labourers was very high in Indora (33.50 per cent) and Bhawarna (17.78 per cent) as compared to Dehra (3.20 per cent) and Pragpur (4.52 per cent). Thus, the dependence of people (marginal workers) on agriculture was very high in Dehra (95.16 per cent), Pragpur (94.72 per cent), Nagrota Bagwan (93.19 per cent) and Kangra (91.50 per cent). The lowest dependence was observed in Indora (67.82 per cent) and Bhawarna (73.76 per cent).

Table 5.11: Industrial Categories of Marginal Workers, 2001 (Per cent)

Block	Marginal	Cultivators	Agricultural	Total	Household	Other
	Workers		Labourers	Agriculture	Industry	Workers
	(No.)				Workers	
Baijnath	11855	67.57	10.30	77.87	7.07	15.07
Bhawarna	13231	55.48	17.78	73.76	7.26	19.48
Dehra	27615	91.96	3.20	95.16	0.85	3.99
Fatehpur	20279	75.07	14.46	89.53	3.14	7.33
Indora	10405	34.32	33.50	67.82	10.57	21.60
Kangra	20820	78.23	13.27	91.50	1.97	6.52
Lambagaon	16268	82.63	5.69	88.32	2.89	8.79
Nagrota Bagwan	18980	78.78	14.41	93.19	1.74	5.07
Nagrota Surian	20333	76.88	10.27	87.15	3.56	9.29
Nurpur	13605	67.42	15.49	82.91	3.18	13.91
Panchrukhi	12004	62.85	13.75	76.60	5.56	17.84
Pragpur	29215	90.20	4.52	94.72	1.45	3.82
Rait	20359	78.15	9.17	87.32	2.01	10.67
Sulah	14867	73.73	11.98	85.71	1.98	12.31
Rural	249836	75.97	11.25	87.22	3.18	9.60
Urban	2509	28.94	6.22	35.16	5.94	58.91
Total	252345	75.50	11.20	86.70	3.20	10.09

Source: Census, 2001

#### **5.3:** The Other Side of Human Resources

Unemployment of the educated youth has become a national malaise and Kangra district is no exception to this generalization. There are eleven employment exchanges in the district. The youth in vast numbers throng these offices for entry into government jobs. On an average, thirty two thousand fresh candidates register their names every year. The

number of the candidates registered with these exchanges increased from 1.08 lakhs in 1994 to 1.71lakhs in 2001 registering an increase of 6.79 per cent per annum as against the population growth rate of about 1.40 per cent per annum (Table 5.12). A glimpse into the educational profile of these job seekers revealed that nearly two-thirds of them were 'matriculates and above' in 1994 and their proportion has grown to over 70.0 per cent by 2001. The proportion of 'other educated' declined fro 24.18 per cent to 17.66 per cent during the same period. The ranks of unemployed graduates and postgraduates are also swelling over time. Put together, their share in the job seeking category has gone up from 9.06 per cent to 11.57 per cent.

Table 5.12: Educational Background of the Candidates Registered with the Employment Exchanges in the District, 1994-2001.

Particulars of Education 1994 2001					
Particulars of Education	19	94	20	01	
	Absolute	Per cent	Absolute	Per cent	
1.Postgraduates	2,279	2.11	4,488	2.62	
2. Graduates	7,493	6.95	15,316	8.95	
3.Matriculates and above	69,940	64.86	120,570	70.42	
4.Other educated	26,071	24.18	30,239	17.66	
5.Uneducated	2,048	1.90	593	0.35	
Total	1,07,831	100.00	1,71,206	100.00	

Source: District Statistical Abstract, Kangra, 2003.





**Courtesy: Chinmaya Organization for Rural Development** 

## Chapter 6

### **Health Status in the District**

At all levels of development, one of the three essential capabilities for human development is to have long and healthy lives. And this dimension is most crucial from the well being point of view of the humanity. During the past two decades or so Himachal Pradesh has continuously built upon this dimension. Consequently, the state has come to occupy the top slot in providing primary health facilities to its citizens (India Today, September 11, 2006). In doing so, it has relegated the best performing state of Kerala, to second position. These findings have been corroborated by the National Family Health Survey-3 (Government of India, 2006) results. According to this survey, while the total fertility rate is 1.9 apiece in these two states, the contraceptive use is slightly higher in Himachal Pradesh (73 per cent) as compared to Kerala (69.0 per cent). However, Himachal Pradesh has yet to go a long way in ultimate health attainments as is evinced by almost three times higher infant mortality rate (IMR) in rural areas (39) as compared to 14 in rural Kerala (NFHS-3). Again, while 99.0 per cent of the deliveries in rural Kerala are institutional, this proportion is quite low at 42.0 per cent in Himachal Pradesh. The state allocated a sum of Rs 396.08 crores to health sector in the year 2006-07. However, due to the continuous financial strain on the resources, the allocations to health sector have been indicating a declining trend in the state. Its share in the total budget of the state came down to 4.56 per cent in 2006-07 from 5.10 per cent in 2004-05.

## **6.1: Health Facilities in the District**

As alluded to in earlier chapters, Kangra district houses more than a fifth of the total population of the state on about a tenth of its geographical area. As such it has a population density that is twice the density of the state as a whole. Thus, meeting the health needs of the people in this district is a gigantic task. Important health statistics for Kangra district are given in Table 6.1. As may be seen in this table, there is one health sub-centre (SC) for every 3,117 persons in the district. Likewise, one primary health centre (PHC) is catering to the health needs of 17,345 persons in the district. These figures are slightly higher for the district when juxtaposed against the state level figures.

On the other hand, when seen in terms of area coverage, while there is one SC for every 13.22 sq km of area in the district, for the state one SC has to cater almost double the area of 26.91 sq km. Similar is true for PHC and community health centre (CHC) area coverage. In terms of number of inhabited villages coverage by these SC, PHCs and CHCs, there is not much difference for the district and the state. One SC is meeting the health needs of 8.34 inhabited villages in the district. Likewise, there is one PHC for 46.40 villages in the district.

Table 6.1: Important Health Statistics in Kangra District, 2005-06

Sr.	Particulars	Kangra	Himachal Pradesh
No.			
1.	Birth Rate	22.2	20.5
2.	Death Rate	6.3	5.7
3.	Rural Population* served by		
	a) One Sub-centre	3117	2879
	b) One PHC	17345	13500
	c) One CHC	104070	90260
4.	Average Rural Area (sq km) covered by		
	a) One Sub-centre	13.22	26.91
	b) One PHC	73.58	126.82
	c) One CHC	441.46	843.53
5.	Average Number of Inhabited Villages		
	covered by		
	a) One Sub-centre	8.34	8.46
	b) One PHC	46.40	39.85
	c) One CHC	278.38	265.08

Note:\* Based on the assumption that 94.0 per cent of the Mid Year estimated Population of Kangra district in 2006 is living in rural areas.

Source: Office of the CMO, Kangra & Health Statistics at a Glance, Department of Health and Family Welfare, Government of Himachal Pradesh, Shimla.

#### **6.2: Important Health Indicators at Block Level**

In order to assess the health scenario of the people in different blocks of Kangra district, a combination of both the 'process' and 'outcome' indicators was used in the present exercise. This was necessitated by the fact that data on 'outcome or attainment' indicators such as life expectancy and infant mortality were either not available or it were grossly unreliable at the sub-district levels. On the attainment side, birth rate and death rate were used as the indicators of the health of the people across blocks. On the input or process side, various indicators that were used include: Accessibility to health institutions,

number of health institutions, number of doctors, number of health staff, family health centres and number of private practitioners per unit of population. A brief account of these indicators across different blocks is given in the following paragraphs.

- **6.2.1.** Accessibility to Health Institutions (PHC): One way of looking at the health infrastructure across the blocks is to examine the accessibility to the health institutions in terms of distance (Table 6.2). At the district level, while 37.56 per cent of the total villages in the district were found to have PHC within a distance of 5 km, 30.53 per cent of the villages had PHC within a distance of 5-10 km. Further around a fourth of the total villages had PHC beyond a distance of 10 km. Across the blocks, the percentage of the villages having PHC in the range of less than (<) 5 km category was higher than the district figure (37.56 per cent) in nine of the fourteen blocks. Most notably, the blocks of Bhawarna (55.06 per cent), Lambagaon (48.71 per cent), Sulah (45.35 per cent), Nagrota Surian (42.92 per cent), Panchrukhi (41.31 per cent) and Rait (40.34 per cent) had higher access to PHCs at less than (<) 5 km range. On the contrary, Indora (18.09 per cent), Pragpur (30.26 per cent), Fatehpur (30.61 per cent), Dehra (33.64 per cent) and Nagrota Bagwan (35.69 per cent) had lower percentage of the villages that were having any PHC within a distance of 5 km.
- **6.2.2. Population per Health Institution:** One of the ways of capturing the depth of the health infrastructure *vis-a -vis* population is to compute the population served by one health institution. Our results in this regard at the block level showed that there was lot of pressure on these institutions in the blocks of Kangra (4654), Nurpur (4065) and Bhawarna (3656). On the other extreme, Lambagaon (1726), Dehra (1816) and Pragpur (1904) were found to be better endowed in terms of health institutions.
- **6.2.3. Population Served per Doctor:** Yet another way of looking at the health infrastructure is to compute the population served per doctor in different blocks. At the district level, there was one doctor per 6,407 persons. Out of fourteen blocks, in six blocks the population served by one doctor was less than the district level figure. Especially, in Nurpur (3,629 persons), Bhawarna (3,656 persons), Baijnath (4,373 persons) and Sulah (5,235 persons) had more medical doctors per unit of population. On the other hand, the blocks of Rait (9,456 persons), Indora (8,765 persons) and

Lambagaon (8,632 persons) had highest population to serve per doctor. Thus, a doctor had to attend to 2.6 times more population in Rait block as compared to Nurpur.

**6.2.4. Population Served per Health Staff:** Health facilities were also examined in terms of availability of the total medical staff (in position i.e. excluding vacant posts) strength including doctors, paramedical staff and class IV staff available per unit of population across different blocks. Here also, Bhawarna (512 persons per staff member), Dehra (517 persons) and Baijnath (543 persons) were better served by any type of medical staff as compared to Kangra (864), Indora (831 persons), Fatehpur (804) and Rait (770). Here it is pertinent to note that while at the district level, around 25 per cent of the staff positions were lying vacant, this figure was quite high at 48.0 per cent in Pragpur, 44.0 per cent in Lambagaon and 31.0 per cent in Dehra blocks of the district. On the other side, Nurpur (10.0 per cent), Sulah (12.0 per cent) and Nagrota Bagwan (15.0 per cent) had lower proportions of medical staff positions lying vacant. This has got clearly reflected in the preceding discussion that Nurpur, Baijnath, and Sulah had better health access as compared to other blocks.

Table 6.2: Block-wise Health Indicators in Kangra

Blocks	PHC	PP-D	PP-S	FHC-P	PR-P	PP-HI	BR	DR
Baijnath	38.38	4373	543	0.54	4.03	2124	15.2	5
Bhawarna	55.06	3656	512	0.12	1.98	3656	11	5.4
Dehra	33.64	5362	517	0.89	2.04	1816	18.3	6.2
Fathepur	30.61	7233	804	0	4.68	2475	21.2	6.1
Indora	18.09	8765	831	0.31	3.42	3856	18.1	5.2
Kangra	38.48	6050	864	0.49	2.89	4654	14.3	5.7
Lambagoan	48.7	8632	580	0.87	4.77	1726	14.8	7.4
Nagrota Bagwan	35.69	8250	672	0.55	3.64	2453	17.3	5.3
Nagrota Surian	42.92	7403	639	1.8	5.97	2019	19.5	6.2
Nurpur	37.95	3629	660	0.1	4.13	4065	19.5	5.2
Panchrukhi	41.31	6607	696	0.3	2.27	2873	19.2	5.7
Pragpur	30.26	8057	655	1.24	2.86	1904	19.3	7.1
Rait	40.34	9456	770	0.29	3.56	3251	19.1	5.9
Sulah	45.35	5235	635	0.48	1.43	2513	14	6.5

Source: Derived from Census, 2001 and the data from the Office of the CMO, Kangra.

**6.2.5. Family Health Centres per Unit of Population:** Nagrota Surian (1.8), Pragpur (1.24) and Dehra (0.89) had more family health centres per ten thousand of population than Nurpur (0.1) and Bhawarna (0.12).

**6.2.6. Private Practitioners per Unit of Population:** Private practitioners play a great role in providing immediate health facilities to the people in hills as these are available next door. There were more private practitioners in Nagrota Surian (5.97), Lambagaon (4.77) and Fatehpur (4.68) for every 10,000 persons as compared to Sulah (1.43), Bhawarna (1.98) and Dehra (2.04).

**6.2.7. Birth Rate:** The birth rate in district Kangra at 22.2 was higher as compared to the state figure (20.5) in 2005. Across blocks, the birth rate was the lowest in Bhawarna (11.0), Sulah (14.0) and Kangra (14.3). It was highest in Fatehpur (21.2), followed by Nagrota Surian (19.5) and Nurpur (19.5).

**6.2.8. Death Rate:** Death rate in Kangra district was also higher at 6.3 against the state figure 5.7. The blocks of Baijnath (5.0), Indora (5.2) and Nurpur (5.2) had the lowest death rates whereas those of Lambagaon (7.4), Pragpur (7.1) and Sulah (6.5) had high death rates.

### 6.3. Composite Health Index

Various indicators described above were used to devise the Composite Health Index (CHI) using zero to one scoring transformation as elucidated in Chapter 4. The median value of the total block level scores was then calculated to gauge the relative performance of different blocks. It was found to be 3.475. Thus, based on this value, Baijnath, Nagrota Surian, Bhawarna, Lambagaon, Sulah, Dehra and Nagrota Bagwan blocks were found to

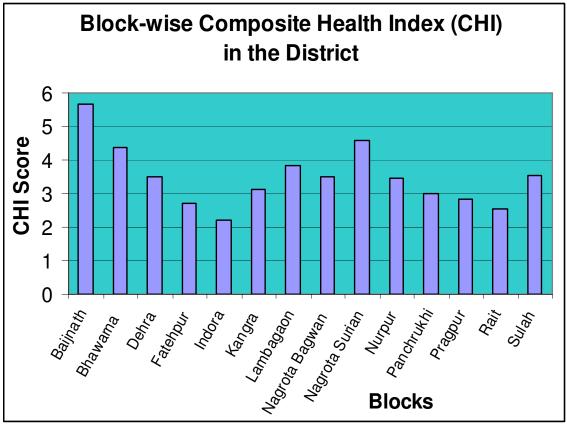
Table 6.3: Block-wise Composite Health Index (CHI) in Kangra

Blocks	PHC	PP-D	PP-S	FHC-P	PR-P	PP-HI	BR	DR	Total	Final
									Score	Rank
Baijnath	0.549	0.872	0.91	0.300	0.573	0.864	0.59	1.00	5.66	1
Bhawarna	1.000	0.995	1.00	0.067	0.121	0.341	1.00	0.83	4.36	3
Dehra	0.421	0.703	0.99	0.494	0.134	0.969	0.28	0.50	3.51	6
Fathepur	0.339	0.381	0.17	0.000	0.716	0.744	0.00	0.54	2.72	12
Indora	0.000	0.119	0.09	0.172	0.438	0.273	0.30	0.92	2.22	14
Kangra	0.552	0.585	0.00	0.272	0.322	0.000	0.68	0.71	3.11	10
Lambagoan	0.828	0.141	0.81	0.483	0.736	1.000	0.63	0.00	3.82	4
Nagrota Bagwan	0.476	0.207	0.54	0.306	0.487	0.752	0.38	0.88	3.48	7
Nagrota Surian	0.672	0.352	0.64	1.000	1.000	0.900	0.17	0.50	5.23	2
Nurpur	0.537	1.000	0.58	0.056	0.595	0.201	0.17	0.92	3.47	8
Panchrukhi	0.628	0.489	0.48	0.167	0.185	0.608	0.20	0.71	2.98	11
Pragpur	0.329	0.240	0.59	0.689	0.315	0.939	0.19	0.13	3.42	9
Rait	0.602	0.000	0.27	0.161	0.469	0.479	0.21	0.63	2.54	13
Sulah	0.737	0.724	0.65	0.267	0.000	0.731	0.71	0.38	3.54	5

Source: Derived from Census, 2001 and the data from the Office of CMO, Kangra.

perform better on the health front than the remaining blocks (Table 6.3). These results have been depicted in Figure 6.1. Thus, the blocks of Indora, Rait, Fatehpur, Pragpur, Panchrukhi, Kangra and Nurpur need to have more policy interventions with respect to health facilities.

Figure 6.1





# **Chapter 7**

### **Status of Education in the District**

To be knowledgeable is the second dimension of human development. And in this aspect the state of Himachal Pradesh has outperformed the best performing state of Kerala consecutively for the last two years (India Today, August 15, 2005; India Today, September 11, 2006). This is indicative of the efforts that have gone into the building of the social infrastructure in the state during the past three and a half decades when it attained the full statehood. But to maintain this identity of *numero uno* position in the field of education, the state has to devote an increasing amount of scarce financial resources along with other quality inputs. The statistics at hand, however, reveal otherwise. The expenditure on education as a proportion of the total expenditure has decreased by more than five percentage points from 17.0 per cent in 2000-01 to 11.5 per cent in 2005-06 (Table 7.1) in this hilly state. As such, lower budgetary allocations do have implications for the state of education in the districts and blocks.

Table 7.1: Expenditure on Education in Himachal Pradesh, 2000-01 to 2005-06

Year		Expenditure (Rs. Crore)	Change over Pervious Year (per cent)	Share of Education In Total Expenditure (per cent)
2000-01	Himachal Pradesh	904.52	-	17.0
	India	60267.30	-	17.4
2001-02	Himachal Pradesh	918.72	1.6	16.2
	India	60793.10	0.9	16.1
2002-03	Himachal Pradesh	657.34	4.2	14.5
	India	62982.78	3.6	15.0
2003-04	Himachal Pradesh	1005.61	5.0	6.1
	India	66191.21	5.1	5.0
2004-05	Himachal Pradesh	1072.20	6.6	11.6
	India	76790.47	16.0	6.2
2005-06 (BE)	Himachal Pradesh	1085.36	1.2	11.5
	India	83286.65	8.5	7.2

Source: The Economic Times, September 11, 2006.

