

HEALTH IN HIMACHAL PRADESH

A Component of Human Development



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August, 2000

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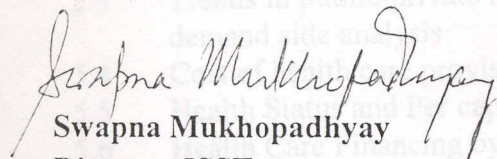
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Acknowledgements

This paper on the Health Sector in Himachal Pradesh has been prepared to serve as an input to the proposed Human Development Report in the state. We would like to thank the local UNDP office for providing us with the opportunity. A team of researchers at the Institute of Social Studies Trust comprising of Rajib Nandi, Lekha S. Chakraborty and Swapna Mukhopadhyay has worked on the report. Dhanu Swadi has provided useful inputs to a few sections of the study and assisted the ISST team in accessing unpublished information from the state. Nilanjana Roy and Ravi Duggal of CEHAT Mumbai have helped by compiling some relevant secondary data for the report. Dr. R.N. Mahanta, Dr. C.D. Sharma and Mr. K. Suniara of the Department of Health and Family Welfare of the state of Himachal Pradesh have provided the team with some useful data. We are grateful to them all.

We would also like to thank the support team at ISST, especially Shobha Sharma for looking after the administrative needs, Talha Malik for library support and Vishal Goyal for computer assistance.



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25 August 2000

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Introduction

Being in good health is a positive statement of well-being. It does not signify simply the absence of disease. WHO defines health as a "complete state of physical, mental and social well-being" [WHO, 1984]. Health cannot be seen in isolation from its social, cultural and economic context. The state of health of the individual, or of the community, is a function of the socio-economic environment within which it is embedded and is therefore critically dependent on the social and economic policies of the state.

Provision of basic health care facilities is universally acknowledged to be a state responsibility. Although there are differences of opinion on what should be the nature and extent of state provision of health care for all, and significant variations in the public-private division of costs and responsibilities exist across nations, there is hardly any difference of opinion on the issue that primary health care is a public good and that there should be public provision for it. In its Alma Ata statement, the Government of India had accepted the responsibility of ensuring "Health for all by the year 2000 A.D."¹ More than two decades down the line, one is a long distance away from reaching that goal. It is a well-known fact that in India, especially in rural areas, health delivery systems are far from adequate. Experts believe that a structural re-orientation may be in order to make them more responsive to the needs of vulnerable sections of society. Health is also a very important component for the success of the recently reformulated family planning programme, which has been restructured to include reproductive and child health along with fertility control initiatives, and therefore, deserves special attention.

The present chapter is designed as an input to the proposed Human Development Report in the state of Himachal Pradesh. This introduction is followed by a brief overview of the

¹ A global initiative towards health-related research and action was taken at an international conference on Primary Health Care held in Alma Ata (in the erstwhile USSR) in 1978. In its Declaration, the conference

health status in Himachal Pradesh in relation to that in the neighbouring states. Subsequent sections look at variations of health indicators across districts and socioeconomic groups; status of women and child health in the state; growth and structure of medical institutions in Himachal; patterns of health sector expenditure of the state government; non-government initiatives in health sector; growth in demand for the Indian System of Medicine, and finally, health policy and health sector reform needs in the state.

1. TRENDS IN HEALTH STATUS: HIMACHAL PRADESH AND ITS NEIGHBOURING STATES

By most indicators of health status, Himachal Pradesh has already achieved a better status than its neighbouring states of Punjab and Haryana. Nevertheless there is much scope for improvements. Significant gaps in several health status indicators as between urban and rural areas in many districts of the state suggest persistence of strong regional imbalances. Difficult terrain and poor infrastructure, high rates of out-migration, overall shortages of specialist medical personnel etc. are some of the factors that add to the problems. The following sections provide a comparative picture on some of the standard health indicators and the morbidity patterns in the state as compared to those in the neighbouring states of Punjab and Haryana, and in the country as a whole.

1.1 Some Important Health Indicators of the state

Life expectancy at birth (LEB), one of the most important indicators of health has been 62.8 years in Himachal Pradesh for the period of 1986-90, which is higher than the national average (57.7 years). In Himachal Pradesh LEB for both males and females have risen steadily from 1970 onwards. However, LEB for both males and females in Himachal are lower than the corresponding figures for Punjab and Haryana (see Table 1.1.1).

spelt out the goal of the signatory nations which was to ensure "Health for All by the Year 2000" with primary health care as its top priority.

Table: 1.1.1 Strategic Indicators on Health Status of Himachal Pradesh in comparison with that in Punjab, Haryana and India

	HP	Punjab	Haryana	India
<i>Population</i>	5170877	20281969	16463648	846302690
<i>Density of Population (popn./Km².)</i>	93	402.72	372.28	274
<i>Crude Birth Rate</i>	27.9	27.1	31.9	29.2
<i>Crude Death Rate</i>	8.8	8.2	8.6	10.1
<i>Infant Mortality Rate</i>	67	56	75	79
<i>Life Expectancy at Birth Males</i>	62.4	64.7	63.4	57.7
<i>Life Expectancy at Birth Females</i>	62.8	66.9	62.0	58.1
<i>Sex Ratio</i>	976	882	865	927
<i>Maternal Mortality Rate</i>	456	369	436	453
<i>Total Fertility Rate</i>	3.2	3.1	4	3.6
<i>Couple Protection Rate</i>	54	--	--	44
<i>Literacy Rate[%]</i>	63.86	--	--	52.21
<i>Females</i>	52.13	--	--	39.29
<i>Males</i>	75.36	--	--	64.13
<i>Mean age at marriage [MAM]</i>				
<i>Females</i>	20.4	21.1	18.4	18.33
<i>Males</i>	25	24.8	23.1	23.32

Source: NFHS-1, Himachal Pradesh, Haryana, Punjab and India

Infant mortality rate (IMR) has declined from 113 in 1971 to 71 in 1981 and further to 64 in 1998. The SRS figures show a decline of IMR from 81 in 1981 to 56 in 1991 for Punjab and 101 to 72 for Haryana during same period. The national figure of IMR declined to 72 from 110 between 1981 and 1991.

Data from the SRS also suggest that the decline of IMR is much sharper in urban setups than in rural areas. The rural IMR showed a decline from 72 in 1981 to 66 in 1998, whereas urban IMR declined sharply from 65 to 38 during these years.