### 7.1. Broad Educational Scenario in the District

Kangra being the largest district in terms of population contributes a great deal to the achievements of the state in terms of education. The state of education in the district *vis-à-vis* the state is given in Table 7.2 and Table 7.3. As may be seen, the performance of the district with respect to overall literacy as well as rural literacy is better than the state.

**Table 7.2: Salient Educational Statistics in Kangra (2005-06)** 

Literacy	Sr.No.	7.2: Salient Educational Statistics in Particulars	Kangra	HP
a) Total Literacy			Tangra	111
Male   Female   73.0   67.4     Gender gap   14.5   17.9     b) Rural literacy	1			
Female   73.0   67.4     Gender gap   14.5   17.9     b) Rural literacy			87.5	85 3
Gender gap				
b) Rural literacy  Male Female Gender gap Allee  C) Urban literacy  Male Female C) Urban literacy  Male Female Base Base Base Base Base Base Base Bas				
Male       87.4       84.5         Female       72.5       65.7         Gender gap       14.9       18.8         c) Urban literacy       2       14.9       18.8         Male       90.1       92.0       92.0         Female       82.8       85.0         Gender gap       7.2       7.0         Pupil-teacher ratio       25       21         a) Primary       25       21         b) Upper primary       21       19         3       Net Enrolment Ratio (NER)       3) Primary         Boys       93.30       85.13         Girls       93.37       84.84         b) Upper Primary       86.46       78.92         Girls       86.77       77.89         Total       86.61       78.42         4       Drop out Rate       3) Primary       86.61       78.42         4       Drop out Rate       3) Primary       0       0.68         Total       0       0.68       0.90         b) Upper Primary       0       0.68       0.90			- 1.10	
Female			87.4	84.5
Gender gap				
C) Urban literacy   Male   90.1   92.0     Female   82.8   85.0     Gender gap   7.2   7.0     2				
Male       90.1       92.0         Female       82.8       85.0         Gender gap       7.2       7.0         Pupil-teacher ratio       25       21         a) Primary       21       19         Net Enrolment Ratio (NER)       3 Net Enrolment Ratio (NER)         a) Primary       Boys       93.30       85.13         Girls       93.44       84.53         Total       93.37       84.84         b) Upper Primary       Boys       86.46       78.92         Girls       86.77       77.89         Total       86.61       78.42         4       Drop out Rate       a) Primary         Boys       0       1.12         Girls       0       0.68         Total       0       0.90         b) Upper Primary       0       0.90			1.112	10.0
Female Gender gap   7.2   7.0			90.1	92.0
Gender gap     7.2     7.0       Pupil-teacher ratio     25     21       a) Primary     21     19       Net Enrolment Ratio (NER)     21     19       Boys     93.30     85.13       Girls     93.44     84.53       Total     93.37     84.84       b) Upper Primary     86.46     78.92       Girls     86.77     77.89       Total     86.61     78.42       4     Drop out Rate       a) Primary     80ys     0     1.12       Girls     0     0.68       Total     0     0.90       b) Upper Primary     0     0.90				
Pupil-teacher ratio				
a) Primary b) Upper primary 21 19  Net Enrolment Ratio (NER) a) Primary Boys Girls Total b) Upper Primary Boys Girls Girls For an Alexandria Boys Boys Boys Boys Boys Boys Boys Boys	2			
b) Upper primary   21   19	=		25	21
Net Enrolment Ratio (NER)				
a) Primary Boys Boys 93.30 85.13 Girls 93.44 84.53 Total 93.37 84.84  b) Upper Primary Boys Girls Total 86.77 77.89 Total 86.61 78.42  4 Drop out Rate a) Primary Boys Girls Total 0 0 0.68 Total 0 0.90  b) Upper Primary	3			
Boys   93.30   85.13     Girls   93.44   84.53     Total   93.37   84.84     b) Upper Primary   Boys   86.46   78.92     Girls   86.77   77.89     Total   86.61   78.42     4   Drop out Rate       a) Primary   Boys   0   1.12     Girls   0   0.68     Total   0   0.90     b) Upper Primary				
Girls 93.44 84.53 Total 93.37 84.84  b) Upper Primary Boys 86.46 78.92 Girls 86.77 77.89 Total 86.61 78.42  4 Drop out Rate a) Primary Boys 0 1.12 Girls 0 0.68 Total 0 0.90  b) Upper Primary		·	93.30	85.13
Total   93.37   84.84     b) Upper Primary   86.46   78.92     Girls   86.77   77.89     Total   86.61   78.42     4   Drop out Rate         a) Primary   Boys   0   1.12     Girls   0   0.68     Total   0   0.90     b) Upper Primary				
b) Upper Primary Boys Girls State  4 Drop out Rate a) Primary Boys Girls Girls O Do				
Boys 86.46 78.92 Girls 86.77 77.89 Total 86.61 78.42  4 Drop out Rate a) Primary Boys 0 1.12 Girls 0 0.68 Total 0 0.90 b) Upper Primary				
Girls     86.77     77.89       Total     86.61     78.42       4     Drop out Rate       a) Primary     0     1.12       Girls     0     0.68       Total     0     0.90       b) Upper Primary			86.46	78.92
Total   86.61   78.42				
4 Drop out Rate  a) Primary  Boys  Girls  Total  b) Upper Primary  0 1.12 0 0.68 0 0.90				
a) Primary Boys O Girls O Total  b) Upper Primary  a) Primary O 0 1.12 0 0.68 0.90	4	Drop out Rate		
Boys 0 1.12 Girls 0 0.68 Total 0 0.90  b) Upper Primary		•		
Girls         0         0.68           Total         0         0.90           b) Upper Primary         0         0.90		•	0	1.12
b) Upper Primary			0	0.68
		Total	0	0.90
		b) Upper Primary		
Boys   1.98   1.65		Boys	1.98	1.65
Girls 1.25 0.99			1.25	0.99
Total 1.62 1.33		Total		
5 Per cent female teachers	5	Per cent female teachers		
a) Primary 50 43		a) Primary	50	43
b) Upper primary 30 28			30	28
6 Per cent schools with one teacher 16.75 13.93	6			13.93
(Primary)				

Source: Educational Statistics, 2005-06, Sarva Shiksha Abhiyan, State Project Office, Himachal Pradesh.

Also, the gender gap in overall literacy at 14.5 per cent points and that in rural literacy at 14.9 per cent is lower in the district than the state figures of 17.9 per cent and 17.5 per cent, respectively. The pupil-teacher ratio is slightly higher in the district as compared to that for the state as a whole, which may be attributed to the higher population density in the district. Again, the district has a higher net enrolment ratio (NER) for girls and boys both at primary as well as at upper primary levels as against the NER for the state. While dropping out of schools is a major concern at the national level, it does not appear to be a major problem in Himachal Pradesh. And it was more true for Kangra district that had zero dropout rate at the primary level (2005-06). The drop out rate at the upper primary level was slightly higher at 1.62 per cent in the district as compared to the 1.33 per cent for the state. It may, however, be mentioned that drop out rate for the girls was lower than the boys in the district as was also observed for the state on the whole. Another favourable feature of education in the district is that 50.0 per cent of the teachers in the primary and 30.0 per cent in the upper primary are females as compared to 43.0 and 28.0 per cent for the state as a whole. But the disturbing point with respect to primary education in the district is that about 17.0 per cent of the schools are being managed by one teacher only. The corresponding figure of about 14.0 per cent for the state is equally disturbing, given the running of mid day meals scheme and manning the five classes in such single teacher schools.

The availability of various facilities in the school premises at the primary and upper primary levels in the district with those existing at the state level were also examined (Table 7.3). The results showed that about 10.0 per cent of the schools in the upper primary section were running without any classroom in the district. It was almost similar state of affairs for the state. However, at primary level, the things were better as there were only 0.68 per cent 'open air schools' in the district as compared to 1.27 per cent for Himachal Pradesh. Similarly, the proportion of schools in the district having only one classroom at the primary and upper primary level was 5.70 and 7.89 per cent, respectively. About 95.0 per cent of the primary schools and 83.0 per cent of the upper primary schools in the district had drinking water facilities. Likewise, about 69.0 per cent of the primary schools and 80.0 per cent of the upper primary schools in the district had electricity facilities. On both these counts, the performance of Kangra was better than the

state. As regards the toilet facilities, while 15.0 per cent of the primary schools had common toilet, only 9.0 per cent had girls' toilet facility in the district. The corresponding figures for the upper primary level were 38.0 and 37.0 per cent, respectively. Here, the performance of the district was much lower as against the state. Similarly, with respect to the facilities of book bank, medical check up, availability of computers, the performance of the district was below the state achievements.

Table 7.3: Facilities Available in Primary Schools, 2005-06

Sr.	Particulars	Kar	ngra	I	HP .
No.		Primary	Upper Primary	Primary	Upper Primary
1.	Classroom availability				
	With no classroom (per cent)	0.68	10.14	1.27	8.72
	With one classroom (per cent)	5.70	7.89	5.03	5.52
2	Common toilet	15.04	38.31	32.10	45.52
3	Girls toilet	8.66	37.46	18.59	42.32
4	Electricity	68.83	79.72	44.91	65.38
5	Drinking water	94.64	83.24	87.11	82.89
6	Boundary wall	29.12	37.04	18.37	25.80
7	Playground	50.09	63.52	48.10	58.42
8	Book bank	11.51	9.72	32.17	30.38
9	Medical check up	27.58	9.01	58.49	37.85
10	Ramps	11.37	0.56	5.82	4.16
11	Computers	0.23	3.24	1.21	10.87

Source: Educational Statistics, 2005-06, Sarva Shiksha Abhiyan, State Project Office, Himachal Pradesh.

#### Box 7.1: Sarva Shiksha Abhiyan

A Programme for Universal Elementary Education.

The Sarva Shiksha Abhiyan is a time-bound initiative of the Central Government, in partnership with the States, the local governments and the community, to provide elementary education to all children in the age group 6-14 years by 2010. It recognizes the importance of community owned system organized in a mission mode for improving reach and performance of the school system. In particular, its objectives are:

- All children in school, Education Guarantee Centre, Alternate School, 'Back to School' Camp by 2003
- All children to complete five years of primary schooling by 2007
- All children to complete eight years schooling by 2010
- Focus on quality elementary education with emphasis on education for life
- To bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010 and
- Universal retention by 2010.

The Sarva Shiksha Abhiyan seeks to bring about convergence of existing institutional effort for elementary education at state and district level. The Programme seeks functional decentralization right down to the school level in order to improve community participation. Besides involving the Panchayati Raj Institutions/Tribal Councils in Schedule Areas, the States would be encouraged to strengthen the accountability in implementation of the Programme by involving NGOs, teachers, activists and women's organizations. The Programme would cover the entire country before March, 2002. The duration of the Programme in every district will depend on the District Elementary Education Plan reflecting the specific needs of each district.

According to broad assessments made by the Department of Elementary Education and Literacy, Government of India, nearly Rs. 60,000 crore additional budgetary resources are required from the Central and the State Governments over the next ten years for implementing this initiative. The actual requirement of funds is to be worked out when the District Elementary Education Plans are finalized.

#### 7.2: Important Indicators of Education at Block Level

Adult literacy and enrolment rate are the two variables that go into the computation of human development index (HDI). Both these indicators fall in the category of 'outcome or attainment' indicators. Enrolment rate could not be worked out as the age group-wise population distribution was not available at the block level for various categories of school levels. So we had to depend upon the adult literacy for these output indicators. On the other side, there are several input or process indicators that facilitate/retard improvement in knowledge situation. For instance, favourable pupil-teacher ratio, population per school, accessibility to schooling, schools with *pucca/kuchha* buildings etc, all have implications for educational developments. A block-wise brief account of these indicators is given below (Table 7.4).

**Table 7.4: Block-wise Indicators of Education in District Kangra** 

Block	Total Literacy (per cent)	Female Literacy (per cent)	Pupil- Teacher Ratio (No.)	Kuchcha Schools (per cent)	Girls Enrolment - Primary (per cent)	Accessibility to Schools (per cent)	Population served per School (No.)
Baijnath	74.83	65.53	19.07	16.59	48.75	95.73	352
Bhawarna	80.61	73.33	19.43	11.31	48.38	92.23	479
Dehra	80.01	72.63	23.84	14.6	47.93	75.61	498
Fathepur	78.49	72.6	23.27	7.65	48.89	78.29	514
Indora	78.05	72.07	22.44	2.86	48.24	72.96	551
Kangra	81.58	74.04	22.99	8.22	49.45	87.5	552
Lambagoan	80.65	73.02	17.81	16.49	48.69	93.53	356
Nagrota Bagwan	78.81	70.65	22.26	13.45	50.06	83.1	531
Nagrota Surian	80.15	73.51	22.18	11.94	48.04	90.65	442
Nurpur	79.31	72.92	25.73	8.12	47.76	78.05	516
Panchrukhi	80.11	72.14	16.67	13.79	49.95	91.18	570
Pragpur	82.65	76.51	19.34	18.46	47.22	86.71	403
Rait	77.87	69.53	25.02	13.81	48.65	85.9	495
Sulah	82.25	75.01	17.76	17.01	47.74	89.16	427

Source: 7<sup>th</sup> All India School Education Survey, 2002 (http://gov.ua.nic.in/aises)

- **7.2.1. Literacy:** The overall literacy was quite high in all the blocks and there was not much variation with respect to the attainment for this indicator. It was slightly lower than the district figure of 80.08 per cent in 6 out of the 14 blocks. It was the lowest in Baijnath (74.83 per cent), Rait (77.87 per cent) and Indora (78.05 per cent) blocks. Literacy was highest in Pragpur (82.65 per cent), Sulah (82.25 per cent) and Kangra (81.58 per cent) blocks. The attainment in female literacy also exhibited the similar features. It also hovered around the district average (73.01 per cent) with little variation across blocks. It was lowest in the blocks of Baijanth (65.53 per cent), Rait (69.53 per cent) and Nagrota Bagwan (70.65 per cent) and was highest in Pragpur (76.51 per cent), Sulah (75.01 per cent) and Kangra (74.04 per cent) blocks.
- **7.2.2. Pupil-Teacher Ratio (PTR):** Pupil-Teacher ratio was computed for various levels of schooling. As may be seen in this table, at the primary level this ratio was more favourable in the blocks of Panchrukhi, Bhawarna, Baijnath, Lambagaon and Sulah where it varied from 16.31 to 19.31. On the other side, teacher-pupil ratio was adverse in the remaining blocks where it ranged from 20.27 in Pragpur to 28.02 in Indora. At the upper primary level, this ratio was yet again favourable in the blocks of Sulah, Panchrukhi, Bhawarna and Lambagaon but was adverse in Nagrota Bagwan, Rait and Fatehpur. As regards the secondary schools, the teacher-pupil ratio was favourable in Sulah, Lambagaon, Bhawarna, Pragpur and Fatehpur while it was slightly adverse in the blocks of Nurpur, Dehra, Nagrota Surian and Nagrota Bagwan. Finally, at the higher secondary level, the ratio was favourable in Panchrukhi, Lambagaon, Sulah and Pragpur whereas it was comparatively unfavourable in the blocks of Fatehpur, Rait, Nurpur and Kangra. For all schools combined together, the teacher-pupil ratio was more favourable in the blocks of Panchrukhi (16.67), Sulah (17.76), Lambagaon (17.81), Baijnath (19.07), Pragpur (19.34) and Bhawarna (19.07). On the other side, Nurpur (25.73), Rait (25.02), Dehra (23.84) and Fatehpur (23.27) had slightly adverse ratio.
- **7.2.3.** Accessibility to Primary Schooling: Accessibility to primary schooling (in terms of distance) goes a long way in influencing the enrolment and literacy levels. And this becomes all the more important in hilly areas where the tiny-tots have to walk considerable distance through the rugged terrain in order to reach the school. The

accessibility was computed by working out the proportion of habitations having a school (at primary stage) within a distance of 1km. The results showed that Baijnath (95.73 per cent), Lambagoan (93.53 per cent) and Bhawarna (92.23 per cent) had the highest accessibility to schooling at primary stage. On the other side, Indora (72.96 per cent), Dehra (74.61 per cent) and Nurpur (78.05 per cent) had the poorest accessibility.

- **7.2.4. Population per School (all schools):** Population served by one school also gives an indication of the relative pressure on the schooling infrastructure. In Baijnath (352 persons), Lambagoan (356) and Pragpur (402) schools had less pressure as compared to Panchrukhi (570), Indora (551) and Kangra (552).
- **7.2.5. Proportion of Schools with** *Kuchcha* **Buildings:** In order to have an insight into the quality of school infrastructure, proportion of schools with *kuchcha* buildings was computed. Indora (2.86 per cent), Fatehpur (7.65 per cent) and Nurpur (8.12 per cent) had the lowest percentage of school buildings that were kuchcha. Contrarily, Pragpur (18.46per cent), Sulah (17.01 per cent) and Baijnath (16.59 per cent) were having the highest proportion of *kuchcha* buildings.
- **7.2.6. Girls Enrolment (primary):** In order to capture the gender differences in the field of education, the relative enrolment of girls at the primary level as a proportion of total enrolment was computed. The results revealed that there was not much variation across the blocks as it ranged between 50.06 (Nagrota Bagwan) to 47.22 (Pragpur). This is in consonance with the overall demographic scene in the district.

#### 7.3. Composite Education Index (CEI)

In order to know the overall state of education across different blocks in Kangra district, the Composite Education Index (CEI) was constructed using the abovementioned 'process and outcome' indicators. These included total literacy (Lit-T), female literacy (Lit-F), pupil-teacher ratio (P-TR), girls enrolment (GE-P) at primary level as a proportion of total enrolment, accessibility of schooling facilities at primary level (SA-P) defined as the percentage of habitations having schools within a distance of one kilometre, population served by one school (PPS) and the proportion of schools having *kuchcha* buildings (K-BS). Thereafter, zero-to-one scoring transformation was used. The results are given in Table 7.5 and have been graphed in Figure 7.1.

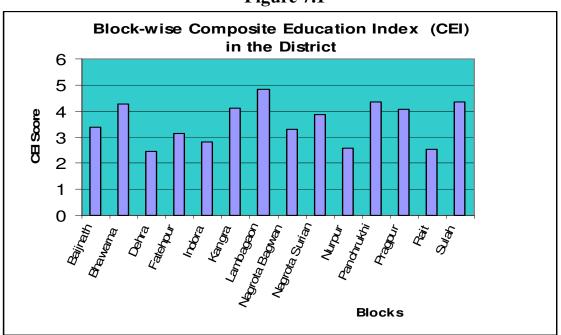
Table 7.5: Block-wise Composite Education Index (CEI) in Kangra

Block	Lit-T	Lit-F	P-TR	K-BS	GE-P	SA-P	PPS	Total Score	CEI Rank
Baijnath	0	0	0.735	0.12	0.539	1	1	3.3937	8
Bhawarna	0.739	0.71	0.695	0.458	0.408	0.846	0.417	4.27538	4
Dehra	0.662	0.647	0.209	0.247	0.25	0.116	0.33	2.46174	14
Fathepur	0.468	0.644	0.272	0.693	0.588	0.234	0.257	3.15539	10
Indora	0.412	0.596	0.363	1	0.359	0	0.087	2.81684	11
Kangra	0.863	0.775	0.302	0.656	0.785	0.639	0.083	4.10339	5
Lambagoan	0.744	0.682	0.874	0.126	0.518	0.903	0.982	4.82949	1
Nagrota Bagwan	0.509	0.466	0.383	0.321	1	0.445	0.179	3.30363	9
Nagrota Surian	0.68	0.727	0.392	0.418	0.289	0.777	0.587	3.86965	7
Nurpur	0.573	0.673	0	0.663	0.19	0.224	0.248	2.57014	12
Panchrukhi	0.675	0.602	1	0.299	0.961	0.8	0	4.338	2
Pragpur	1	1	0.705	0	0	0.604	0.766	4.07522	6
Rait	0.389	0.364	0.078	0.298	0.504	0.568	0.344	2.54534	13
Sulah	0.949	0.863	0.88	0.093	0.183	0.711	0.656	4.3354	3

Source: Derived from the data given in Table 7.4.

The median value of the Composite Education Index (CEI) scores was 3.632. Based on this, the blocks of Lambagaon, Panchrukhi, Sulah, Bhawarna, Kangra, Pragpur and Nagrota Surian performed better on various education indicators as compared to Dehra, Rait, Nurpur, Indora, Fatehpur, Nagrota Bagwan and Baijnath. Thus, to augment upon the knowledge dimension of the human development in the district, the policy interventions need to be undertaken with a greater thrust in the latter set of blocks.

Figure 7.1





## **Chapter 8**

## **Gender Issues in Kangra**

Gender issues and empowerment of women has come to the centre of all development planning and policy discussions the world over. In India a host of constitutional and legal provisions exist to protect the rights and privileges of women (Appendix II). However, despite all these provisions such issues as the adverse child sex ratio, high infant and maternal mortality, gender gaps in literacy and wage rates, escalating violence against women and child trafficking have been attracting public attention. This has been duly taken note of by the Planning Commission. In order to address these concerns so that the social and economic empowerment of women and gender justice reach the targeted groups, the Mid -Term Review of Tenth Five Year Plan has recommended such measures as the universalizing of the Integrated Child Development Services (ICDS), expanding crèches, evaluation of existing programmes, strengthening of the delivery mechanisms and assessing the gender impact of all programmes (Economic Survey, 2005-06). As a sequel to this the Working Group on 'Gender Issues, Panchayati Raj Institutions, Public-Private Partnership, Innovative Finance and Micro Finance in Agriculture' for the Eleventh Five Year Plan (2007-2012) have recommended a host of measures, inter alia, for the empowerment of women. In the present chapter an attempt has been made to examine some of these issues such as sex ratio, women in SHGs/microfinance, ICDS and Panchayati Raj Institutions at the sub-district level of blocks in Kangra.

**8.1. Age–wise Distribution of Female Population:** The age-wise per cent distribution of female population in district Kangra has been given in Table 8.1. As may be seen in this table, while 11.06 per cent of the total population in the district was in the age group of 0-6 years, the population of the girl child (0-19 years) was 38.20 per cent. The economically active (15-59 years) female population was 61.81 per cent per cent of the total population.

Table 8.1: Age-wise Distribution of Female Population in Kangra, 2001.

Sr No.	Age Group (Years)	Kangra (per cent)	HP (per cent)
1	0-6	11.06	12.53
2	7-10	7.94	8.64
3	11-14	8.73	9.05
4	15-19	10.47	10.11
5	20-24	9.81	9.61
6	25-59	41.83	40.59
7	60 &above	10.25	9.25
8	Age not stated	0.21	0.22

Source: Gender Statistics, 2006, Department of Economics and Statistics, Government of Himachal Pradesh.

**8.2. Sex Ratio:** Himachal Pradesh is known for its achievements in human resources development, especially in the arena of education and health. The state had least gender inequalities throughout the country about a decade ago (Kumar, 1996). Notwithstanding all this, the recent demographic developments with deep socio-economic repercussions have raised many eyebrows. For instance, the sex ratio at the state level has come down slightly from 976 in 1991 to 970 in 2001 (Table 8.2). However, the overall sex ratio in Kangra has shown steady increase from 1008 in 1971 to 1027 in 2001. In 1991, out of total twelve districts in the state, five low and mid hill districts namely Kangra, Hamirpur, Mandi, Bilaspur and Una had sex ratio that favoured women. In 2001, only Kangra, Hamirpur and Mandi had 1000 plus sex ratio whereas Bilaspur and Una slipped into the category of districts with an adverse sex ratio. But the more worrisome part of the changing demography is the sharp decline in the sex ratio of '0-6 years' age group. At the state level, it has come down from 951 in 1991 to 897 in 2001. Across districts, this ratio declined in all but one district of Lahaul and Spiti (for Kinnaur the figure was not available). The magnitude of this fall was alarmingly highest in Kangra from 939 to 836.

**Table 8.2: Temporal Changes in Sex Ratio in Kangra, 1971-2001** 

Year	Overall Sex Ratio		0-6 yea	rs Sex Ratio	
	Kangra HP		Kangra	HP	
1971	1008	958	-	-	
1981	1016	973	-	-	
1991	1024	976	939	951	
2001	1027	970	836	897	

Source: Statistical Outline of Himachal Pradesh (Various Issues), Department of Economics and Statistics, Government of Himachal Pradesh, Shimla.

At the block level, the overall sex ratio was highest in Lambagaon (1190) followed by Sulah (1101) and Dehra (1069) blocks (Table 8.3). It was most adverse in Indora (917) and Nurpur (984) blocks. The sex ratio for '0-6 years' age group was highly adverse in all the blocks. For instance, while it was slightly better in Dehra (871), Nagrota Bagwan (854) and Baijnath blocks (852), it was most demoralizing in Sulah (801), Bhawarna (806) and Lambagaon (807) blocks. This trend if allowed to persist *ad infinitum*, will surely mar the human resource achievements of the state to a point of no return.

Table 8.3: Sex Ratio at Block Level, 2001

Block	Sex	ratio
	Overall	0-6 Years
Baijnath	1035	852
Bhawarna	1006	806
Dehra	1069	871
Fatehpur	1013	828
Indora	917	818
Kangra	1021	857
Lambagaon	1190	807
Nagrota Bagwan	1039	854
Nagrota Surian	1047	833
Nurpur	984	829
Panchrukhi	1055	827
Pragpur	1036	828
Rait	1033	848
Sulah	1101	801
Rural	1032	835
Urban	902	852
Total	1025	836

Source: Census, 2001

Women Empowerment through Self-Help Groups **8.3.** (SHGs): Women empowerment has got a major boost during the past one and a half decade with the spreading of the microfinance movement in India because a majority of SHGs under this movement are women SHGs. The story of women empowerment through these SHGs is no different in Kangra district. The SHGs in the district can be grouped in two broad categories<sup>3</sup>: those falling under SHG-Bank Linkage Programme of NABARD (NABARD SHGs) and those falling under rural development (DRDA SHGs). By mid 2006 there were 7119 SHGs in the district out of which 81.0 per cent were accounted for by the NABARD stream (Table 8.4). Put together these SHGs have been disbursed credit worth Rs 22.27 crore wherein the share of NABARD SHGs is 93.6 per cent. At the district level there were 5.62 SHGs per 1000 of population. The credit disbursement per SHG was Rs. 31,000. Across blocks, there were more SHGs per one thousand of population in Dehra (12.36), Bhawarna (9.87), Kangra (7.83) and Sulah (7.04) as compared to Indora (1.61), Fatehpur (2.82), Nurpur (3.04) and Nagrota Surian (3.64). The credit disbursement per

<sup>&</sup>lt;sup>3</sup> There are other government departments also that have formed SHGs for their developmental activities but they are in small numbers.

SHG also exhibited wide variation from Rs 15,000 in Baijnath block to Rs 48,000 in Fatehpur block.

Table 8.4: Self Help Groups (SHGs) in District Kangra, 2005-06.

Block	Number of SHGs				Credit Disbursed to SHGs (Lakh Rs.)			- Credit
	DRDA (Oct- 2005)	NABARD (June,06)	Total	SHGs per 1000 of Population	DRDA	NABARD	Total	per SHG (Rs. Lakh)
Baijnath	167	142	309	4.16	11	36	46	0.15
Bhawarna	49	745	794	9.87	18	223	241	0.30
Dehra	93	1299	1392	12.36	12	406	418	0.30
Fatehpur	56	209	265	2.82	12	115	127	0.48
Indora	67	88	155	1.61	9	47	56	0.36
Kangra	167	780	947	7.83	8	400	408	0.43
Lambagoan	64	235	299	4.33	9	79	88	0.29
Nagrota Bagwan	102	338	440	4.85	10	120	130	0.29
Nagrota Surian	67	256	323	3.64	9	94	102	0.32
Nurpur	101	208	309	3.04	6	91	97	0.32
Panckrukhi	122	210	332	5.02	8	60	68	0.20
Pragpur	180	458	638	6.09	4	172	176	0.28
Rait	72	402	474	4.56	17	138	156	0.33
Sulah	42	400	442	7.04	10	104	113	0.26
Total	1349	5770	7119	5.62	142	2085	2227	0.31

Source: Office of DDM, NABARD, Kangra and DRDA, Kangra.

**8.4. Role of NGOs in Women Empowerment:** Various NGOs are involved in the women empowerment through SHGs (Table 8.4). Out of these NGOs, Chinmaya Organization for Rural Development (CORD), an organ of Chinmaya Tapovan Trust, Sidhbari and Gramin Seva Ashram, Bhawarna are the prominent NGOs who have helped the cause of women empowerment in the district. CORD is operating in over 500 villages of District Kangra. It's

Comprehensive Integrated Rural Development Programme activities (Box 8.1) has touched the lives of over 55,000 beneficiaries directly, and over 2,75,000 people indirectly. The CORD works with villages women through several village level structures such as Mahila Mandals, Yuva Mandals, Gram Sabhas, Self Help Groups, Panchayati Raj Institutions, etc., Its activities are demand-driven and truly participatory. There are other NGOs such as Samridhi Mahila Cooperative Society Ltd. (SMCS) which are playing an important role in the empowerment of women in the district (Box 8.2).

		r Rural Developmen	
Programme	Achievement	Outreach	Members benefited during last year
Women's Groups	518 Mahila Mandals	500 villages	30,000
Self Help Groups	1439 Micro Credit Groups	500 villages	22,000
Income Generation	62 activities identified	500 villages	13,000 approx.
Self Help Groups' Training in collaboration with NABARD (the National Bank for Agriculture & Rural Development)	Approx. 22,552 people trained	5 States (Himachal Pradesh, Punjab & Haryana, Jammu & Kashmir and Uttranchal)	Orientation of NGOs, Banks and Government functionaries in Himachal Pradesh, Punjab, Haryana, Jammu & Kashmir and Uttranchal
Primary Health Care Services	Being provided for over 20 years	Health awareness in over 500 villages & OPD for surrounding villages	Approx. 20,000 patients treated annually. Awareness outreach to all 500 villages
Sanitation	684 toilets built	Health awareness in over 500 villages	-
Community Based Rehabilitation of the Disabled	2500 benefited (Focus 445)	Focused activities in 85 villages	Outreach programmes with regular contact; a)168 physically handicapped b) 101 mentally challenged c) 108 multiple defects d) 55 hearing impaired e) 13 visually impaired
Balwari	2,870 children	20 villages	Approx. 400 children
Balvihar	8,000 children	50 villages	1900
Literacy	Approx. 750 women	23 villages 309	
Social Justice and Informal Legal Cell	207 cases resolved	500 villages	313 cases registered
Adolescent Girls' Groups	10,300 benefited	35 villages	637 new members annually
Youth & Men's Clubs	220 Clubs	220 villages	5,084
Panchayat	226 Panchayats	500 villages	All villagers
Participatory Natural Resource Management	2 Panchayats (Kand Kardiana and Bhatoli Samiala)	500 villages (Focused activities in 5 villages)	All villagers

Source: CORD, Sidhbari

Table 8.5: SHGs and Non-Governmental Organizations in Kangra (As on 30-06-06)

SrNo.	Name of Organization	SHGs formed	SHGs with Saving	Linked SHGs	Credit amount
			accounts		
1	Chinmaya Tapoban Trust	1750	1649	1683	729.17
2	Savera, Renkha	450	440	425	104.36
3	Parvtiya Krishi avem Gramin				
	Vikas Sansthan, Khundian	927	927	927	340.1
4	Gramin Seva Ashram,				
	Bhawarna	1150	1125	796	250.72
5	Samaj Seva Parishad, Rait	173	160	153	27.28
6	Era, Thumba, Khundian	4	4	4	0.29
7	V.V.V. (Kissan) Clubs	68	68	68	35.99
8	C.D.P.O*	1850	1789	1664	595.12
9	Swarag Sakoh	25	15	50	1.65
	Total	6397	6177	5770	2084.68

<sup>\*</sup> CDPO (Child Development Project Officer) who is looking after ICDS in the district, is a Government Department; all others are NGOs.

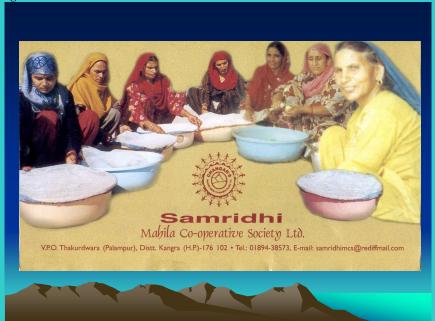
Source: NABARD

8.5. Role of Department of Social Justice and Empowerment: The Department of Social Justice and Empowerment, Government of Himachal Pradesh through its project 'Integrated Child Development Services (ICDS) is playing a very important role in building up the human resources in the state. The ICDS scheme is operated at the district level with District Programme Officer (DPO) as the Incharge and he is assisted by the CDPOs (Child Development Project Officers) at the block level. The success of the SHG activities through the ICDS may be attributed to the availability of vast and dedicated staff network (*Anganwari* workers) that almost reaches every village in the operational area and has very close working relationship with the women folk who are the prime constituents of these SHGs. At present, the DPO is being assisted by 15 CDPOs, who are supported by 74 supervisors and 1454 anganwari workers in the district. In total there are 1924 anganwari centres in the district of which 470 centres are mobile. Population served by one anganwari worker varied from 483 in Pragpur to 1220 in Indora block (Table 8.6). Likewise, in Panchrukhi, Lambagaon and Kangra there was lower pressure on anganwari workers as compared to Indora, Fatehpur and Nagrota Surian.

#### Box 8.2: Samridhi Mahila Cooperative Society Ltd. (SMCS), Thakurdwara

Registered under vernacular nomenclature 'Samridhi Mahila Cooperative Society' came into being in June 1996 that connotes collective prosperity to women production groups (WPGs) in its ambit by creating and sustaining income generation through agroprocessing of locally available fruits from mixed forests and common lands. Needless to mention, the changar areas in Kangra and Bhatiyat region in Chamba districts are bestowed with mixed forests of mango, amla, dhiun and citrus trees growing abundantly on forests and common lands. The local communities are using these fruits on limited scale to prepare pickles for domestic use. Taking cue from this, a concept was framed that took the shape of 'Samridhi' to utilize the vast untapped fruits from mixed forests and common lands for income generation through value addition.

With the modest beginning of 16 women members and 357 kg of processed products in 1995-96, Samridhi has grown into a sizeable agri-business processing society with strong hard working contingent of 182 women members producing about 30 metric tonnes of processed pickles, chutneys, candies and various other food formulations that have homely appeal, irresistible delicacy and wider consumer acceptability in various parts of the country. Consequently, the total sales that stood merely at Rs 17,000 in 1995-96 has registered remarkable increase to the tune of Rs 33.59 lakhs in 2003-04. The society has earned a profit of Rs 8.45 lakhs and distributed income of Rs 5.17 lakhs as wages to different WPGs. The society has a high solvency ratio and enjoys modern computer and internet facilities to facilitate business transactions and marketing of products. In order to increase income, employment and livelihood security, this model needs to be emulated and replicating in other regions of the state in particular and country in general.



Source: Department of Agricultural Economics, CSK HPAU, Palampur.

Table 8.6: Anganwari Centres, SHGs and Workers in Kangra, 2005-06

Block	Total AWCs	Mobile	No. of SHG	AWW	Population per AWW	No. of SHGs/1000 of Population
Baijnath	131	85	149	93	799	2.00
Bhawarna	72	72	139	72	1117	1.73
Dehra	106	-	180	106	1062	1.60
Fatehpur	83	-	159	83	1133	1.69
Indora	79	-	96	79	1220	1.00
Kangra	169	39	285	169	716	2.36
Lambagaon	93	165	236	131	527	3.42
Nagrota Bagwan	83	-	165	83	1093	1.82
Nagrota Surian	78	45	139	78	1139	1.56
Nurpur	93	-	152	93	1093	1.50
Panchrukhi	149	-	204	131	504	3.09
Pragpur	217	31	348	217	483	3.32
Rait	101	33	246	101	1030	2.36
Sulah	_	-		-	-	-
Total	1454	470	2498	1454	871	1.97

Source: District Project Officer (ICDS), Kangra, 2005-06

In addition to their normal child and mother health care duties, AWWs play a crucial role in encouraging SHGs to augment rural saving and to provide financial support through these groups. There were more ICDS SHGs in Lambagaon (3.42), Pragpur (3.32) and Panchrukhi (3.09) per thousand of population as compared to Indora (1.00), Nurpur (1.50) and Nagrota Surian (1.56).