According to the 'Annual Report on the Working of the Registration of Births and Deaths Act, 1969 for the year 1998' of the Chief Registrar of the state of Himachal Pradesh, Crude Death Rate (CDR) has declined sharply in the state from 15.6 in 1971 to 5.0 in 1998. The national figure for these two time points are 14.8 and 9.0 respectively. In the above report, urban CDR (8.8) was reported to be higher than rural CDR (4.6) in the state. These figures differ from SRS (1998), which reports CDR as 7.7, with 7.9 for rural and 5.4 for urban Himachal.

According to Census 1991, the **Crude Birth Rate (CBR)** for Himachal is 29.4. SRS (1998) figures indicate a CBR of 22.6 for Himachal Pradesh, which is much lower than the CBR at national level (26.5). Regarding the rural-urban difference, urban Himachal experiences a much lower birth rate (17.0) than rural (23.0). The 'Annual Report on the Working of the Registration of Births and Deaths Act, 1969 for the year 1998', mentioned above, reports that birth rate in rural Himachal is much lower (17.2) than the urban (44.1).

The recorded rural-urban differences for both CDR and CBR noted above might appear somewhat strange, but this could very well be a reflection of the fact that urban birth and death rates are computed mostly on the basis of hospital records, and hence are much better estimates than those in rural areas. In rural Himachal, because of very low incidence of hospitalization, rural rates are almost entirely estimated on the basis of reported incidence of births and deaths, generally done by the *Gram Panchayat Avam Vikas Adhikari*, who is the Local Registrar under the Block Development Officer. There is every likelihood of being serious downward bias in these estimates.²

Total Fertility Rate (TFR) has declined from 4.7 in 1981 to 3.6 in 1991 in Himachal according to Census data. Over the six-year period between NFHS-1 (1992) and NFHS-2 (1998), TFR has decreased from 2.97 to 2.14. SRS figure for TFR in 1998 is slightly higher than the NFHS-2 estimate, which is 2.43. Himachal Pradesh has shown a faster decline in TFR in recent years as compared to its neighbouring states of Punjab and Haryana.

Box 1.1

Data Problems in Himachal Pradesh

Data problems are acute in many states, and Himachal Pradesh would rank quite high among them. For many strategic variables, district level information is just not available. Also, even at the state level, estimates of the same variable from two different data sources can be widely divergent. The following table provides some examples of such divergence:

	SRS	NFHS
IMR	64 (1998)	34 (1998)
TFR	2.4 (1996)	2.1 (1998)
NNMR	45 (1996)	22 (1998)

² Based on personal interview of officials at the State Directorate of Health Services, Shimla.

According to NFHS-1, **Maternal Mortality Rate (MMR)** is comparatively higher in Himachal Pradesh (456) than the neighbouring states of Punjab (369) and Haryana (436). It is even higher than the national average of 453. This could very well be a reflection of inadequacies of infrastructure and in the provision of institutional facilities for child delivery in the state.

Box 1.2

Some indicators of health status in Himachal Pradesh

- *Life expectancy at birth in Himachal Pradesh [62.8 years] is higher than national average [57.7] for the period, 1986-90. (NFHS)*
- *Infant mortality rate has declined from 71 per 1000 in 1981 to 64 per 1000 in 1998; IMR is below national average of 72 per 1000. (SRS Bulletin, April 2000)*
- *Himachal has experienced a decline in crude death rate from 15.6 in 1971 to 7.7 in 1998, where as the national average was 9.0 in 1998. Crude birth rate also showed a declining trend from 37.3 in 1971 to 22.6 in 1998, which is below the national average (26.5 in 1998) (SRS Bulletin, April 2000)*
- *Maternal mortality rate is higher in Himachal Pradesh [456] compared to the neighbouring states of Haryana [436] and Punjab [369]. It is even higher than the national average [453]. (NFHS-1)*
- *The sex ratio of Himachal Pradesh [976] is above national average [927], although a few districts have recently showed a distinct decline.(Census 1981, 1991).*
- *87 percent of birth received at least one antenatal checkup; only 39 percent of children born to illiterate mothers received antenatal care compared to 75 percent in case of mothers who had completed high school [National Family Health Survey-2, 1999].*
- *Non-institutional delivery is 71 percent in Himachal Pradesh [NFHS-2, 1999]. The District Survey, 1997 (Dept. of Health & FW) noted that women who consulted doctors for health problems after delivery is as high as 60-70 percent in all districts.*
- *66 percent of live births received at least two tetanus toxoid and 86 percent received iron and folic acid tablets [NFHS-2, 1999].*
- *Proportion of children fully vaccinated have increased from 63 percent in NFHS-1, 1992 to 83 percent in NFHS-2, 1999.*
- *Couple protection rate has shown a recent declining trend from 58.37 percent in 1994-95 to 51.57 percent in March 2000 (Dept. of H&FW, HP).*
- *Nutritional status of children showed that nearly half of children below 4 years are underweight.*
- *Knowledge about contraception is almost universal. Though female sterilization is the popular method, used by 45 percent of currently married woman; male sterilization is remarkably high in Himachal Pradesh [13.6], which is four times higher than the national average [3.5].*
- *Prevalence rate of leprosy has declined from 8.8 per 1000 in 1981 to 0.47 per 1000 in March 2000.*
- *Under National AIDS Control Programme, till March 2000, 23870 serum samples were tested and 201 cases found positive with 72 cases of full-blown AIDS.*

1.2 Morbidity patterns in Himachal Pradesh

National Family Health Survey 1992 (NFHS-1) showed that the prevalence of **Malaria** during the last three months of the survey was 11.41 per 1000 population in Himachal Pradesh as against 9.33 for Haryana, 25.46 for Punjab and 33.24 for India. (see Table: 1.2.1) The rural-urban differences showed that the prevalence of Malaria has been higher in rural than in urban areas. Under the National Malaria Eradication Programme, 2026 fever treatment depots, 2883 drug distribution centres and 216 malaria clinics are functioning in the state. The surveillance data showed that number of deaths due to malaria was high in the eighties, with figures on deaths reaching the highest at 790 deaths in 1984. During 1998, 565611 blood slides were collected and about 1400 cases were found positive. No death due to malaria was reported in that year. This suggests that malaria is under control in the state.