#### 8.6. Women in Panchayati Raj Institutions

The democratic set up in our country has empowered the people to elect their own representatives for the various levels of governance. In this way, governance has been decentralized to reach the lowest level of democracy i.e. village panchayats. The Panchayati Raj Instititutions (PRIs) have been assigned functions, powers and responsibilities as specified in the Panchayati Raj Act, 1994 of the state. These institutions have been empowered to execute and supervise various developmental activities at these lower levels of governance. The reservation provisions have ensured that the women get their due share in these PRIs at all levels. While the norm of 33 per cent reservation for women from various categories such as SCs, OBC and general category was adhered to at Panchayat Samiti and

Zila Parishad level, it was 40 % for the panchayat members. This has resulted in a greater say of the second sex at the lowest level of governance and has thus empowered the women folk considerably. The block wise position of women representation to these PRIs has been given in Table 8.7 to Table 8.12.

Table 8.7: Block-wise Number of Panchayat Officials, 2001

Block	Panchayat	Pradhan	Panchayat Ward Panches	Panchayat Samiti Members
Baijnath	51	51	303	24
Bhawarna	46	46	286	23
Dehra	64	64	388	34
Fatehpur	54	54	328	28
Indora	49	49	321	27
Kangra	67	67	419	35
Lambagaon	55	55	297	24
Nagrota Bagwan	54	54	324	27
Nagrota Surian	48	48	304	26
Nurpur	52	52	330	19
Pragpur	75	75	409	32
Punchrukhi	37	37	209	16
Rait	61	61	383	31
Sulah	47	47	259	19
Total	760	760	4560	365

Source: District Panchayat Officer, Kangra, 2001.

The process of women empowerment has got a big boost in the form of reservations in these institutions for the females who constitute half of the total populace in the district. In the total 760 panchayats in the district, 268 panchayats (35.26 per cent) were headed by the women. Out of these, 59 panchayats (22 per cent) were headed by women Pradhans belonging to SC category, while 44 panchayats (17 per cent) were headed by women from the OBC category. The remaining 165 (61 per cent) positions were occupied by the females from the general category. As regards the panchayat members, out of a total of 4560 members, 1827 members (40 per cent) were women. The share of SC women members was 18.0 per cent while 82.0 per cent members belonged to general category. Out of 14 panchayat samiti chairpersons, five positions were reserved for women. While three of these were reserved for general category females, one each was reserved for OBC and SC categories. As for the reservation at Zila Parishad level, out of 56 wards in the district, 19 were reserved for women. Out of these while twelve female members were from the general category, three were from OBC category and four from SC category.

Table 8.8: Reservation Details of Panchayat Samiti Members in Kangra District

Block	Total Samiti SC OBC		OBC	General	Un-reserved		
	Members	All	Female	All	Female	female	
Baijnath	24	4	2	2	2	4	10
Bhawarna	23	2	2	2	2	5	10
Dehra	34	5	2	3	2	8	14
Fatehpur	28	3	2	2	2	7	12
Indora	27	4	3	2	2	5	11
Kangra	35	2	2	3	2	9	17
Lambagaon	24	5	2	2	2	4	9
Nagrota Bagwan	27	2	1	2	2	6	14
Nagrota Surian	26	3	2	3	2	6	10
Nurpur	29	4	2	2	2	6	13
Punchrukhi	16	4	2	1	1	3	5
Pragpur	32	5	3	3	2	6	13
Rait	31	5	2	3	2	7	12
Sulah	19	2	2	2	1	5	7
Total	375	50	29	32	26	81	157

Source: District Panchayat Officer, Kangra, 2001.

Table 8.9: Reservation Details of Panchayat Pradhans in Kangra District

Block	Total	S	SC	OBC		General	Un-
	Pradhans	All	Female	All	Female	female	reserved
Baijnath	51	8	4	5	3	11	20
Bhawarna	46	6	3	4	3	10	20
Dehra	64	9	5	6	4	14	26
Fatehpur	54	6	4	5	3	12	24
Indora	49	8	5	4	3	10	19
Kangra	67	6	3	6	4	16	32
Lambagaon	55	10	6	5	3	11	20
Nagrota Bagwan	54	3	2	5	3	14	27
Nagrota Surian	48	6	3	4	3	11	21
Nurpur	52	7	4	5	3	11	22
Punchrukhi	37	9	51	4	2	6	11
Pragpur	75	12	7	7	4	15	30
Rait	61	9	5	6	3	13	25
Sulah	47	6	3	4	3	11	20
Total	760	105	59	70	44	165	317

Source: District Panchayat Officer, Kangra, 2001.

Table 8.10: Reservation Details of Zila Parishad Members including Chairman and Vice Chairman in Kangra District

Total wards	56
SC	8
SC female	4
OBC	5
OBC females	3
General females	12
Unreserved	24

Source: District Panchayat Officer, Kangra, 2001.

**Table 8.11: Reservation Details of Panchayat Samiti Chairpersons** 

Sr. No.	Panchayat Samiti	Reservation Status
1	Baijnath	Unreserved
2	Bhawarna	Unreserved
3	Dehra	OBC female
4	Fatehpur	OBC
5	Indora	General female
6	Kangra	Unreserved
7	Lambagaon	SC
8	Nagrota Bagwan	SC female
9	Nagrota Surian	General female
10	Nurpur	Unreserved
11	Punchrukhi	Unreserved
12	Pragpur	SC
13	Rait	Unreserved
14	Sulah	General female

Source: District Panchayat Officer, Kangra, 2001.

**Table 8.12: Reservation Details of Panchayat Members** 

Block	Population (Cens	of Gram us, 2001)		Seats for Panchayat	Reserv	ed for SC	Reserv	ed for ST	General	
	Total	SC	ST	members (No.)	Male	Female	Male	Female	Female	Unreserved
Baijnath	80557	19322	1164	303	47	24	0	0	96	136
Bhawarna	82851	16202	9	286	41	20	0	0	93	132
Dehra	114217	24754	0	388	58	29	0	0	129	172
Fatehpur	94302	16674	0	328	44	22	0	0	111	151
Indora	97063	25586	0	321	61	24	0	0	102	134
Kangra	122013	15536	0	419	42	20	0	0	145	212
Lambagaon	73150	22004	18	297	60	29	0	0	91	117
Nagrota Bagwan	90753	9112	4	324	28	14	0	0	116	166
Nagrota Surian	88828	16178	0	304	44	16	0	0	108	136
Nurpur	103514	22098	0	330	53	24	0	0	106	147
Panchrukhi	54584	21165	0	209	51	31	0	0	52	75
Pragpur	104928	26257	0	409	70	34	0	0	130	175
Rait	109250	24272	67	383	65	26	0	0	128	164
Sulah	63664	11678	16	259	43	8	0	0	99	109
Total	1279674	270838	1278	4560	707	321	0	0	1506	2026

Source: District Panchayat Officer, Kangra, 2001.

## **Chapter 9**

## **Composite Livelihood Index and Human Development in the District**

The third dimension of human development is to have a decent standard of living. And per capita income is used as a measure of this dimension at aggregate levels viz global, regional, national, etc. But to capture this aspect at disaggregated levels of blocks is well nigh impossible due to the non-availability of the relevant data. In order to work out the block level per capita income (BLPCI) the following procedure was used in the present exercise. The three-year average of District Domestic Product for the triennium ending 2001-02 was apportioned among different blocks on the basis of their respective share (per cent) in total workers in the district. The block level domestic product thus arrived at was then divided by the corresponding population figures at the block level to arrive at Then the blocks were given rank scores based on zero to one order BLPCI. transformation. The second variable to capture this dimension of decent standard of living was the incidence of poverty. The proportion of families below poverty line (BPLF) in different blocks was used to capture the extent of economic deprivation. Here it may be mentioned that since the data on latest poverty estimates were not available, the data based on 1998 survey whose results were out in 2002 were used for the present exercise. The blocks were then assigned scores on the basis of zero to one transformation. The work participation rate (WPR) was the third variable used to gauge the standard of living across the blocks. A brief description of the performance of the blocks with respect to these variables is as follows.

- **9.1. Per Capita Income:** According to the block level per capita income (BLPCI) thus computed, Dehra (Rs 24,100), Pragpur (Rs, 23,844) and Nagrota Bagwan (Rs, 19,126) had the highest per capita incomes among all the blocks. On the other side, Nurpur (13,084), Indora (13,295) and Bhawarna (14,905) had the lowest per capita incomes. Since the district domestic product was apportioned on the basis of proportion of workers, the methodology has inbuilt bias towards the blocks with highest workers population.
- **9.2. Incidence of Poverty:** Poverty is not acute in the state of Himachal Pradesh and it is more so in Kangra district. The incidence of poverty across the blocks was lowest in

Nurpur (17.53 per cent), Indora (18.67 per cent) and Sulah (23.19 per cent). On the other side, it was highest in Baijnath (31.81 per cent), Rait (29.40 per cent) and Bhawarna (29.35 per cent) among all the blocks.

Table 9.1: Ranking of Blocks according to Composite Livelihood Index (CLI)

Table 9.1. Ranking of blocks according to Composite Livelinood fildex (CL1)								
Block	BLPCI (Rs)	Rank	BPLF (non cont)	Rank	`.	Rank	Total Score	Final Rank
	(NS)		(per cent)		cent)		Score	Nalik
Baijnath	17591	0.48	31.81	0.00	44.7	0.41	0.8918	12
Bhawarna	14905	0.21	29.35	0.17	37.9	0.16	0.5506	14
Dehra	24100	1.00	28.69	0.22	61.3	1.00	2.2192	2
Fatehpur	16280	0.36	24.86	0.49	41.4	0.29	1.1345	7
Indora	13295	0.03	18.67	0.92	33.8	0.02	0.9650	10
Kangra	17486	0.47	23.45	0.59	44.5	0.40	1.4609	3
Lambagaon	16972	0.43	28.77	0.21	43.2	0.35	0.9931	9
Nagrota Bagwan	19126	0.62	27.75	0.29	48.7	0.55	1.4566	4
Nagrota Surian	17131	0.44	26.35	0.38	43.6	0.37	1.1915	6
Nurpur	13084	0.00	17.53	1.00	33.3	0.00	0.9999	8
Panchrukhi	15500	0.28	25.27	0.46	39.4	0.22	0.9532	11
Pragpur	23844	0.98	20.76	0.77	60.7	0.98	2.7349	1
Rait	16465	0.38	29.40	0.17	41.9	0.31	0.8522	13
Sulah	17171	0.44	23.19	0.60	43.7	0.37	1.4208	5

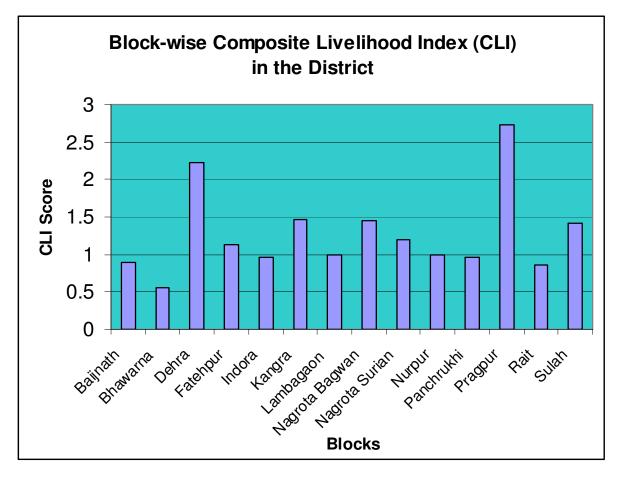
Source: Computed from the data culled from Census, 2001, Department of Economics and Statistics and DRDA, Kangra.

**9.3. Work Participation Rate (WPR):** The work participation rate in the Census parlance is defined as the proportion of total workers (including main and marginal workers) expressed as percentage of total population. The work participation rate was found to be the maximum in Dehra (61.3 per cent), Pragpur (60.7 per cent) and Nagrota Bagwan (48.7 per cent). However, it was lowest in Nurpur (33.3 per cent), Indora (33.8) and Bhawarna (37.9 per cent).

**9.4.** Composite Livelihood Index (CLI): Thereafter, to derive the Composite Livelihood Index (CLI) the BLPCI, BPLF and WPR rank scores were added and the blocks were ranked on the basis of total score. The block with highest score was given rank one and the one with the lowest total score was given rank fourteen. In order to assess the relative performance of the blocks with respect to livelihoods, the median value of the scores of the Composite Livelihood Index was computed. It was found to be 1.067. The results of

CLI are given in Table 9.5 and Figure 9.1. On the basis of the median value, the blocks of Pragpur, Dehra, Kangra, Nagrota Bagwan, Sulah, Nagrota Surian and Fatehpur performed better in terms of CLI in that order. On the other side of the ladder of the Composite Livelihood Index (CLI), the blocks of Bhawarna, Rait, Baijnath, Panchrukhi, Indora, Lambagaon and Nurpur call for more interventions to improve upon the livelihoods of the people in these blocks.

Figure 9.1



#### 9.5. Human Development in the District

Human Development is measured by the Human Development Index (HDI). The methodology for calculating Human Development Index (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 dollars (US) i.e. PPP\$. However, Human Development Index (HDI) in the present exercise could not be worked out. This was primarily because of the non-availability of the relevant data. For instance, data on life expectancy were simply not available at the block level. The information about the infant mortality from Civil Registration System (CRS), which is available at the block level, was having huge discrepancy when seen against the more reliable Sample Registration System (SRS) data for the district/ or state level. In the sphere of education, the enrolment rate could not be worked out as the age group-wise population distribution was not available at the block level for various categories of school levels. And finally, the data on per capita incomes at the block level were also not available at all. Keeping these limitations in mind, it was deemed proper to assess the issue of human development in the district using the scores of Composite Education Index (CEI), Composite Health Index (CHI) and the Composite Livelihood Index (CLI) individually and separately. This was necessitated by the fact that the aggregation of these three types of scores would simply mar the possibility of pin-pointing the weaknesses with respect to individual dimensions of human development. Thus, it might restrict the scope of policy interventions at the block level needed for a specific dimension of human development. But these findings have to be used with a bit of caution since these are indicative only and per se inter-block comparisons arising out of these results should best be avoided. The results of this exercise are given in Table 9.2 (and Fig 9.1).

The performance of the blocks of Baijnath, Nagrota Surian, Bhawarna, Lambagaon, Sulah, Dehra and Nagrota Bagwan with respect to health attainment was relatively better than that of the blocks of Indora, Rait, Fatehpur, Pragpur, Panchrukhi, Kangra and Nurpur. Thus, this latter set of blocks need more policy thrust on health dimension.

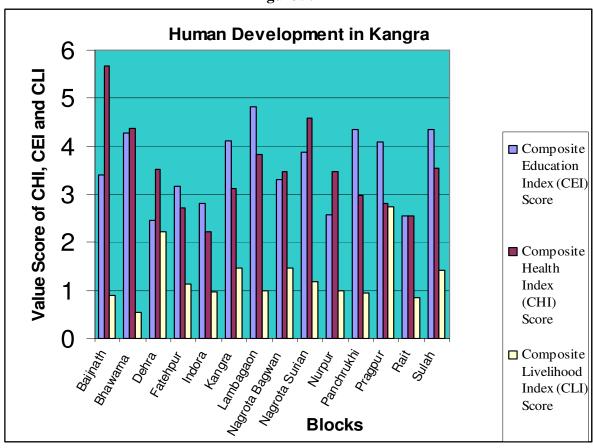
Similarly, for educational attainment, the blocks of Dehra, Rait, Nurpur, Indora, Fatehpur, Nagrota Bagwan, Baijnath and Nagrota Surian, whose performance was below the median value among all the blocks, there was greater need to push in higher efforts towards the building up of knowledge dimension of human development. In the same fashion, the performance of Bhawarna, Rait, Baijnath, Panchrukhi, Indora, Lambagaon, Nurpur and Fatehpur was below the median value for the livelihood concerns. Hence, there is a higher need to address these concerns in the mentioned blocks *vis-a-vis* other blocks.

Table 9.2: Human Development across Blocks in Kangra District

Block	Composite Education Index (CEI)	Rank	Composite Health Index (CHI) Score	Rank	Composite Livelihood Index (CLI)	Rank
Baijnath	<b>Score</b> 3.3937	8	5.6600	1	Score 0.8918	12
				_		
Bhawarna	4.2754	4	4.3600	3	0.5506	14
Dehra	2.4617	14	3.5100	6	2.2192	2
Fatehpur	3.1554	10	2.7200	12	1.1345	7
Indora	2.8168	11	2.2200	14	0.9650	10
Kangra	4.1034	5	3.1100	9	1.4609	3
Lambagaon	4.8295	1	3.8200	4	0.9931	9
Nagrota Bagwan	3.3036	9	3.4800	7	1.4566	4
Nagrota Surian	3.8697	7	4.5900	2	1.1915	6
Nurpur	2.5701	12	3.4700	8	0.9999	8
Panchrukhi	4.3380	2	2.9800	10	0.9532	11
Pragpur	4.0752	6	2.8200	11	2.7349	1
Rait	2.5453	13	2.5400	13	0.8522	13
Sulah	4.3354	3	3.5400	5	1.4208	5

Source: Earlier tables on CEI, CHI and CLI.





## **Chapter 10**

## Human Development and the Way Ahead-An Epilogue

Kangra district has witnessed umpteen geographical and territorial alterations between 1948 and 1972. However, after the last reorganization in 1972, the district territory has remained intact. Despite all these changes, Kangra continues to be the largest district population-wise and occupies fourth place in terms of the geographical area. Physiographically, the district is a real replica of the state in the sense that it has almost all types of agro-climatic conditions, ranging from sub-tropical to dry temperate, that are found throughout the state. And as such it offers a mosaic of opportunities for its denizens to earn livelihoods and move on to a higher trajectory of growth in human development. The population of the district has grown by 1.67 times from 8.01 lakhs to 13.39 lakhs during the past three decades. The population density in the district has increased from 139 persons/sq km to 233 persons during the same period putting lot of pressure on the natural and physical resources of the district. Notwithstanding all this, be it education, health, infrastructure development or the general living conditions, there has been a perceptible improvement in all spheres of life in the district during the past thirty years or so. The spread of development has also been perceptible across all the fourteen development blocks in the district. For instance, the provisions of health, education and infrastructural facilities in the otherwise inaccessible Chhota Bhangal area of Baijnath block have eased out the harsh living conditions to a great extent. Various governmental and non-governmental organizations through SHG movement and their related rural development activities have led to the empowerment of the women folk in the district.

However, there are several gray spots that mar the scene of the human development in the district, strikingly. And the foremost among these is the alarming decline in the sex ratio of '0-6 years' age group. In fact, it has come to be case of the highest adverse sex ratio in some of the blocks of district Kangra. This tendency needs to be curbed immediately as it will thwart most of the efforts aimed at achieving higher well-being of the people in district. Also, on the health front, there appears to be a shortage of the health personnel in

the district. While around twenty five per cent of the staff positions are lying vacant at the district level, in some of the some of the blocks this proportion of vacant posts is as high as plus-forty per cent. This is a serious issue as it affects the delivery of quality health services in these blocks. So there is a need to redress this concern either by filling up the sanctioned posts in the blocks or through the rationalization of health personnel among the blocks.

Second issue pertains to the livelihood concerns of the people in the district. The high proportion of marginal workers (more than fifty per cent) in some of the blocks indicates the extent to which these rural people are exposed to the employment insecurity. Again, the fact that their dependence on agriculture is very high in Dehra, Pragpur, Nagrota Bagwan and Kangra blocks (more than ninety per cent of the marginal workers were either cultivators or were agricultural labour) reveals their vulnerability to employment risks. Therefore, given that a large majority of the people still depends on agriculture for their living, there is a need to make agriculture an economically viable proposition through enhancing the productivity levels among other things. This could also be achieved, wherever conditions permit, by shifting from the present subsistence farming to high value agriculture. Such activities as tea farming (in Palam valley) the off-season vegetable farming (e.g. in Multhan area of Baijnath block, dairying in *Changar* areas, or the growing of medicinal and aromatic plants (in Dehra block), etc can go a long way in improving the economic well-being of the people in the district. Then, there is value addition in agriculture that holds great scope for improving the lives of the poor people as has been shown by the valiant efforts of some women cooperatives and SHGs in the district.

As regards the state of education in the district, the burning concern is the growing unemployment of the educated youth. This problem has to be borne in mind for any future improvement on the human development perspective. In this context, it is imperative to add here that qualitative improvements in the educational system, especially a reorientation towards the technical and vocational education that is self-employment generating, are strongly called for. As regards the schooling infrastructure,

it is a matter of concern that nearly seventeen per cent of the schools at the primary level in the district are being run by single teacher. Given that a single teacher has to man five classes and operate mid-day meals scheme as well, it is likely to affect the quality of the education that is being imparted at the rudimentary stage.

The non-agriculture sector in the district also has great potential to influence economic and social well-being of the people. For instance, various religious and historic spots such as the Jawalamukhi, Chamunda Devi, Kangra, Baijnath, Andretta, Masrur and Dharamshala offer tremendous opportunities for tourism industry. Besides these, majestic Dhauladhar and its various offshoots clinging towards lush green valleys provide ample opportunities for eco-tourism in the district. The recent upsurge in all types of connectivity has facilitated this transformation in a big way. But all these known opportunities need policy interventions such as provisions of vocational training/education to the people at large and youth in particular.

Finally, since in the recent past financial outlays to the health and education sectors at the state level have exhibited a declining tendency, it has its natural implications for these sectors at the district level. So the government has to ensure that the declining trend of spending on social sector is reversed so that the approbation earned by the state for the quantitative achievements on the human development aspects is not made to halt midway before bringing in the desired qualitative improvements.

# **Fact File: Kangra District**

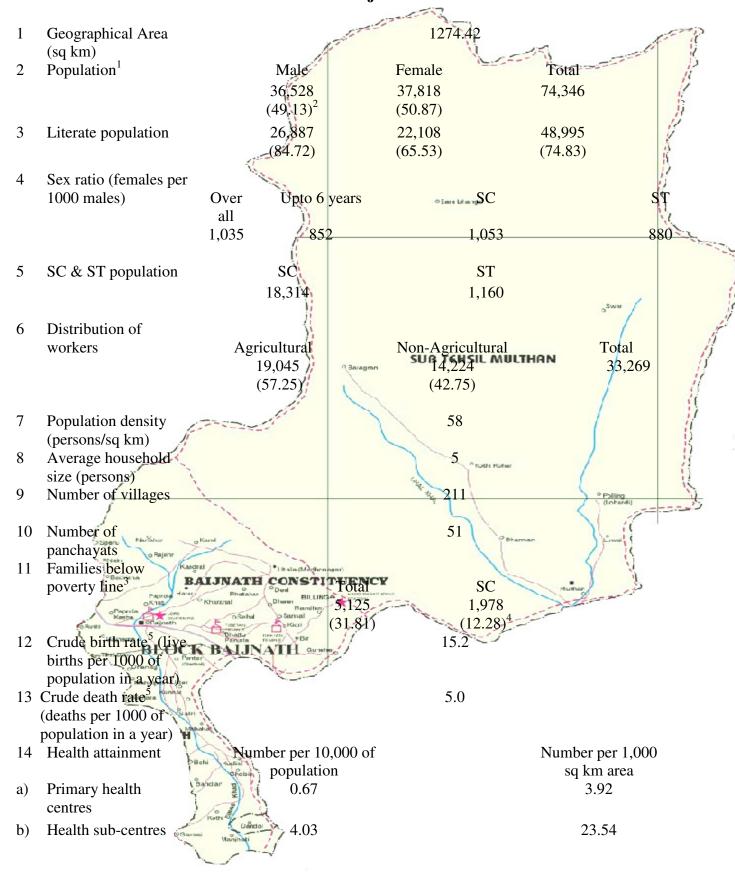
1	Geographical area (sq km)	5,739.0			
2	Population <sup>1</sup>	Male	Female	Total	
		6,61,254 (49.38) <sup>2</sup>	6,77,776 (50.62)	13,39,030	
3	Literate population	5,00,383 (87.53)	4,40,122 (73.00)	9,40, 505 (80.07)	
4	Sex ratio (females per 1000 males)	Overall	Up to 6 Years	SC	ST
		ANGRA D		999	-838
5	SC & ST population	SC 2,79,540	ST 1,597		
	1. 6.	(20.88)	(0.12)	-	
6	Distribution of workers	Agricultural 3,74,887 (63.65)	Non-Agricultural 2,14,107 (36.35)	Total 5,88,994	
7	Population density (persons/sq km)	233		1-11	
8	Average household size (Persons)	5	and the state of t	1-1-	
9	Number of villages	3,868	Comba Co	7	
10	Number of panchayats -	760			
11	Families below poverty line <sup>3</sup>	Total	SC	-7	
	9-4-1-	64,903 ( 22.44)	21,214 (32.69) <sup>4</sup>	1	
12	Crude birth rate <sup>5</sup> (live births per 1000 of population in a year)	22.2			
13	Crude death rate <sup>5</sup> (deaths per 1000 of population in a year)	6.3	<b>建</b> 载		
14	Health attainment	Number per 10,000 of population	Number per 1,000 sq km area	THE CALL STATE  WHITE AND A SECOND SE	
a)	Primary health centres	0.36	8.36	75.00	
b)	Health sub-centres	3.22	75.10	Part Charles	
c)	Dispensaries	1.98	46.18	I Free -	

d)	Rural population served by one doctor <sup>6</sup>	6,061			
e)	Rural population per medical staff <sup>6</sup>	1,191			
15	Educational attainment <sup>7</sup>	Boys	Girls	Total	
a)	Enrolment				
	Primary schools	62,110	58,450	1,20,560	
		(51.51)	(48.49)		
	Upper primary schools	17,125	15,411	32,536	
		(52.63)	(47.37)		
	Secondary schools	36,900	34,185	71,085	
		(51.90)	(48.10)		
	Higher secondary schools	46,593	39,162	85,755	
		(54.33)	(45.67)		
b)	Pupil-teacher ratio	Primary	Upper Primary	Secondary	Higher Secon- dary
		22.12	13.87	23.16	23.38
16	Infrastructure <sup>8</sup>	Number per	Number per 1,000		
		10,000 of population	sq km area		
a)	Fair price shops	6.41	158.56		
b)	Post offices	4.58	113.26		
c)	Cooperative societies	7.02	173.90		
d)	Banks	1.08	26.66		
e)	Road density (km/100 sq km)	83.01	1		

Notes: 1. Most of the demographic data pertains to 2001 Census, unless otherwise specified.

- 2. Figures in the parentheses indicate percentages of total.
- 3. Based on 1998 Survey but released in 2002.
- 4. Per cent of total BPL families.
- 5. Based on Civil Registration System data for the year 2005.
- 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
- 7. Seventh All India Educational Survey, 2002
- 8. Based on figure of March 2006 and Mid-year Population for the year 2005 (14, 20, 718)

## Fact File: Baijnath Block

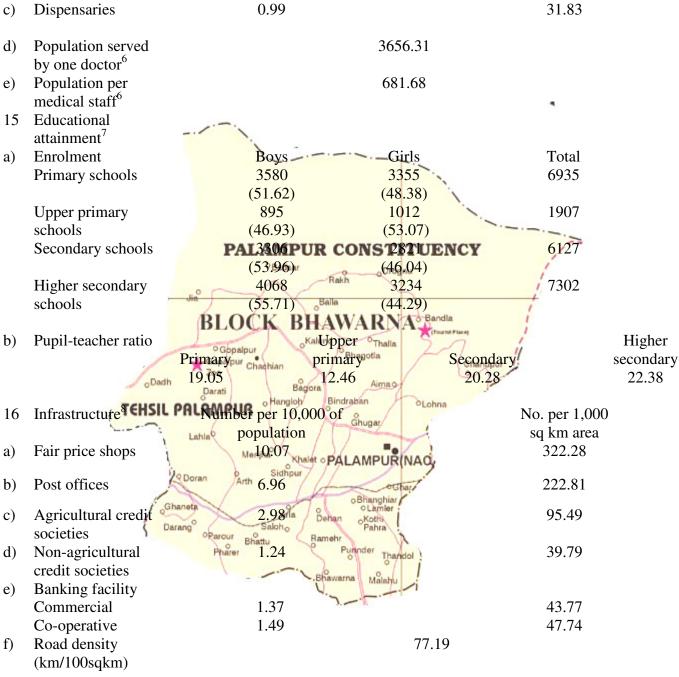


c)	Dispensaries		3.09			18.05	
d)	Population served by one doctor <sup>6</sup>			437	3.29		
e)	Population per medical staff <sup>6</sup>			94	1.08		
15	Educational attainment <sup>7</sup>						
a)	Enrolment		Boys	G	irls	Total	(F-1)
/	Primary schools		4188	1	084	8172	1
	Timary sensons	1.	51.25)		.75)	2112	R
	Upper primary		1218		086	2304	<u> </u>
	schools	<u> </u>	52.86)		(.14)	200.	11
	Secondary schools		2346		197	4543	*
	·	(	51.64)	(48	(.36)		<b>)</b>
	Higher secondary		4066	30	004	7070	2
	schools	1) (	57.51)	(42	.49)		1
		1	-				1
b)	Pupil-teacher ratio	V.		Upper			Higher
		Primary		primary	Secon		secondary
		);			dary	Swar	if
	o	17.61		14.49	22.37	/ /	21.29
16	Infrastructure <sup>8</sup>	Number	per 100	00 of sub tensil	L MULTHAN	Number per	
		po	pulation			s <b>q</b> km ar	ea //
a)	Fair price shops	di di	8.07	\		47.08	i (
b)	Post offices		6.46			37.66	<u> </u>
c)	Agricultural credit		3.09			18.05	į į
	societies			See	oth Kohar	1	[[
d)	Non-agricultural		1.61	1		Clobs 9:42	- = ====
/	credit societies			7	1	1	
e)	Banking facility	1		\	Dharman	)	
•	Commercial BAIJN	ATH CONST	h47eno	שיי	1	8.63	
	Paprox Haise Kharena	Photoner BILLIN	FATON	of steams		2	
	Co-operative	Samuel Samuel	0.80	1500		4.71	
f)	Road density	Hatter Heavy Ber	1	2.20	7.26		
	(km/100sqkm)	73	1.				
	Note: 1. Most of the	demographic dat			less otherwise sp	pecified.	
	- Piolires in	ine narentheses ir	idicate <b>n</b> ei	centages of fotal			

- 2. Figures in the parentheses indicate percentages of total.
  3. Based on 1998 Survey but released in 2002.

  - 4. Per cent of total BPL families.
  - 5. Based on Civil Registration System data for the year 2005.
  - 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
  - 7. Seventh All India Educational Survey, 2002
  - 8. Based on Census 2001 data.

		Fact File: Bhawa	rna Block	
1	Geographical area		251.33	
	(sq km)			
2	Population <sup>1</sup>	Male	Female	Total
		40104	40335	80439
		$(49.86)^2$	(50.14)	(100.00)
3	Literate population	30984	26656	57640
	-	(88.13)	(73.33)	(80.61)
4	Sex ratio (females	Over		
	per 1000 males)	all Upto 6 years		SC ST
		1006 806	9	89 -
_	CC 0 CT	SC		NT.
5	SC & ST	SC	2	ST
	Population	15020		26
		PALAMPUR	CONSTI	LIENCY
		O Badsar	Drognu	
6	Distribution of	00	Rakh	/
	workers	Agricultural	Non-Agricult	ural Total
		D114172 D11	16326	Bandla 30498
		D1 <sub>(46.47)</sub> IX DH	(53.53)	(Tourst Flace)
7	Population density	O Gopalpur O Kalur	320	200 11
	(persons/sq km)	Gopalpur Chaghian	Bhagotla	(Chandpur
8	Average household	Zoo	Aima o	
	size	Darati Bagora		
9	Number of villages	LAMPUR Hangloh	Bindraban 158	OLohna .
10	Number of	6 //	Ghugar 46	4
10	Number of panchayats	Palria.	40	
11	Families below	Menjha Khalet o	PALAMPURIN	AC
11	2	oran Arth Sidhpu Total	S	SC.
	poverey mile	5014	o Glyny	186
	Ghane	9 (29.35		$70)^4$
12	Crude birth rate <sup>5</sup>	Saloho Di	oKotri O	
	(live births per 1000	OParour Bhattu Ran	nehr	
	of population in a	Pharer	Purinder Thando	( )
	year)		0	I
13	Crude death rate <sup>5</sup>		MiSitu	1
	(deaths per 1000 of	,	7-1-	
	population in a year)	N 1 10,000 C		1,000
14	Health attainment	Number per 10,000 of		Number per 1,000
		population		sq km area
a)	Primary health	0.37		11.94
	centres			
b)	Health sub-centres	2.36		75.60

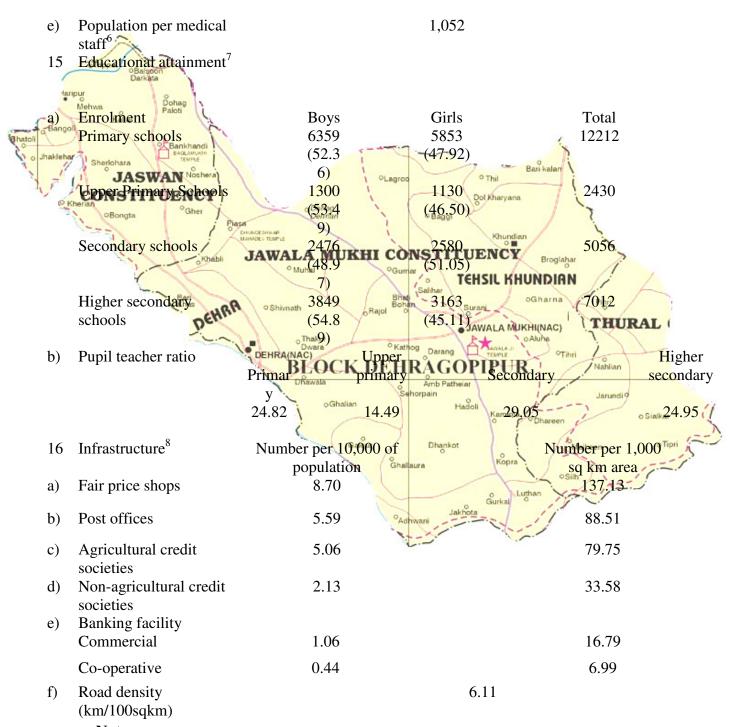


- **Note:** 1. Most of the demographic data pertains to 2001 Census, unless otherwise specified.
  - 2. Figures in the parentheses indicate percentages of total.
  - 3. Based on 1998 Survey but released in 2002.
  - 4. Per cent of total BPL families.
  - 5. Based on Civil Registration System data for the year 2005.
  - 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
  - 7. Seventh All India Educational Survey, 2002
  - 8. Based on Census 2001 data.