Leprosy is as low as 0.56 per 1000 population in Himachal Pradesh, as reported in NFHS-1. Though lower than the national rate (1.2), the incidence is slightly higher than in Punjab (0.28) and Haryana (0.14). In Himachal, the prevalence of leprosy has come down from 8.8 per thousand population during 1981 to 0.47 in March 2000. National Leprosy Control Programme has now been converted to the Leprosy Elimination Programme. At present there are 82 treatment centres with 212 beds in the state. Of these, 71 percent are located in rural areas where the incidence has continued to be higher.

NFHS-1, 1992 estimates the prevalence of **Tuberculosis** at 2.42 per 1000 population in Himachal Pradesh, as against 4.67 in India, 3.27 in Haryana and 2.38 in Punjab. The National Family Health Survey report shows that as in the case of leprosy and malaria, the incidence of TB in rural areas is higher (2.6) than in urban areas (0.9) in Himachal. The same is true for both the neighbouring states of Punjab and Haryana. It has been noted that the occurrence of TB is higher among rural males (3.3) than rural females (1.9). Whereas, the figure is very close for both urban males and females. The TB control programme is implemented through 2 Sanatorium, 13 clinics, 6 sub-clinics and 1 survey-centre. Most of them (64%) are located in urban areas. Total 751 beds are available for TB patients in the state.

Table: 1.2.1 Comparison of Morbidity Rate of Himachal Pradesh with Neighbouring States and India

	Blindness		Tuberculosis	Leprosy	Physical Impairment of Limbs	Malaria during the last three Months
	Partial	Complete				
Himachal Pradesh						
Male	9.8	5.5	3.1	1.0	6.4	13.0
Female	8.8	3.7	1.8	0.2	4.9	9.9
Total	9.3	4.5	2.4	0.6	5.6	11.4
Punjab						
Male	6.1	1.3	2.8	0.1	11.3	26.6
Female	7.2	2.8	2.0	0.5	5.2	24.3
Total	6.6	2.0	2.4	0.3	8.4	25.5
Haryana						
Male	6.7	1.4	4.3	0.1	8.6	8.3
Female	6.9	1.5	2.1	0.1	4.8	10.5
Total	6.8	1.5	3.3	0.1	6.8	9.3

Source: National Family Health Survey, 1993 of Himachal Pradesh, Haryana and Punjab.

The prevalence of **partial and complete blindness** in Himachal Pradesh (9.29 and 4.55 respectively per 1000 persons) is higher than in the neighbouring states. The prevalence of complete blindness is higher than the all-India average (4.16 per 1000 population). District blindness control societies have been constituted in all the districts except in Kinnaur. There are very few Eye and ENT Clinics in the state, all of which are located in urban centres. There are no such clinics in Lahaul & Spiti or in Kinnaur.

Box 1.3

The Problem of Partial and Complete Blindness in Himachal Pradesh

The prevalence of partial and complete blindness is very high in Himachal Pradesh. No specific reasons for this high incidence of blindness has been cited. However, Vitamin A deficiency is reported to be extremely high in the state. Deficiency of Vitamin A may cause diseases like keratomalacia and xeroradiography which may lead to blindness. According to some doctors in the state, the radiation of Ultra-violet Ray is high in Himachal Pradesh, which may also be a contributory factor.

NSSO, 52nd Round data show that both in urban and rural areas, females suffer more ^{from} ~~due~~ short-term ailments than the males, whereas, males suffer more from long-term ailments. As compared to other states, the incidence of hospitalization is very low in the state. A major factor for this low incidence could be the problem of accessibility due to the difficult terrain. With only 1.7 beds per thousand population in the government institutions in the state, availability of beds may also be a constraining factor.

The **distribution of deaths** by major cause for the year 1993 reveals that in Himachal Pradesh, 35.4 percent of deaths was caused by bronchial problems and coughs. This is very high compared to the national average of 19.2 percent. Diseases of circulatory system and digestive disorder marked the next major causes of death in Himachal Pradesh (14.3 percent and 10.7 percent respectively).

Table: 1.2.2 Distribution (%) of Deaths by Major causes: A Comparison between H.P. and India (SRS, 1993)

Cause of death	H.P.	India
Senility	12.5	22.9
Bronchial problems and Cough	35.4	19.2
Causes peculiar to infancy	3.9	11.0
Diseases of Circulatory System	14.3	10.7
Other Clear Symptoms	7.5	8.9
Accidents and Injuries	8.2	8.3
Digestive Disorder	10.7	6.8
Fevers	5.7	6.7
Disorder of Central Nervous System	1.8	4.2
Child Birth and Pregnancy	0.0	1.3

Source: Family Welfare Programme Yearbook 1997-98, Dept. of H & FW, HP

As mentioned earlier, these figures may have to be taken with a grain of salt. The SRS data, as reported in Table 1.1.1, shows an above-average figure for maternal mortality in the state. This is inconsistent with 0% of death from 'Child Birth and Pregnancy' reported in the last row of Table 1.2.2 above.

In 1992, the first positive case of **HIV/AIDS** was detected in Himachal Pradesh. As on March 31st 2000, 23870 serum samples were tested and 201 were found HIV positive with 72 full blown AIDS cases. However, seropositivity rate was found to be 8.4 per 1000 persons screened in one test centre in Shimla.

Department of Health and Family Welfare, Himachal Pradesh has prepared a State Project Implementation Plan (PIP) under phase-II, AIDS Control Project of NACO. The duration of the project is five years, from 1999 to 2004. The State AIDS Control Society is implementing the project in all the districts. The main objectives and activities covered under the project are:

- (i) To reduce the spread of HIV infection among people indulging high-risk behaviour and others through targeted interventions, control of STDs, condom promotion etc.
- (ii) To strengthen the State's capacity to respond to long term challenges posed by HIV/AIDS through training programmes, surveillance, and research.

There is a plan under the project to provide low-cost, home or community based care to people living with HIV/AIDS. There is a proposal to establish "District Community Care Centres" through NGO intervention.

1.3 Nutritional Status of the people in Himachal Pradesh

Not much information is available on the nutritional status of Himachali people. However a report on the subject prepared by the Department of Women and Child Development, Government of India under the 'India Nutrition Profile 1995-96' provides some salient information on the nature and extent of nutritional deficiencies in the state. The report shows that there are wide inter-district variations in the food consumption patterns and nutritional intakes in the state. Some of the striking features relate to very high levels of malnutrition among children and very low consumption of leafy vegetables in the state.

Box 1.4

Some Salient Features of the Nutritional Status of People in Himachal Pradesh

- *Cereals are consumed at its recommended level in the state, although its intake is below that level in five districts.*
- *State average of pulse consumption was also adequate while in Hamirpur and Una consumption was much below the recommended level.*
- *Green leafy vegetables were consumed in extremely low quantity in Bilaspur, Shimla and Solan districts, although State average consumption was at recommended level*
- *Intake of other vegetables was low in Kangra, Kinnaur, Kullu, Mandi, Sirmaur and Una districts.*
- *Milk consumption was adequate except in Kinnaur, Mandi and Sirmaur districts*
- *Consumption of flesh food was almost absent except in Kinnaur districts.*
- *Fats, oils and sugar consumption around the recommended level.*
- *There was wide difference in the average intake of foodstuff from one district to another.*
- *Nutrients intake was consequently marginally lower than Recommended Dietary Allowances (RDA) for energy and iron and much below the RDA for riboflavin and Vitamin A in the State.*
- *81 percent of the children suffered from mild to moderate degree of malnutrition.*
- *4 percent of children suffered from severe under-nutrition.*

2. VARIATIONS IN HEALTH INDICATORS ACROSS DISTRICTS AND SOCIO-ECONOMIC GROUPS

Health indicators vary to a great extent between the districts in the state of Himachal Pradesh. Part of this diversity could be explained by the very diverse history of the region. The history of formation of the state is different from that in many other states. The state of Himachal came into existence by putting together twenty-six hill-states of various socio-economic levels at different points of time between 1948 and 1971 when finally the state and district boundaries were drawn up as they currently are. Due to the diversified backgrounds, health and family welfare programmes in each district started from different levels altogether. The backward regions have been taking longer to catch up with the more advanced ones. The hilly terrain of the state is also one of the basic reasons behind diversified health indicators. Accessibility and transportation are two very important factors behind the wide gap of health indicators between the districts of Himachal Pradesh.

As noted earlier in this report, reliable data at the district level are very hard to come by in Himachal Pradesh. The Statistical Appendix to this report puts together whatever relevant district level data that could be collected from different sources for ready reference.

2.1 Health Indicators across the districts

Almost all the important health indicators vary from district to district. Moreover, over time, different districts have developed different trends in the various indicators. In 1991 census, Chamba recorded the highest CBR (35.18) and Hamirpur recorded the lowest (21.2). According to the figures reported in the Annual Report of the Office of the Chief Registrar (Births and Deaths) of the Government of Himachal Pradesh, Kinnaur, which had one of the highest CBRs in 1991, records the lowest CBR (7.9) in 1998. The same report also records a huge gap between rural and urban birth rates, with a very high birth rate in rural areas. The gaps are highest in Hamirpur, Kangra and Kullu districts. (See Appendix, Table 1)

Estimates of Crude death rates for all the districts in Himachal suggest that urban death rates are higher than rural death rates. Kullu records the highest gap with 4.3 as rural CDR and 17.7 for urban CDR. (See Appendix, Table 1)

According to the 1991 census, Infant Mortality and Child Mortality rates are high in Himachal. Kinnaur records the highest infant mortality rate in the state with 123 per 1000 live births, followed by Chamba (104) and Shimla (104). Kinnaur also records the highest child mortality rate (152) followed by Shimla (126) (see Appendix for details). Lack of postnatal hygiene is believed to be one of the main reasons behind many infant deaths in Himachal. The awareness on hygiene is far from adequate in many places of the state. Absence of easy availability of water and inadequate post-natal care expose the new-born babies and the mothers to high risk of infections.

2.2 Construction of a Health Index for H.P. at the District Level: General and Gender-related

Human development Index manifests the composite achievement of a region in basic human capabilities, such as a long and healthy life, access to knowledge and a decent standard of living. UNDP methodology of constructing the HDI is based on three indicators, viz. life expectancy, educational attainment index as measured by a combination of adult literacy and gross enrollment ratio and per capita income. One of the three components in the computation of the Human Development Index i.e., life expectancy at birth, can be treated as the basic index of health, especially if it is adjusted for morbidity, as for instance in the Disability Adjusted Life Expectancy or DALE. DALE is a measure of expectancy of healthful life, free of diseases and injuries. District wise LEB is not available for Himachal Pradesh. In the absence of DALE or even LEB at the district level, an attempt has been made here to construct a district-level health index based on two variables i.e., infant mortality rate and child mortality rate because these are sensitive indicators of socio-economic development and access to health care services. The two variables have been combined using the same procedure as in the construction of the HDI.

District-wise health indices thus constructed for 1991 show large variations. The values range from 0.045 (Kinnaur) to 0.952 (Hamirpur). The state average is 0.656. The indices at the district level in 1991 do not show much improvement over 1981 values. Hamirpur holds the highest rank for both the years but its score has come down from 0.969 to 0.952. Kinnaur, the lowest in the ladder also lowered its score from 0.103 to 0.045. However districts like Chamba, Mandi, Bilaspur and Shimla show a fair amount of improvement over time. (See table 2.2.1)

Table 2.2.1: Distribution of Districts According to Rank in Health Index, 1981,1991

	Health Index 1991	Rank in 1991	Health Index 1981	Rank in 1981
Hamirpur	0.952	1	0.969	1
Bilaspur	0.809	2	0.739	3
Mandi	0.812	3	0.734	5
Kangra	0.734	4	0.736	4
Una	0.709	5	0.773	2
Chamba	0.584	6	0.413	8
Solan	0.568	7	0.551	6
L & Spiti	0.474	8	0.470	7
Sirmaur	0.435	9	0.395	9
Kullu	0.417	10	0.324	10
Shimla	0.386	11	0.274	11
Kinnaur	0.045	12	0.103	12
H.P.	0.678	-	0.611	-

Source: Estimated by ISST

The Gender-Related Health Index (GHI) popularized by the United Nations Fund for Population Activities (UNFPA) adjusts the average achievements in health in accordance to the degree of disparity in health achievement between males and females. For constructing this index, a weighing formula that denotes a moderate degree of aversion to inequality, setting the weighing parameter equal to two, is used. This is equivalent to using the harmonic mean of the male and female values. In the process of computing GHI, we have calculated gender-equity-sensitive indicators (GESI) of infant mortality rate and child mortality rates. A third variable, i.e., the sex ratio is also included in the computation of GHI. The sex ratio was used because district level information on life expectancy at birth separately for males and females was not readily available. The formula used was in conformity with the one applied for the construction of GDI.