#### **Fact File: Dehra Block** 1 Geographical area 714.65 (sq km) Population<sup>1</sup> 2 Male Female Total 54,430 1,12,601 58,171 $(48.33)^2$ (51.66)40959 3 Literate population 37211 78170 (80.01)(88.14)(72.63)4 Sex ratio (females per Over STUpto 6 years SC 1000 males all 1,069 1,014 871 5 SC & ST population SC ST2430 4 (0.003)5 (21.5)Bankhandi 9) JASWAN Noshera OLagro Dol Kharyana Agricultural Non-Agricultural Total 55074 13957 Khundian 69031 JANALA MUKHI CONSTACTALENCY O Muhal Population density 7 158HSIL KHUNDIAN (Persons per sq km) Average household size 8 O Shivnath THURAL JAWALA MUKHI(NAC) 9 Number of villages Kathog Daran 538 DEHRA(NAC) Nahlian RAGOPIPUR Number of panchayats Amb Pate 4 Families below poverty 11 o Ghalian line<sup>3</sup> SC Total 6,283 2,079 Majheen Dhankot $(9.49)^{\circ}$ (28.69)12 Crude birth rate<sup>5</sup> (live 18.3 births per 1000 of Jakhota population in a year) 13 Crude death rate<sup>5</sup> (per 1000 of population) Health attainment Number per 10,000 of Number per 1,000 population sq km area Primary health 0.44 6.99 a) centres Health sub-centres 4.97 78.36 b) Dispensaries 3.37 53.17 c) Population served by 5,362

d)

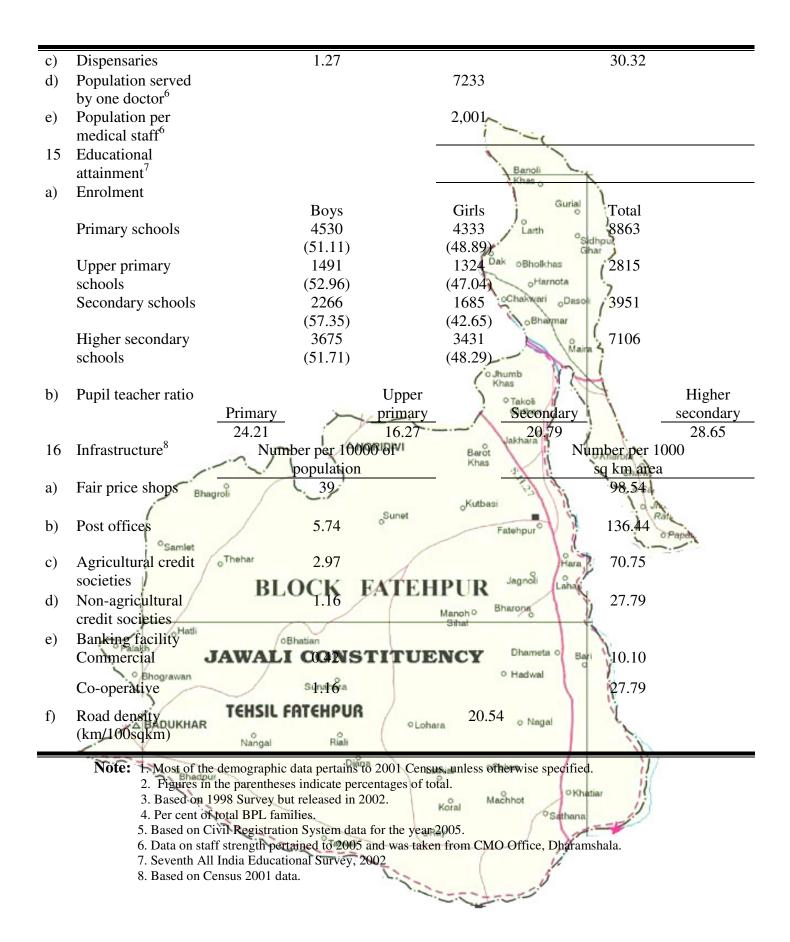
one doctor<sup>6</sup>



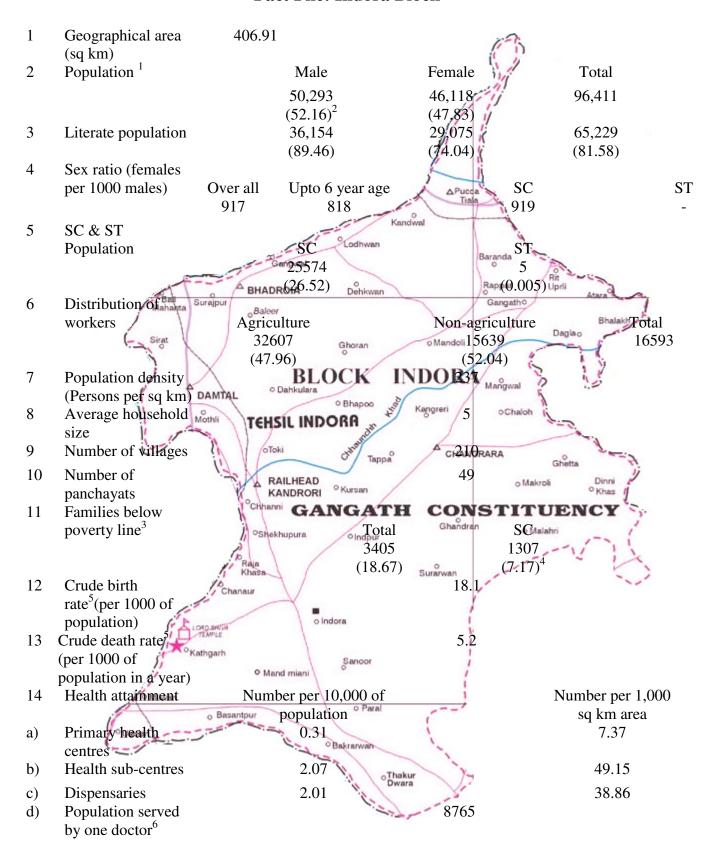
- 2. Figures in the parentheses indicate percentages of total.
- 3. Based on 1998 Survey but released in 2002.
- 4. Per cent of total BPL families.
- 5. Based on Civil Registration System data for the year 2005.
- 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
- 7. Seventh All India Educational Survey, 2002
- 8. Based on Census 2001 data.

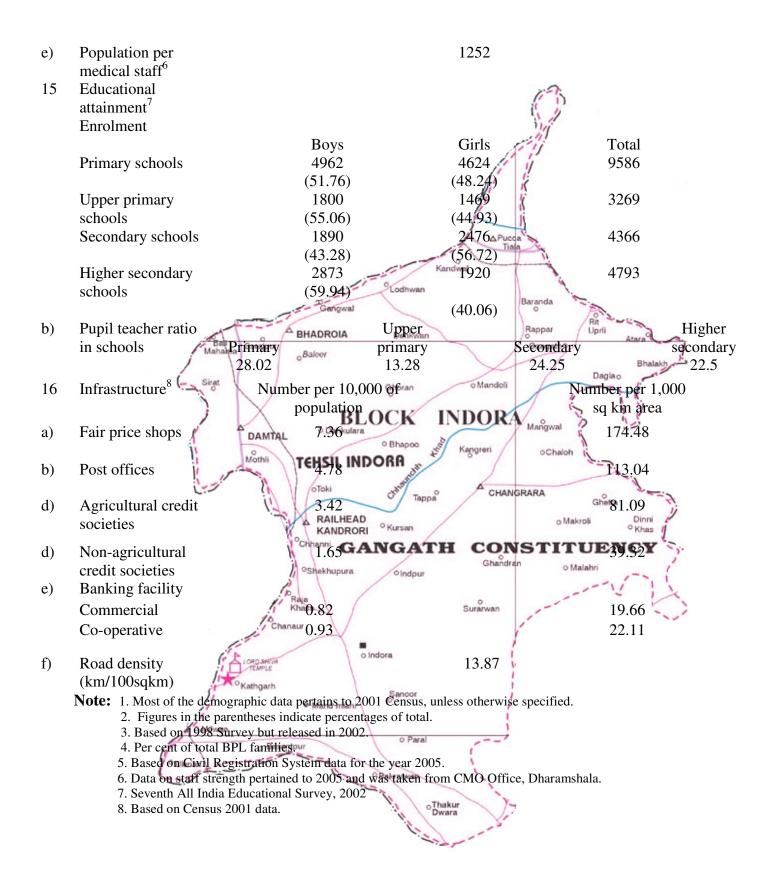
**Fact File: Fatehpur Block** 

1	Geographical area		395.57	
	(sq km)			Banoli
2	Population <sup>1</sup>	Male	Female	Khas Total
	•	46711	47321	Gurial
		$(49.67)^2$	(50.32)	Larth
		,		Sidhpul
3	Literate population	33595	30128	Dak oBho63723
		(84.66)	(89.68)	(78.49)
				oChakwari oDaso
4	Sex ratio (females			6 Bhaymar
	per 1000 males)	Over all Upto 6 years	<u> </u>	SC ST
		1,013 828		969 -
5	SC & ST Population			O Jhumb Khas
		SC		ST OTakon
		16,632		Girthan
		(17.68)		(0.006)
	D' - '1 - '	AND AND	RIDIVI	Barot Khas
6	Distribution of	Aminulanual	Non Acris	Chame
	workers	Agricultural 27540	Non-Agrica 11402	
	(	(70.72)	Sunet (29.28	- 1 L
7	Population density		238	Fatehpur
,	(Persons per sq km)	Samlet	236	Hara
8	Average household		1.5.	Land Co.
O	size	BLOCK F	ATEMPL	R
9	Number of villages		307Mano	ho Bharona
10	Number of	oHatli	54	
	panchayats Palakh	JAWALI CONST	TUENC	Dhameta o Bari
11	Families below			O Hadwal
	poverty line <sup>3</sup>	Sunal Total		SC \
	4º/	TEHSIL FATEHPEN	/	1167
		DUKHAR (24.86)	O Lohara	(6.44) <sup>4</sup> • Nagal
12	Crude birth rate <sup>5</sup> (per	Nangal Riali	21.2	
10	1000 of population)	Bhedpur	Luthial	oPolian
13	Crude death rate <sup>5</sup>	111	6.1	Machhot O Khatiar
	(per 1000 of	311	Koral	Machnot
	population in a year)	Number 201 10 000 of	oRay	
14	Health attainment	Number per 10,000 of population		Number per 1,000
		population	7	sq km area
a)	Primary health	0.21	1:1	5.05
	centres			
b)	Health sub-centres	3.72		88.53



## **Fact File: Indora Block**





#### **Fact File: Kangra Block** Geographical area 339.18 1 (sq km) Population<sup>1</sup> 2 Male Female Total 59,867 20,992 61,125 (49.48)(50.51)SUNAG Literate population 46834 3 40487 (89.46)HARAMS(81458) (74.04)Sex ratio (females 4 Sokni-da-Kot STper 1000 males) Over all Upto 6 years 818 1.021 5 SC SC & ST Population 15501 (12.81)6 Distribution of workers Agricultural Non-Agricultural Total 35391 18428 18428 (34.24)(65.76)7 Population density (Persons per sq km) 8 Average household OMatour 9 Number of villages Number of 10 panchayats Sadarpur Families below 11 poverty line<sup>3</sup> SC KANGRAGIACI 1102 $(4.61)^4$ 14.3 12 Crude birth rate<sup>5</sup> (live births per 1000 Lun of population in a year) 13 Crude death rate<sup>5</sup> (per 1000 of population in a year) Ranital 14 Health attainment Number per 10,000 of Number per 1,000 population sq km area Morth<sub>o</sub> Jasai Primary health 0.41 14.74 a) Balugaloa centres Chakban Gheen Health sub-centres 61.91 1.73 b) 1.98 70.75 c) Dispensaries

d)	Population served			6050			
e)	by one doctor <sup>6</sup> Population per			1260			
15	medical staff <sup>6</sup> Educational				1		
	attainment <sup>7</sup>				1		
a)	Enrolment				To be seened		
		Boy		Girls	SSUNAG SWILE SUNAG	Total	
	Primary schools	522	0	5107		10327	
		(50.5	54)	(49.42)	HARAMS	ALA	
	Upper primary	200	1	1741	Sok	3742	
	schools	(53.4	17)	(46.53)	O Upper Barol		
	Secondary schools	410	4	3633	there o'	7737	
		(53.0	04)	(46.96)	Upper Sidhpur Dari	Nort	
	Higher secondary	357	1	3435	Gabli Barol	7006	
	schools	(50.9	97)	(49.03)	RAMSAL.		
					oPassu		
b)	Pupil teacher ratio		Upper		or assure		Higher
	•	Primary	primary		Secondary		secondary
		23.47	51.21		°M24.64		27.69
16	Infrastructure <sup>8</sup>			Su	KKAT -		
10	IIIIastructure	Number per	10,000 of	Gh Gh	Numb	er per 1,0	00
		popula	And the second s	Bagil Khohala		km area	00
۵)	Fair price shops	5.12		Arinoli	-	182.79	
a)			JIATA	OMatour	Kachbiari :		
b)	Post offices	8.4.	Tiara	Vises	Kholi	300.72	
			Nantihar OSamirpur OJamana	dad	o Rajiana		
		Air .	Samirour OAbdullapur	/	53mile		
c)	Agricultural credit	2.50	Chakban Haler OBi	rta	Sadarpur Sc	91.39	
	societies	Sale	Ralal TENEVEO	ari			
4)	Non agaign tunal	7	Nandrol Samela	3)		17 60	
d)	Non-agricultural credit societies	6 Tarkhan	Nandrol Kharat	o Tarau )		17.68	
	credit societies	1 16	ohad TEH KANG	SRA.			
e)	Banking facility	OLuni 6 Ka	Bhathu				
	Commercial	Khas BLOCK	KANGRA	1		14.74	
	Co-operative	CDadol KAOIS	Daulatpur	1	1	17.68	
f)	Road density	T9:5		10.49	ANON	17.00	
1)	(km/100sqkm)	Thakurdwara	OGahlian OThana ki	has Kharatk	han		
	(KIII/1005qKIII)		90	o Chandrot OBussi	-		
N	Note: 1. Most of the den	nographic data pertains	s to 2001 Census, ui	nless otherw	ise specified.		
		parentheses indicate pe			)		
		Survey but released in	2002.War	ajiana khas	5/		
	4. Per cent of total	i BPL families. Registration System da	ita for the year 2005	T€HS	S(L		
	6. Data on staff str	rength pertained to 200	5 and was taken fro	m CMO Of	fice. Dharamshala	ı <b>.</b>	
	7. Seventh All Ind	ia Educational Survey,	2002	/	Salah		
	8. Based on Censu	s 2001 data.		hakban	Jandrh		
			11/	1			
			1	1			
			1	-1			

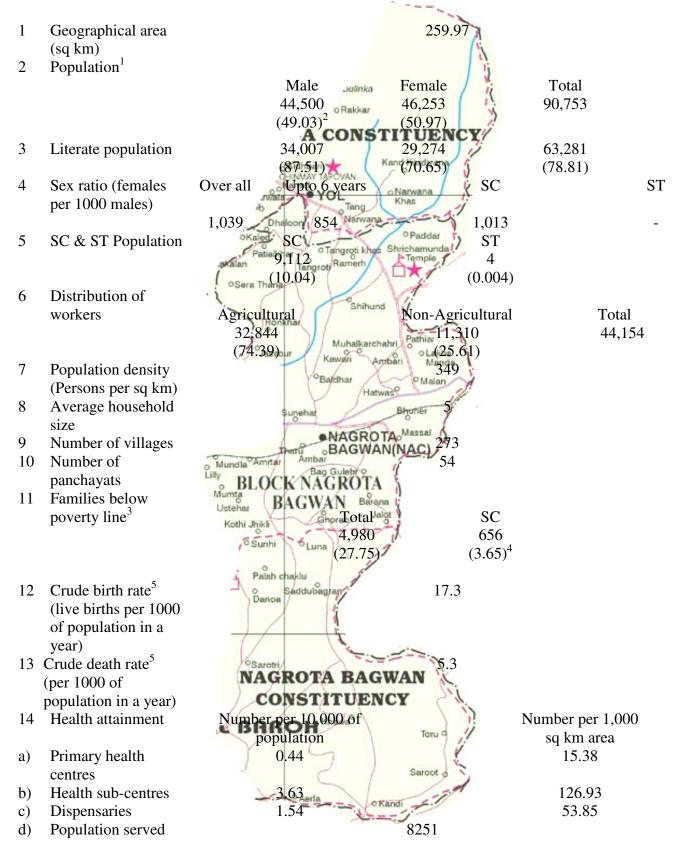
# Fact File: Lambagaon Block

1	Geographical area (sq km)		220.37	
2	Population <sup>1</sup>	Male 31,539 (45.67) <sup>2</sup>	Female 37,519 (54.32)	Total 69,058
3	Literate population	24,364 (90.20)	24,727 (73.02)	49,091 (80.65)
4	Sex ratio (females per 1000 males)	Over Upto 6 all 1,190	years	SC ST 124 -
5	SC & ST Population	SC 20374 C (29.50)	ONST	ST 18 .02).ng
6	Distribution of workers	Agricultural Rit	JAISINGHPUR Dago Apper theru Nahlana Non-Agricul Dupkiara 9,115	Bar Viungai
7	(Dans one work and lim)	hurat Bandahu	o Kotlu ) O Lambagaon 313	Bijapun OSari ghal Molago O Bag Kuljan Malia
8	Average household size	CK Garder Sole i		Jaisinghour Haler 6 Harsi
9 10 11	Number of yillages BA Number of panchayats	Jangel Berram,	273 55	Sangha
	poverty line <sup>3</sup> cons	FITUENCY.	Total S 4518 21	C 76
12	Crude birth rate <sup>5</sup> (live births per 1000 of	Alampur	(28.77) (13. 14.8	
	population in a year) Crude death rate <sup>6</sup> (per 1000 of population in a year)		7.4	
14	Health attainment	Number per 10,0 population		Number per 1,000 sq km area
a)	Primary health centres	0.43		13.61
b)	Health sub-centres	5.21		163.36
c) d)	Dispensaries Population served by	2.32	8632	68.06

	one doctor <sup>6</sup>			
e)	Population per		1381	
	medical staff <sup>6</sup>			
15	Educational			
	attainment <sup>7</sup>			
a)	Enrolment			
•••)	<b></b>	Boys	Girls	Total
	Primary schools	2,927	2,778	5,705
	Timaly sensors	(51.30)	(48.69)	3,700
	Upper primary	1125	1013	2138
	schools	(52.61)	(47.38)	2130
	Secondary schools	1,751	1,625	3,376
	Secondary schools	(51.86) As	(48.14)	3,370
	Higher secondary	2,579	2,523	5,902
	schools	$(50.54)^{\text{man}}$	<b>R</b> (49.46)	3,702
	schools			
b)	Pupil teacher ratio		DNST.	Higher
U)	Prima		mar <b>yEHSIL</b> Ma Secon	Kurang
	ry	Suhan	JAISINGHPUR Dago	-100
	19.27	Rit 1		07/ Mungal 18:22
16		nber per 10,000		Number per 1,000
10	Betahan Batahan	population	ar Haret o	Bijapusq km area
a)	Fair price shops Konn	10.57	o Kosri o Jalet Karne	
a)	Tall price shops - Rona Thurst	Bardahu	OKotlu 7 OLambagaon	O Bag Kuljan Maile
b)	Post offices Duhak Bair ghi	6037v		199a66 Dhaniri
0)	DI OCI	Sole ba	ner	Jaisinghpuii Haler 6 Harsi
c)	Agricultural credit	6.08	/	190.59
	societies LAMBAG	AON \	wed	Sanghor
d)	Non-agricultural	2.31	with C.	72.60
	credit societies	Barram	V.	
e)	Banking facility Balakrupi	Sakoh	•	
	Commercial	pp Nagaro	1.88	58.94
	Co operative	UENCY		36.30
•		Alampur 15		30.30
f)	Road density kuhan	ihru	32.43	
	(km/100sqkm)			