District level GHI in Himachal has been calculated for the year 1991. Hamirpur ranks highest with a score of 0.962 and Kinnaur ranks lowest with 0.045. (See Table: 2.2.2)

Table: 2.2.2 District Level Gender Health Index (GHI) in Himachal Pradesh 1991

Districts	Gender Related Health Index	Rank
Hamirpur	0.962	1
Bilaspur	0.805	2
Mandi	0.794	3
Una	0.753	4
Kangra	0.721	5
Solan	0.538	6
L & Spiti	0.475	7
Chamba	0.429	8
Sirmaur	0.403	9
Kullu	0.396	10
Shimla	0.304	11
Kinnaur	0.045	12
Himachal Pradesh	0.656	-

Estimated by ISST

A caveat is in order here. Any index, including the one reported above, is necessarily imperfect. Hamirpur, which tops the list both in the overall health index as well as the gendered health index, has reported many cases of female foeticide. The relative affluence of the district has gone hand in hand with the emergence of numerous ultra-sound clinics, which are reportedly used for detecting and eliminating female foetuses. Not merely is that reliable information in this regard is hard to come by, even if it were available, it would have been hard to accommodate such information sensibly in an aggregative index of the kind constructed here.

3. WOMEN AND CHILD HEALTH IN THE STATE

Health status of the average Indian woman is known to be poor almost everywhere in India. In Himachal, reproductive health problems are widely prevalent amongst women, especially amongst the poorer women and those living in the rural areas. Poor nutritional status during pregnancy and after delivery increases women's susceptibility to these problems. Another major source of complications is the fact that high proportions of births in the state continue to take place at home, and attended by poorly trained 'dai's. The

concept of hygiene and sanitation is poor among people. Many women are still not properly immunized. All these factors make them more vulnerable.

Box 3.1

Reasons behind poor maternal health in Himachal Pradesh

- *Poor diet and nutritional deficiency*
- *Heavy workloads during pregnancy*
- *Mostly non-institutional deliveries.*
- *Deliveries attended by untrained dai's*
- *Deliveries under unhygienic conditions*
- *Taboos associated with child birth*

Regarding **immunization of pregnant women**, NFHS-1 (1992) suggests that 47.4 % of pregnant mothers whose pregnancies resulted in live births, received two doses of tetanus toxoid vaccine during four years preceding the survey in Himachal Pradesh. The figure is less than corresponding figures for Punjab (82.7) and Haryana (63.3) as well as the all-India average (53.8). NFHS 1992 further showed that 71.7 percent mothers of live-births received iron and folic tablets which is comparable to that of Punjab (73.6) and much above the figure for Haryana (59.9) or for that of India (50.5). NFHS-2, 1999 showed that 66 percent pregnant mothers of live births received at least two tetanus toxoid injections and 86 percent received iron and folic acid (IFA) tablets or syrup. Thus according to the NFHS figures, there has been a clear improvement in the coverage over the seven year span between the two surveys.

NFHS 1992 showed that 76 percent of mothers received **ante-natal care** in Himachal Pradesh as against 62.3 percent in India and 72.7 and 87.9 percent respectively for the neighbouring states of Haryana and Punjab. The preliminary report of NFHS-2 (1999) shows that 87 percent illiterate pregnant mothers of live births received ante-natal checkups from a doctor compared to 75 percent of mothers who have completed high school.

Institutional delivery is very low in Himachal Pradesh. NFHS-1 (1992) reported only 16 percent of live-birth deliveries occurred in medical institutions, which is comparable to

one of the adjacent states, i.e., Haryana (16.7), as against higher percentages in Punjab (24.8) and India (25.5) percent. The figure for Himachal has improved to 29 percent in NFHS-2 (1999). NFHS-2 showed that non-institutional deliveries still constituted 71 percent of all deliveries. The district survey by the Department of Health and Family Welfare (1997) had noted that institutional deliveries in almost all the districts of Himachal Pradesh fall in the range of 20 to 30 percentage points, with the exception of Shimla (53.3%), Bilaspur (36.8%) and Kullu (34%). (See appendix) The survey further noted that women who consulted doctors for health problems, but only after delivery, is as high as 60 to 70 percent in all the districts. This, coupled with the very low incidence of institutional deliveries, could be a reflection of the fact that the incidence of child-birth-induced health complications may be quite high in the state.

NFHS, 1992 showed that the percentage of children fully vaccinated in Himachal Pradesh is 63 percent, which is almost double of the all-India figure (35.4), and higher than that of the adjacent states of Punjab (61.9) and Haryana (53.5). A tremendous improvement in the coverage of **immunisation of children** for BCG, DPT and polio and measles has taken place in Himachal Pradesh between NFHS-1 and NFHS-2. The percentage of children fully vaccinated increased from 63 percent in NFHS-1 to 83 percent in NFHS-2 and the percentage of children who did not receive any vaccinations declined from 8 percent in NFHS-1 to 3 percent in NFHS-2. Rural-urban differential is remarkably low in the case of full vaccination coverage in the state: the figures are 84 percent and 80 percent respectively for rural and urban areas. Gender differentials exist in vaccination coverage; 87 percent of boys were fully vaccinated against 79 percent of girls. Analysis of vaccine-specific data showed vaccination coverage of children is 95 percent for BCG, 89 percent for three doses of DPT vaccine, 90 percent for three doses of polio vaccine and 89 percent for measles. The district survey conducted by Ministry of Health and Family Welfare, Government of India, 1997 showed that all the districts, with the exception of Lahaul and Spiti (70%), Kinnaur (56.2%), Kangra (77.2%) and Sirmaur (69.2%) have coverage levels of all vaccinations comparable to or much above the state figure.

NSSO has recorded immunisation of children and pregnant women according to mpcc (monthly per capita consumption) fractile groups in rural and urban areas. The data show

that more than 90 percent children are immunised in all the groups, without much disparity. In rural areas, less than 90 percent of pregnant women are immunised among first two mpcc fractile groups. In urban areas, pregnant women in the top six fractile groups are fully immunised. (See table: 3.1)

NFHS, 1992 showed that 44.9 percent of **children who suffered from diarrhea** received either ORS or recommended home solution, which is higher than the neighbouring states of Punjab (32.7) and Haryana (19.5) and that of India (30.6%). The preliminary report of NFHS-2 showed that 68 percent of children who suffered from diarrhoea received Oral Re-hydration Therapy (ORT), either ORS packets or the recommended home solution or increased fluids. The District Survey, 1997 noted that the coverage by ORS was high in the districts of Bilaspur (53.8%), Kullu (42.8%), Lahaul and Spiti (54.5%) and Solan (71.4%), whereas the coverage was as low as between 10 and 15 % in the districts of Chamba, Kangra, Kinnaur, Mandi and Una and only 5.1% in Sirmaur.

Nearly 67 percent of **children were found to be anaemic**, which is a higher proportion than anaemic women (41%) in Himachal Pradesh (NFHS-2, 1999). A strong relationship is noted between the anaemic state of mothers and their children. 85 percent of children whose mothers are moderately anemic (hemoglobin concentration of 7-9.9 grams per decilitre) have anemia, compared with 59 percent of children whose mothers are not anemic. The District Survey showed that for the year 1997, adolescent girls suffering from anemia was as high as 63.2 percent in Solan, 27.3 percent in Shimla, 18.3 percent in Hamirpur, 12.1 in Lahaul & Spiti and other districts ranging from 5 to 10 percent except Mandi (3.7%) and Sirmaur (2.4%).

Nearly 20-25 percent of children suffered from breathing problems in the districts of Chamba, Kangra, Kinnaur, Mandi and Una whereas in most other districts it ranged between 10-15 percent. This problem was recorded lowest in Lahaul & Spiti (1.9%) and Bilaspur (3.9%).

According to NFHS-1 (1992), the nutritional status of children using anthropometric indices indicated that nearly half of young children in Himachal Pradesh (47%) are

underweight. Comparable figures in the adjacent states of Punjab and Haryana are 45.9% and 37.9% respectively while the India average is 53.4%.

Table: 3.1 Immunization of children and pregnant women according to mpec fractile groups, Rural-Urban Statistics of Himachal Pradesh
(Percent)

Fractile Group	Immunisation of Children		Immunisation of Pregnant Women	
	Rural	Urban	Rural	Urban
0-10	88.4	100.0	77.9	94.3
10-20	90.0	94.4	86.0	94.4
20-30	97.4	95.2	93.9	95.2
30-40	95.1	95.2	90.9	95.2
40-50	95.7	100.0	93.3	100.0
50-60	98.1	100.0	97.4	100.0
60-70	96.3	100.0	94.7	100.0
70-80	96.2	100.0	94.9	100.0
80-90	95.2	98.3	95.2	100.0
90-100	94.4	98.8	94.7	100.0

Source: NSSO, 52nd Round.

3.1 Family Welfare Programmes

In the year, 1956-57, **Family Welfare Programme** was launched in Himachal Pradesh. As elsewhere in the country, the programme was made 'target oriented' by the mid-seventies. Since then, the proportion of couples protected by different family planning methods steadily rose from 29.9 percent in 1976-77 to 58.37 percent in 1994-95. In 1996 under the reformulated Reproductive and Child Health Programme, the 'target-free' approach was introduced. Since then, a gradual decline in CPR is noted for Himachal Pradesh as a whole. The districts of Chamba (37.95), Lahaul and Spiti (48.87), Sirmaur (46.2) and Una (44.29) showed a value of CPR below the state average. While a small decline in most methods of contraception seems to have set in in the last few years (See Table 3.2 below), it is not possible to evaluate the overall impact of the 'target-free' approach on such factors as the quality of care and community access to RCH facilities without more qualitative information.

Table: 3.2 Percentage of Couples protected by different Family Planning Methods in Himachal Pradesh since 1977-78.

Year	Sterilization	IUD Insertion	Condom Users	Oral Pill Users	Couple Protection Rate
1977-78	22.20	1.30	1.70	0.00	25.20
1984-85	30.18	3.54	1.89	0.04	35.65
1987-88	34.50	6.60	2.60	0.90	44.60
1994-95	40.73	10.41	4.86	2.37	58.37
1997-98	39.76	8.55	3.33	2.37	54.00

Source: Family Welfare Programme Year Book 1997-98, Dept. of H & FW, HP

The Reproductive and Child Health Programme (RCH), the erstwhile Family Welfare Programme in its new avatar, intends to integrate maternal and child health with fertility control as well as reproductive health services, such as screening, diagnosis and treatment of STDs/RTIs. The aim is to reduce infant and maternal mortality and morbidity rates, help reduce unwanted fertility, thereby contributing to stabilisation of population growth, and improve the health status of women and children. The current phase of the RCH programme in Himachal is for a period of five years. The programme has two sub-phases; in the first phase all the districts were covered and in the second phase, Kinnaur and Sirmour have been selected for more intensive work. In a recent press meeting at Shimla, the state Health Minister has informed that RCH projects has been signed in Sirmour and Kinnaur districts with a total assistance of Rs. 6.3 crore for which funds had been sanctioned by the Government of India. While a project for Kangra and Hamirpur district is under consideration of the European Commission. A Community Need Assessment approach under RCH programme was introduced to assess the demographic and family welfare needs at grassroot levels by involving local public representatives, government machinery and voluntary organisations. Training for government functionaries at various levels has also been arranged.

NFHS 1992 reported that **knowledge of contraception** is almost universal, in both rural and urban of the state. All the modern methods of contraception were known to at least 92 percent of women surveyed in both rural and urban areas. At 57.2 the contraceptive prevalence rate in the state is about 33% higher than the national average (36.9). Female sterilisation is the most popular method of contraception in Himachal Pradesh, as almost in

all Indian states. It is used by 45 percent of currently married women as per NFHS, 1999. NFHS-2 reported that male sterilisation is remarkably high in Himachal Pradesh. It is about four times higher than the national average. 13.6 percent of rural couples in the state use this method as against 5 percent in Haryana; 2.4 percent in Punjab and 3.5 in India. Patterns of contraceptive use by age reveals that at least 80 percent of women aged 35-39, and more than 60 percent of two-child couples, are using contraception in the state of Kerala, Himachal Pradesh and Punjab, where as the use-rate is 61 percent for all India.

The current **use of modern contraceptive methods** in Himachal Pradesh increased by 7 percentage points, i.e. from 54 percent of currently married women aged 15-49 to 61 percent between 1992 (NFHS-1) and 1999 (NFHS-2). However, the 1999 figures show a decline in the percentage of female and male sterilisations in Himachal Pradesh. Rural-urban differentials exist, with urban areas showing higher incidence of use for most methods as compared to rural areas. Modern spacing methods are used by 26 percent of currently married women in urban areas as against 7 percent in rural areas. Traditional methods are more popular in urban areas (10 percent) than in rural areas (6 percent). However it is important to note that sterilisation is more popular in rural areas (46 percent for females and 8 percent for males) than in urban areas (36 percent for females and 4 percent for males). The Survey noted that modern spacing methods and traditional methods increase with the level of education, while there is a steep decline in sterilisation among more educated women. The District Survey 1997 noted that district-wise us-rates for sterilisation (male/female) range from around 42.1 percent in Chamba, Una and Lahaul and Spiti to 57.8 percent in Mandi.