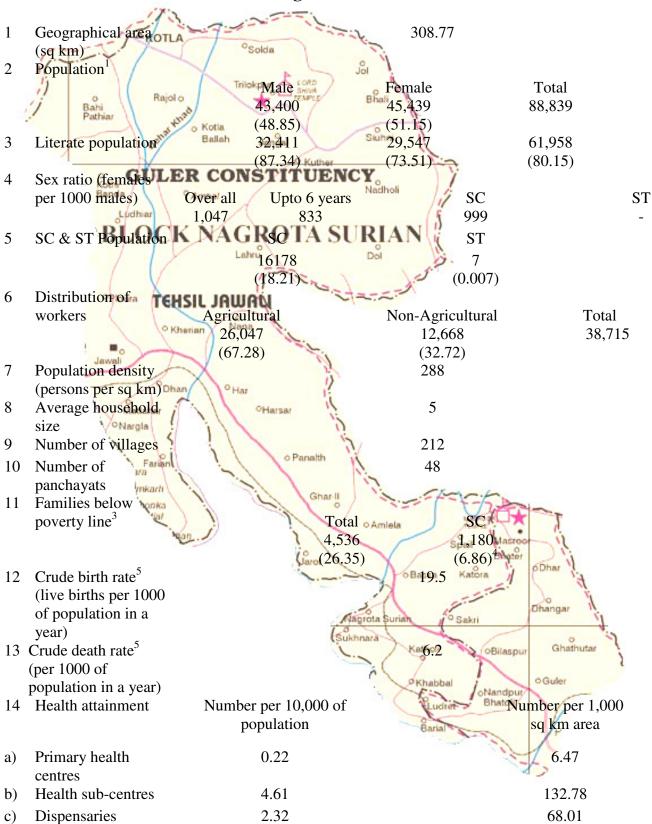
- 2. Figures in the parentheses indicate percentages of total.
- 3. Based on 1998 Survey but released in 2002.
- 4. Per cent of total BPL families.
- 5. Based on Civil Registration System data for the year 2005.
- 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
- 7. Seventh All India Educational Survey, 2002
- 8. Based on Census 2001 data.

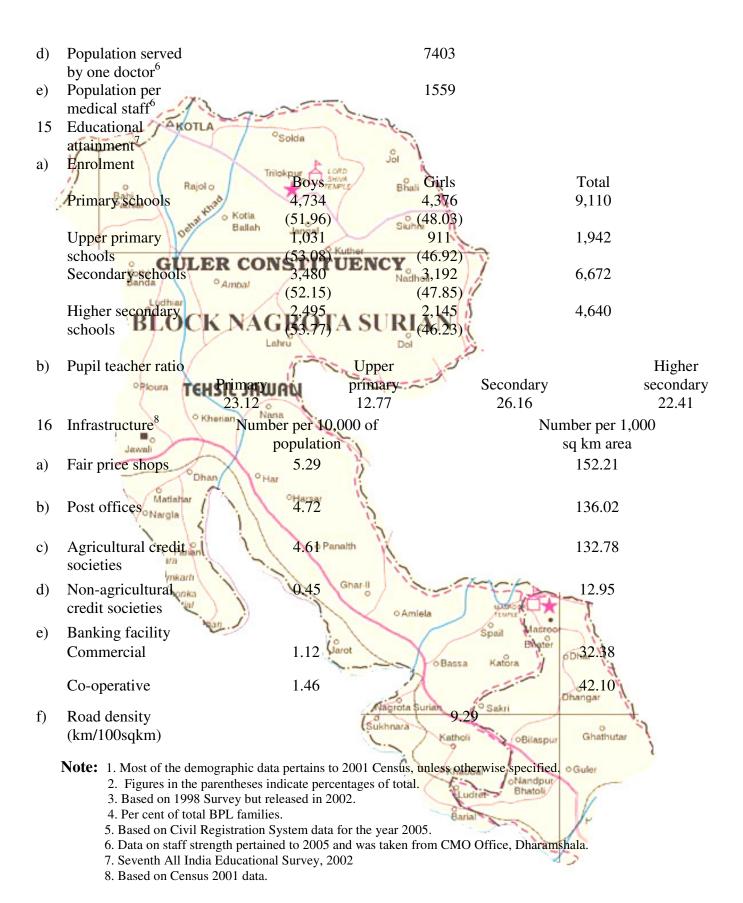
# Fact File: Nagrota Bagwan Block



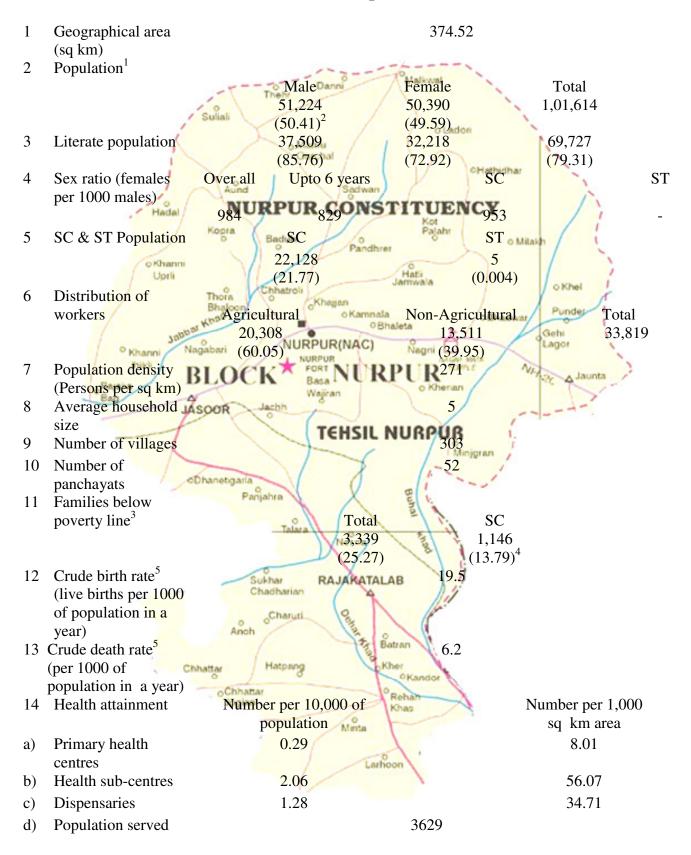
		Į į	
	by one doctor <sup>6</sup>	.sulinka / i	
e)	Population per	ORakkar 1375	
	medical staff <sup>6</sup>	A CONSTITUTION OF	
15	Educational attainment <sup>7</sup>	A CONSTITUENCY/	
a)	Enrolment	ASidhbari - Kand Kardiyana	
a)	Linomicit	Boys Girls	Total
		4279 YOL 4290	8569
	Primary schools	(49.93 Narwana (50.97)	
		OKaled Paddar F	2011
	Upper primary schools	Patial Style 22 Tangroti khas Shrills Tanda	3044
	SCHOOLS	(50.32 Ramerh (49.68)	
	Secondary schools	OSera Than 2454 2329	4783
	·	(51.30 Shihund (48.70)	
		Ronkitar	
	Higher secondary	2645 Muhalkarchahri 2338	4983
	schools	Ja (53.08 Kawari Arpbari Manda	
b)	Pupil teacher ratio	BaltTpper	Higher
-,	- <b>·</b> F ·····	Primary primary Secon	<u> </u>
	0	21.97 Superior 17 Bhunter 25.0	
16	Infrastructure <sup>8</sup>	Number per 10,000 of Number per 10,000 of	Number per 1,000
۵)	Esia maiss abons	population BAGWAN(NAC)	sq km area
a)	Fair price shops	Mundla Amri 6.94Ambar Bag Guletir 9	242.33
b)	Post offices	BLOC 49NAGROTA	261.56
c)	Agricultural credit	Ustehar B.85 WAN Barana	134.63
4)	societies	Kothi Jhikii	73.08
d)	Non-agricultural credit societies	Sunhi	73.08
e)	Banking facility		
		Palah chaklu	52.05
	Commercial	Danoa /	53.85
f)	Co-operative Road density	1.65	57.69
1)	(km/100sqkm)	14.55	
	( <i>1000</i> <b>4</b> .)	1	
	<b>Note:</b> 1. Most of the d	emographic data pertains to 2001 Census, unless otherwise	specified.
	2. Figures in th	e parentheses indicate percentages of total.  8 Survey but released in 2002.	
	4. Per cent of to	tal BPL families.	
	5. Based on Civi	l Registration System data for the year 2005. strength pertained to 2005 and was taken from CMO Office	Dhamamahala
		ndia Educational Survey, 2002	e, Dharamshaia.
	8. Based on Cen	sus 2001 data.	
		Saroot	
		Aerla Kandi	
		14	
		• • •	

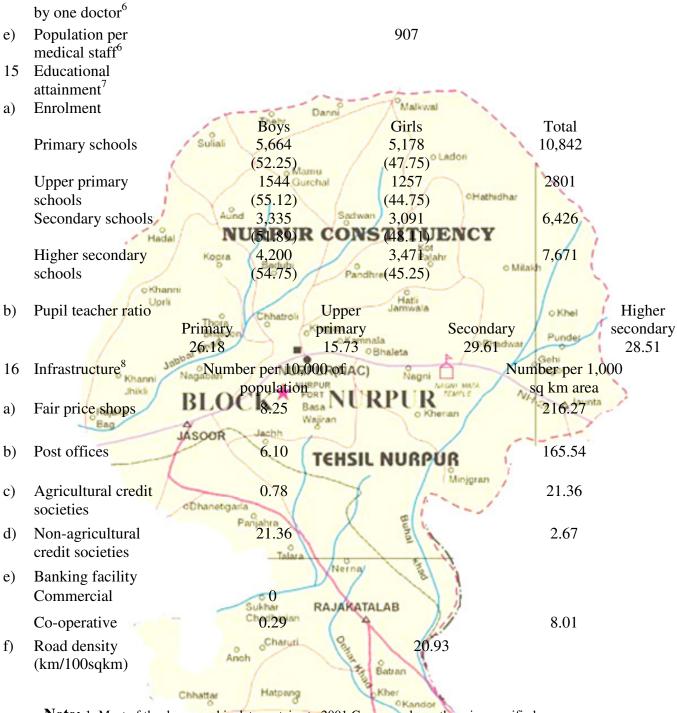
# **Fact File: Nagrota Surian Block**





# **Fact File: Nurpur Block**

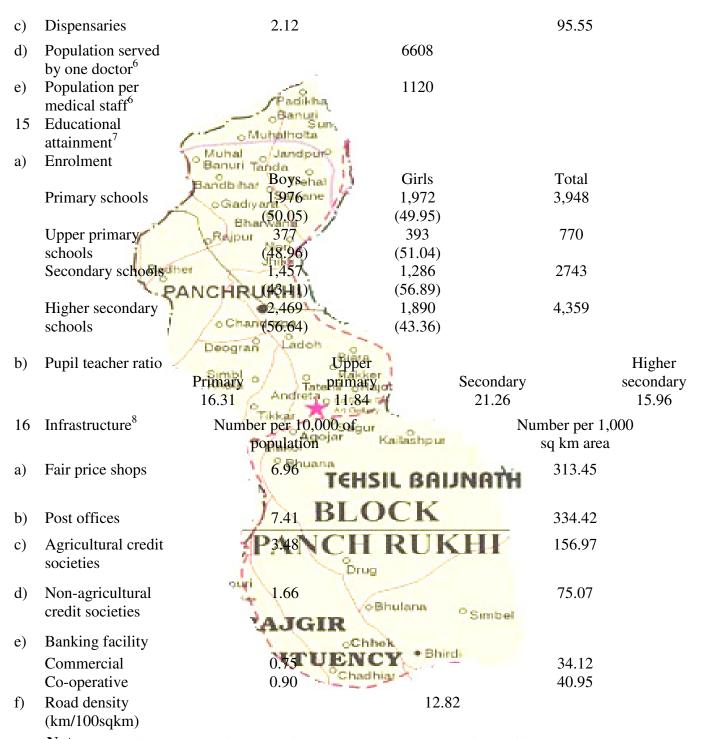




- **Note:** 1. Most of the demographic data pertains to 2001 Census, unless otherwise specified.
  - 2. Figures in the parentheses indicate percentages of total.
  - 3. Based on 1998 Survey but released in 2002.
  - 4. Per cent of total BPL families.
  - 5. Based on Civil Registration System data for the year 2005.
  - 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
  - 7. Seventh All India Educational Survey, 2002
  - 8. Based on Census 2001 data.

# Fact File: Panchrukhi Block

		Fact File: Panchi	ukhi Block			
1	Geographical area		146.52	2		
	(sq km)					
2	Population <sup>1</sup>					
_	r op wawron	Male	Female		Total	
		32,151	33,924		66,075	
		(48.65)	(51.35)		00,073	
	1	Muhalho ta2	(31.33)			
2	Litarata manulation	Jandpuro	22016		46908	
3	Literate population	anuli Tanda 24892	22016			
4	0 1: (6 2	Gadiyara (88.79)	(72.14)	0.0	(80.11)	C/TD
4	Sex ratio (females	Over all Upto 6 years	3	SC		ST
	per 1000 males)	Non 1 oct bible 1 oct		1.026		
	Badher	1,055		1,036		-
5	SC & ST Population	SC		ST		
	1 /	Chandropa 23,2	52	12		
	-	eogran o				
(	Distribustion of	imbl o Biar (35)	(9)	(0.018)		
6	Distribution of	Andreta n carross till	NT A	1, 1	T	. 1
	workers	Agricultural	Non-Agric			otal
		-26,052 gojar Ka	13,00		12	2,989
7	<b>5</b> 1.1 1 1.	(50.44)	(49.8			
7	Population density	DIO	BHI17451	••		
	(Persons per sq km)	BLOG	- K	_		
8	Average household	PANCH	RUKHI			
	size	Drug				
9	Number of villages	T ARM	ulana 167			
	_	AJGIR		el		
10	Number of	oChbok	37 ➤ ■ Bhird			
1.1	panchayats	Chadhia	-			
11	Families below	T	1	0.0		
	poverty line <sup>3</sup>	Tot		SC		
		3,77		2,061		
10	G 1 1 1 1 5	(20.7)		$(8.45)^4$		
12	Crude birth rate <sup>5</sup>		19.2			
	(live births per 1000					
	of population in a					
	year)					
13	Crude death rate <sup>5</sup>		5.7			
	(per 1000 of					
	population in a year)					
14	Health attainment	Number per 10,000 of			Number per 1,	,000
		population			sq km area	ì
a)	Primary health	0.75			34.12	
a)	centres	0.73			34.12	
b)	Health sub-centres	2.72			122.85	
U)	ricaini suo-cellues	2.12			144.03	



**Note:** 1. Most of the demographic data pertains to 2001 Census, unless otherwise specified.

- 2. Figures in the parentheses indicate percentages of total.
- 3. Based on 1998 Survey but released in 2002.
- 4. Per cent of total BPL families.
- 5. Based on Civil Registration System data for the year 2005.
- 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
- 7. Seventh All India Educational Survey, 2002
- 8. Based on Census 2001 data.

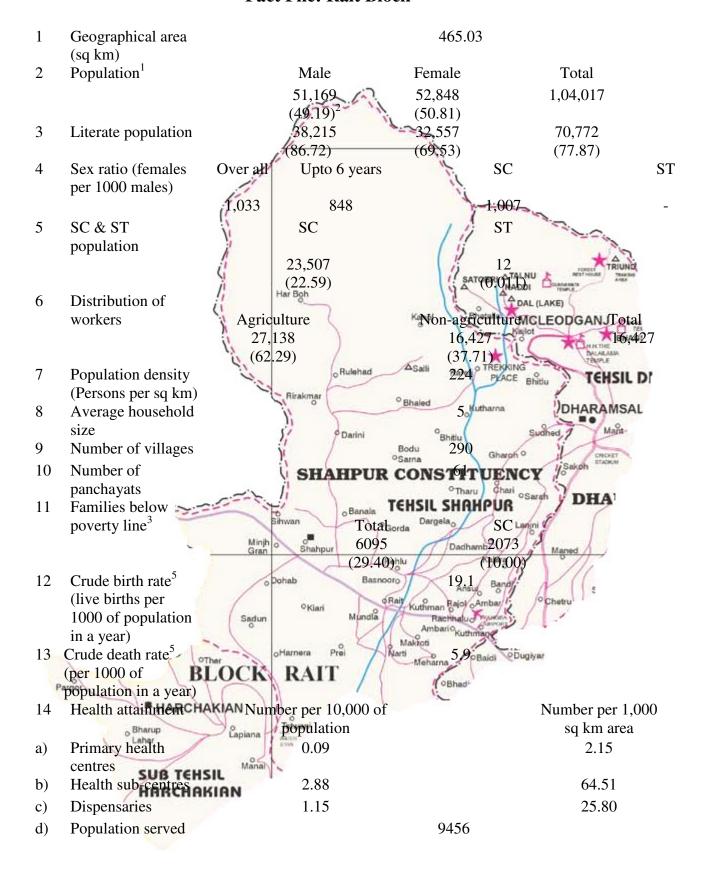
# **Fact File: Pragpur Block**

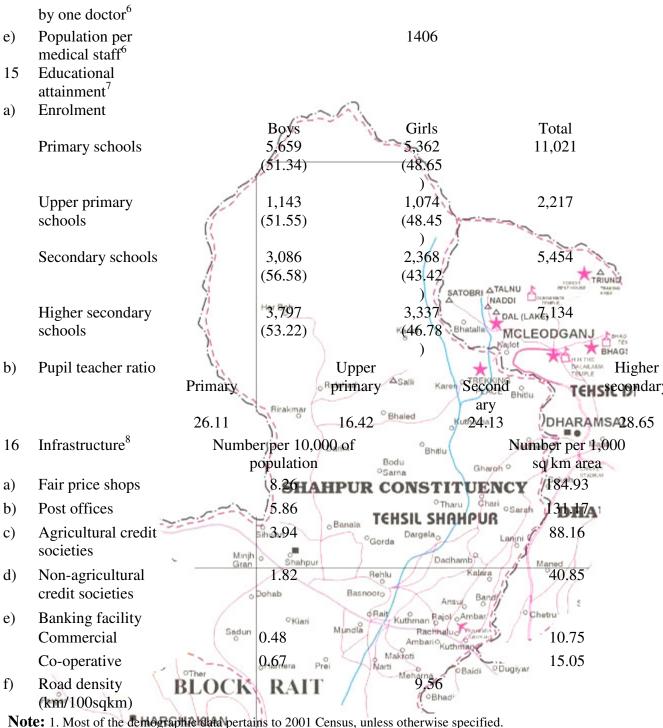
		raci	i rne: rragp	ur block		
1	Geographical area			416.8	3	
	(sq km)					
2	Population <sup>1</sup>		Male	Female	-	Гotal
_	Topulation		51,439	53,304		04,743
					1,0	J4,743
			$(49.10)^2$	(50.9)		
3	Literate population		39,592	36,313		5,905
			(89.21)	(76.51)	8)	32.65)
4	Sex ratio (females O	ver all	Upto 6 years	S	SC	ST
	per 1000 males)		1 ,			
		1,036	828		970	_
5	SC & ST	1,050	SC		ST	
3	Population	-;	50		51	
	Fopulation	Kaswa 7	26.252		2	
	Gamroor Rail	Jagir Ladiara	26,253		3	
	SANSARPUR TARRACE Ghati		(25.06)		(0.0028)	
	Bhaner	WELLS BLOOK	Ara Chock Jan	nbal T		
6	Distribution of Seul	TUENCY	Gurrywar Nangal Chock	OBSE CILL		
	workers TEHSIL JASI	upangkaten	tural ( Non / °	selvon-Agr	icultural	Total
	Jandor o Kotla Behar	48,49	08 oChaplah Chanauro	Badhal 15,0	)33 Sunhet	63,531
		(76.3	Tyamal Tyamal	Dhounta (23°	66) Nehran pukhar Nahan Nagorta	
7	Population density		Obliga	250		
	(Persons per sq km)		BLOCK	ARAG PUR Dh	Naleti OMuhin	la
8	Average household		Swana P	ARAGPUR CONS	TITUENCY	NH-70
O	size		Sarinoli	angot Nalsuha	Bani Rakkar	Chouli
9	Number of villages		(°	Chalali	SUB TEHSIL R	AKKAR
	_			304	Kaloha	The state of the s
10	Number of			17/3	oGudara	Kaulapur o Pir Saluhi
	panchayats			1	Chaplah	
11	Families below			ţ.		Barol
	poverty line <sup>3</sup>		Tota	al	SC 3	Jadid o Santia
			4,54	16	1,850	OKatoh Tikkar
			(25.2)	27)	$(13.79)^4$	
12	Crude birth rate <sup>5</sup>		`	19.3		OKurna Punani
	(live births per 1000					C. C.
	of population in a		1			
	year)					
12	Crude death rate <sup>5</sup>			7.1		
13				7.1		
	(per 1000 of					
	population in a year)					
14	Health attainment	Number	r per 10,000 of		Num	ber per 1,000
		po	pulation		Se	q km area
٥)	Drimony hoolth	_	_			2.40
a)	Primary health		0.28			2.40
	centres		4.06			100 10
b)	Health sub-centres		4.86			122.48
c)	Dispensaries		3.72			91.26

d)	Population served by one doctor <sup>6</sup>		8,057	
e)	Population per		1,662	
C)	medical staff <sup>6</sup>		1,002	
15	Educational			
13	attainment <sup>7</sup>			
a)	Enrolment			
u)	Emonient	Boys	Girls	Total
	Primary schools	5,306	4,748	10,054
	Timery serious	(52.77)	(47.23)	10,001
	Upper primary	1,069	992	2,061
	schools	(51.86)	(48.14)	_,001
	Secondary schools	3,013	3,171	6,184
		(48.72)	(51.28)	-, -
	Higher secondary	Kaswa 3,811	2,985	6,796
	schools Gamroor Bari Rail	Ladiara (56.07)	(43.93)	,
	TARRACE OGhati	Dadasiba		
b)	JASWAN CONSTI	TUENCY Gurrywar Na Lag	per	Higher
	Pupil teacher ratio TEHSI Prim	MY KOTLA Prin	nary Basi Secon	ndary secondary
	Jandor Sehar	oChap Char Char	ah Gheori Chudrer	Sunhet
	20:	Odural O		8an pukhar Nahan Nagorta
16	Infrastructure SAMION Haler	lumber per 10,000 o	f Tipri Seehan O Dhaliara	Number per 1,000
		populationLOC	K PARAG PUR Dhajag	Naleti Musq km area
a)	Fair price shops	5.44 Swana	PARAGPUR CONSTIT	<b>UENCY</b> 136.89
1.	D 4 CC	(77	Gangot Nalsuha Ba	ni Chouli
b)	Post offices	6.77	O Chalali OSeri	SUB TEHSIL RAKKAR
c)	Agricultural credit	5.82	S. S	146:50
- /	societies		1)	OGudara Saluhi /:
d)	Non-agricultural	3.24	1./	** Sarad 81.65
	credit societies			Dogri Jadido osanta
e)	Banking facility			O Katoh Tikkar
ĺ	Commercial	2.04		52.83una Punani
	Co-operative	2		50.43 Aloh
f)	Road density		15.22	
,	(km/100sqkm)		= :	

- 2. Figures in the parentheses indicate percentages of total.
- 3. Based on 1998 Survey but released in 2002.
- 4. Per cent of total BPL families.
- 5. Based on Civil Registration System data for the year 2005.6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
- 7. Seventh All India Educational Survey, 2002
- 8. Based on Census 2001 data.

## **Fact File: Rait Block**

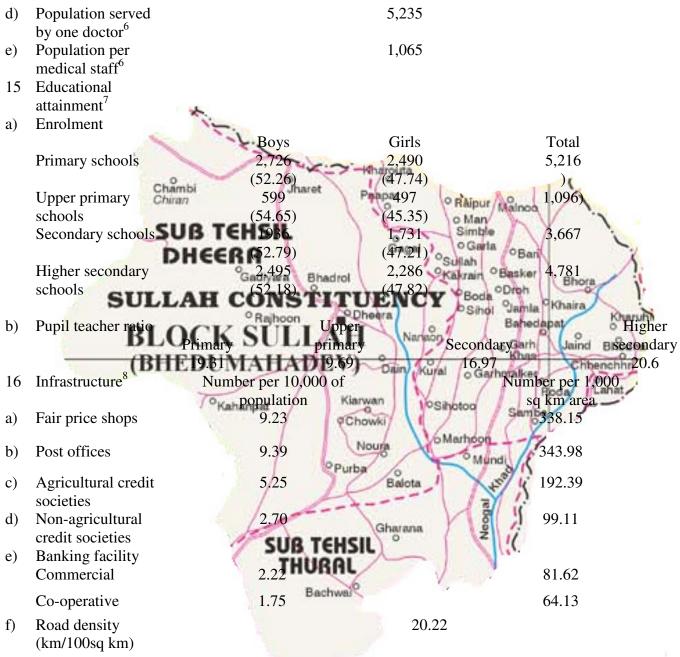




- 2. Figures in the parentheses indicate percentages of total.
- 3. Based on 1998 Survey but released in 2002.
- 4. Per cent of total BPL families.
- 5. Based on Civil Registration System data for the year 2005.
- 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.7. Seventh All India Educational Survey, 2002
- 8. Based on Census 2001 data.

# Fact File: Sulah Block

1	Geographical area		171.52		
2	(sq km) Population <sup>1</sup>	Male 29,904 (47.59) <sup>2</sup>	Female 32,921 (52.41)	Total 62,825	
3	Literate population	23,419 (90.55)	22,266 (75.01)	45,685 (82.25)	
4	Sex ratio (females per 1000 males)	Over all Upto 6 years	S		Т
5	SC & ST population	1,101 801 SC 11661	RAIDU O Man	6 Mainoo	
	Population density Average household size Number of villages Number of panchayats Families below poverty line <sup>3</sup> Crude birth rate <sup>5</sup> (per 1000 of population) Crude death rate <sup>5</sup> (per 1000 of	CK SULLAH DUMAHADEV)  (Stanson of the control of th	an 280 280 47 Amerindo	Basker Bhor Total Jamla Chaira 27,441 Bahedapat (100.00) Garh Jaind Bhodha Mhus Arhntalket Rioda Lahat Samba	
14	population in year) Health attainment	Number per 10,000 of population		Number per 1,000 sq km area	
a)	Primary health centres	0.63		23.32	
b) c)	Health sub-centres Dispensaries	3.18 2.86		117 104.94	



- 2. Figures in the parentheses indicate percentages of total.
- 3. Based on 1998 Survey but released in 2002.
- 4. Per cent of total BPL families.
- 5. Based on Civil Registration System data for the year 2005.
- 6. Data on staff strength pertained to 2005 and was taken from CMO Office, Dharamshala.
- 7. Seventh All India Educational Survey, 2002
- 8. Based on Census 2001 data.

# Appendix I

### **Technical Note on Human Development Index (HDI)**

# **Computation of HDI**

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 (with two-thirds weight) and combined enrolment ratio at primary, secondary and tertiary (with one-third weight) levels and (iii) the standard of living index measured by the real GDP per capita expressed in Purchasing Power Parity dollars (US) i.e. PPP\$.

Before the HDI is calculated, an index needs to be created for each of these three dimensions. To work out these dimension indices for longevity, education and standard of living, minimum and maximum values (goalposts) are chosen for each of these indicators. Performance in each dimension is measured as a value between 0 and 1 by applying the following formula:

The HDI is then calculated as a simple average of the dimension indices. The Goalposts for computing HDI are as given below:

# **Goalposts for computing HDI**

Indicator	Maximum Value	Minimum Value
Life Expectancy at birth	85	25
(years)		
Adult literacy rate (%)	100	0
Combined Gross	100	0
Enrolment Ratio		
GDP per capita (PPP US\$)	40,000	100

# **Appendix II**

# Rights and Privileges of Women<sup>4</sup>

#### 1. Constitutional Provisions

The Constitution of India not only gives equality to women but also empowers the state to adopt measures in favour of women for neutralizing the socio-economic, educational and political disadvantages faced by them. Fundamental Rights, among others, ensure equality before the law, equal protection of law, prohibit discrimination against any citizen of India on grounds of sex that not only give equality to women but also in respect of religion, race, caste and place of birth and guarantees equal opportunity to all citizens in matters relating to employment. A few important articles of constitution granting special privileges to women are as below:-

- (i) Article 14:- Equality before law for women,
- (ii) Article 15:- The state not to discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them.
- (iii) Article 15(3):- The state to make special provision in favour of women and children.
- (iv) Article 16:- Equality of opportunity for all citizens in matters relating to employment or appointment to any office under the state.
- (v) Article 339(a):- State policies towards securing for men and women equally the right to an adequate means of livelihood.
- (vi) Article 39(d):- Equal pay for both men and women.
- (vii) Article 42:- The state to make provision for securing just and human conditions of work and for maternity relief.
- (viii) Article 51(a) (e):- To promote harmony and the spirit of common brotherhood amongst all the people of India and to renounce practices derogatory to dignity of women.
- (ix) Article 243 D (3):- Not less than one-third (including the number of seats reserved for women belonging to scheduled caste and scheduled tribes) of the total number of seats to be filled by directed election in every Panchayat to be

<sup>&</sup>lt;sup>4</sup> Source: Gender Statistics, Himachal Pradesh (2006), Department of Economics and Statisticss, Government of Himachal Pradesh, Shimla.

reserved for women and such seats to be allotted by rotation to different constituencies in a Panchayat.

- (x) Article 243 D (4):- Not less then one –third of the total number of offices of chairpersons in the Panchayats at each level to be reserved for women.
- (xi) Article 243 T(3):- Not less than one-third (including the number of seats reserved for scheduled caste and scheduled tribes ) of the total number of seats to be filled up by direct election in every Municipality to be reserved for women and such seats to be allotted by rotation to different constituencies in a Municipality.
- (xii) Article 243 T (4):- Reservation of offices of chairpersons in Municipalities for the schedule caste and scheduled tribes and manner as the legislative of a State made by law provide.

## 2. Legislative Provisions

Various legislative measures intended to ensure equal rights, counter social discrimination and various forms of violence and atrocities and to provide support services especially to working women have been enacted by the Govt. to uphold constitutional mandate. Women may be the victims of crimes such as 'Murder, 'Robbery, cheating etc, the crimes which are directed specially against women, are characterized as 'Crime against Women which are classified under two categories viz.

(i) The crimes identified under the Indian Panel Code like Rape Kidnapping or abduction for different purposes, Homicide for dowry deaths, or their attempts, Mental and physical torture, Molestation, Sexual Harassment and Importation of girls etc and (ii) The crimes identified under the special law like:- Employees State Insurance Act, 1948, The plantation labour Act 1951, Family Courts Act, 1954, The special Marriage Act, 1954, The Hindu marriage Act 1955, The Hindu succession Act, 1956, The Maternity Benefit Act, 1961, Dowry Prohibition Act, 1961, Medical Termination of pregnancy Act, 1971, The Contract Labour Act, 1976, The equal Remuneration Act, 1976, The child Marriage Restraint Act 1979, Criminal Law (Amendment) Act, 1983, The Factories (Amendment) Act, 1986, Indecent Representation of women (Prohibition) Act, 1986 and Commission of Sati (Prevention) Act, 1987.

#### 3. Special Initiatives for Women

Some special initiatives have been taken in recent years in this regards viz;

#### (i) National Commission for Women

In January 1992, this statutory body with a specific mandate to study and monitor all matters relating to the constitutional and legal safeguards provided for women, review the existing legislation to suggest amendments wherever necessary was set up.

### (ii) Reservation of Women in Local Self Government

The 72<sup>nd</sup> and 73<sup>rd</sup> constitutional Amendment Acts passed in 1992 by Parliament ensure one-third of the total seats for women in all elected offices in all Rural and Urban Local Bodies.

### (iii) The National Plan of Action for the Girl Child (1991-2000 AD)

The Action Plan is to ensure survival, protection and development of Girl Child with the ultimate objection of building up a better future for the girl child.

### (iv) National Policy for Empowerment of women, 2001

The Department of Women and Child Development in the Ministry of Human Resources Development has prepared a 'National Policy for Empowerment of Women' in the year 2001. The goal of this policy is to bring about the advancement, development and empowerment of women.

#### References

Annual Report on the Working of the Registration of Births and Deaths. 2005. Health and Family Welfare Department, Government of Himachal Pradesh.

District Statistical Abstract-Kangra 2003. Department of Economics and Statistics, Government of Himachal Pradesh.

Educational Statistics. 2005-06. Sarva Shiksha Abhiyan, Government of Himachal Pradesh.

Fukuda-Parr, Sakiko and A K Shiva Kumar. 2003. *Readings in Human Development*. (Edited). Oxford University Press. New Delhi.

Economic Survey. 2005-2006. Ministry of Finance, Government of India.

Government of India. 2006. National Family Health Survey-3, 2005-06 (Fact Sheets for Himachal Pradesh and Kerala). Ministry of Health and Family Welfare, Government of India, New Delhi.

Gender Statistics- Himachal Pradesh. 2006. Department of Economics and Statistics, Government of Himachal Pradesh.

Health at a Glance.2006. Health and Family Welfare Department, Government of Himachal Pradesh.

Himachal Pradesh Human Development Report. 2002. Government of Himachal Pradesh.

http://gov.ua.nic.in/aises.

India Today. 2005. India's Best and Worst States, Vol. 30, No.32, August 9-15.

India Today. 2006. State of the States, Vol. 31, No.36, September 5-11.

Kumar, A K Shiva. 1996. Gender Related Development Index for Indian States, Economic and Political Weekly, Vol. 31, No.14, pp. 887-895.

Kumar, Virender, H R Sharma and R K Sharma. 2004. Livestock Economy of Himachal Pradesh- Growth Patterns, Ecological Implications and State Policy, *Agricultural Economics Research Review*, Vol.17, No.1, pp.57-76.

Sen, Amartya. 1984. *Resources, Values and Development*. Oxford University Press. New Delhi.

Statistical Outline of Himachal Pradesh-Various Issues. Department of Economics and Statistics, Government of Himachal Pradesh.

The Economic Times, September 11, 2006.

Tiwari, S C and O P Awasthi. 1978. Inventory of Resources, Kangra District, Himachal Pradesh, Himachal Pradesh Krishi Vishva Vidyalaya, College of Agriculture, Palampur (Kangra). Himachal Pradesh.

UNDP (United Nations Development Programme). 1990. *Human Development Report* 1990–Concept and Measurement of Human Development. New York: Oxford University Press.

UNDP (United Nations Development Programme). 1998. *Human Development Report* 1998-*Consumption for Human Development*. New York: Oxford University Press.

UNDP (United Nations Development Programme).2006. *Human Development Report* 2006- *Beyond Scarcity: Power, Poverty and Global Water Crisis.* New York: Oxford University Press.