4. PUBLIC HEALTH DELIVERY SYSTEM IN HIMACHAL PRADESH: PROBLEMS AND PROSPECTS

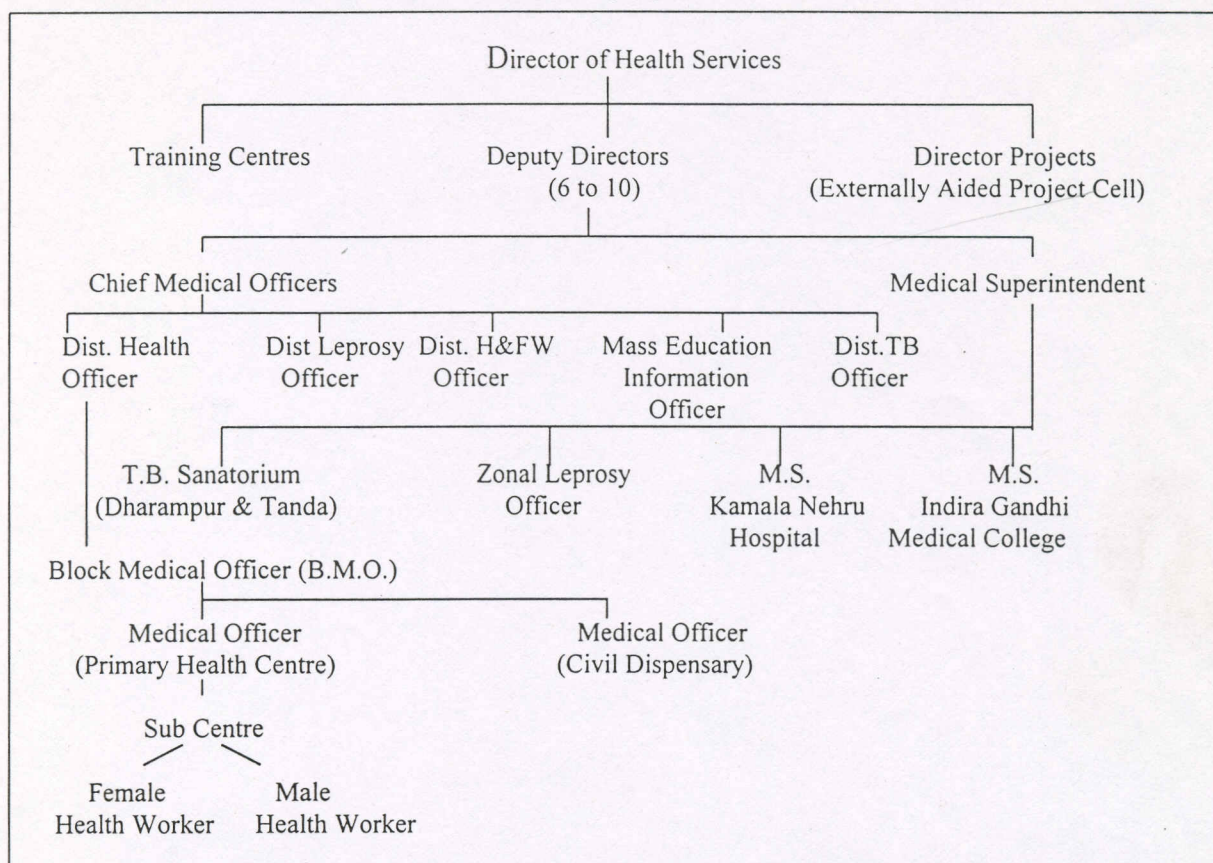
4.1 Organisation and Structure of Health Care System

The ministry of Health and Family Welfare is at the apex of all the departments and directorates of health and family welfare services in the state. The Directorate of Health

Services is responsible for providing preventive, promotive, curative and rehabilitative services to the community, including the rural, backward and tribal areas, through a network of Sub-Centres, Primary Health Centres, Community Health Centres, Rural Hospitals and Civil Dispensaries. The following chart provides the structure of the state health service delivery system.

Chart 4.1

Structure of State Health Service Delivery System



At the district level, District Health Officer is assisted by other medical officers such as the District Leprosy Officer and the District T.B. Officer. At the block level, the respective medical officers at Primary Health Centres and Civil Dispensaries support the Block Medical Officer. The Health Workers at Sub Centres take care of the village level health activities.

Health is an important component of the success of family planning programme. The state of the health delivery system in rural and inaccessible areas needs a lot of improvement. The population-based norms for setting up the health delivery structure are as follows:

- Establishment of one Health Sub Centre for a population of 5000 in plains and 3000 in Tribal and hilly areas by year 2000.
- One PHC for the population of 30,000 in plains and 20,000 in tribal and hilly areas by year 2000.
- Establishment of one community health centre (CHC) for population of eighty thousand to one lakh or to cover the population of four PHCs.

Because of the hilly and inaccessible terrain, Himachal has more PHCs and Sub-Centres than many other states situated in the plains.

4.2 Growth and coverage of medical institutions

Himachal Pradesh has achieved better health indicators in comparison with some of the neighbouring north Indian states in India. Part of this success lies in the growth and expansion of coverage of health institutions in the state. Considering the hilly and inaccessible terrain of the state, the health department concentrated on establishing the sub-centres at the panchayat level, so that basic health service can easily reach to the people living in remote areas. Between 1973-74 and 1983-84, 1014 new sub-centres were established in the state. In next ten years, the department gave more emphasis on establishing primary health centres and community health centres to provide relatively advanced health services to more people. The growth of medical institutions in the state is indicated in Table: 4.2.1.

Table: 4.2.1 Growth of Government Medical Institutions, 1973-74 to 1999-2000

	1973-74	1983-84	1993-94	1999-2000*
General Hospitals	37	37	39	50
Community Health Centres	0	6	29	65
Rural Hospitals	0	17	13	0
Primary Health Centres	76	78	218	302
Civil Dispensaries	173	222	167	155
Sub-centres	284	1298	1852	2069
Beds Available	3922	4881	7060	8747

*Source: Directorate of Health Services, H.P. * As on March 31, 2000.*

Today in Himachal Pradesh, each Primary Health Centre covers around 20,000 people on an average. Little above one lakh twenty thousand people come under general hospitals in the state, except state special hospitals and hospitals run by cantonment boards. One sub-centre covers less than 3000 people on an average and one community health centre covers a little more than 90,000 people on an average. (see Table: 4.2.2)

Among the Indian System of Medicines and Homeopathic (ISM&H) institutions, Ayurvedic dispensaries have been expanded sharply in the state. In 1996, there were 659 Ayurvedic dispensaries. The number has gone up to 1109 in 2000. This has been brought about by explicit policy at the state level to accord official support to these institutions within the government health delivery structure. Institutions belonging to other Indian systems of medicines have not progressed much. (See Box No. 6.1, Govt. of H.P. Notification No. HFW-A (F9-1/99 of Nov. 25, 1999 in section 6, in this chapter below). As a result of the policy of involving and promoting Ayurvedic institutions within the official system and efforts in increasing the number of PHCs and Sub Centres, the coverage of these structures has distinctly improved in the last half a decade as can be discerned from Table 4.2.2.

Table: 4.2.2 Average number of people covered by different types of medical institutions in Himachal Pradesh in 1996 and 2000.*

Type of Medical Institutions	Coverage of population by a single unit	
	1996	2000
General Hospital	145773	122683
Community Health Centre	120960	94372
Primary Health Centre	23300	20312
Sub Centre	2909	2965
Civil Dispensary	34455	39575
Ayurvedic Hospitals	473761	278825
Ayurvedic Dispensaries	8627	5531

*Source: Directorate of Health Services, H.P. * Calculated on the basis of estimated population of 1996 and 2000.*

Besides the hospitals run by department of Health and Family Welfare, there are 8 State Special hospitals and 6 Cantonment Board hospitals in the state. Among those 8 State Special Hospitals, 6 are located in rural areas and two are in urban areas. All Cantonment Board hospitals are located in urban centres.

There are not many private medical institutions in Himachal Pradesh. There are only 16 non-government hospitals in the state, which are run by private organisations, missionaries or by private Trusts. Total bed capacity of these hospitals is 419, mostly in urban centres.

Among, 133 government X-ray clinics in the state, 68% are located in rural areas. All 11 Eye and ENT Clinics are situated in urban centres. There are in total 109 government dental clinics in the state, of which 61% is in rural areas. Of the 46 Mother and Child Welfare Centres, 41 percent are located in rural areas.

However there is a serious shortage of medical personnel to run these units. 16.42 percent of sanctioned posts for doctors are lying vacant in the state. In recent times there has been a small improvement in the situation for doctors. For other medical staff, 22.42 percent posts of staff nurses, 10.68 percent posts of female health workers and 20.50 percent posts of male health workers are lying vacant. Many vacancies are lying unfilled for the posts of Laboratory Technicians and Laboratory Assistants. More than 25 and 31 percent posts are lying vacant for these two important categories. It is to be noted that there is also a serious scarcity of ophthalmic assistants in the state as 34.48 percent of the posts are unfilled.

Table: 4.2.3 Staff Position of Health and Family Health Welfare Department in H.P.

Category	As on December 31, 1998		As on January 1, 2000	
	No. of Posts sanctioned	Percentage lying vacant	No. of Posts sanctioned	Percentage lying vacant
Doctor	1498	18.56	1638	269 (16.42)
Staff Nurse	1365	260 (19.05)	1427	320 (22.42)
Female Health Worker	2100	205 (9.76)	2210	236 (10.68)
Male Health Worker	2005	254 (12.67)	2005	411 (20.50)
Sr. Lab Technician	561	144 (25.67)	612	155 (25.33)
Lab. Asst.	116	54 (46.55)	169	54 (31.95)
Pharmacist	793	95 (11.98)	857	173 (20.19)
Chief Pharmacist	80	3 (3.75)	80	7 (8.75)
Radiographer	165	17 (10.30)	183	40 (21.86)
Ophthalmic Asst.	144	48 (33.33)	145	50 (34.48)
OT Asst.	87	15 (17.24)	95	18 (18.95)

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

4.3 Difference between rural urban Health Scenario

Himachal Pradesh is basically a rural state with 92 percent of population living in the rural areas. It has not been possible to have detailed data on vacancies by rural/urban locations. However it may not be presumptuous to suggest that a disproportionately large percentage of the vacancies are in rural and tribal/hilly areas. This can be inferred from the data on medical attendance at birth and death in these locations. SRS figures show that only 25.3 percent of births in rural areas were attended by trained attendants in 1996, as against 41.6 percent in the urban areas. SRS (1996) figures also show that only 22 percent of the deliveries in rural areas were institutional, compared to a corresponding figure of 56.4% in urban areas.

Table: 4.3.1 Medical and Ayurvedic Institutions Functioning in Tribal Areas as on 31.03.2000

	Population	Hospital	CHC	PHC	CD	SC	Ayurvedic	State Spl	Beds	
	1991						Dispensary	Hospital	Allop	Ayur
Kinnaur	71270	2	3	17	0	32	40	2	206	43
L & Spiti	31294	1	3	9	5	35	20	0	136	7
Pangi	14960	0	1	3	0	16	4	0	38	2
Brahmaur	33909	0	2	2	0	17	20	0	42	6
Total	151433	3	9	31	5	100	84	2	422	58

Note: Hospital.: Government Hospitals, CHC: Community Health Centre, PHC: Primary Health Centre, CD: Civil Dispensary, SC: Sub-Centre, Ayur.: Ayurvedic, Allop. : Allopathy.

Source: Directorate of Health Services, H.P.

There is always a short fall of medical staff in rural areas. The following table shows that there is a scarcity of doctors in the primary health centres in the state. There also exists a persistent excess demand for the services of f midwives in rural areas.

Table: 4.3.2 Medical Personnel in Rural Areas of H.P.

Health Personnel in Rural Areas	1980	1985	1990	1995
Specialists (Total)	NA	NA	NA	108 (7)
Doctors in Primary Health Centre	NA	197 (25)	249 (15)	326 (28)
Doctors in Allopathic Dispensaries	NA	220 (21)	42 (0)	NA
Male Health Workers	128 (180)	818 (155)	1225 (0)	1551 (301)
Female Health Workers	510 (718)	821 (466)	1693 (12)	2050 (60)
Nurse Midwife	NA	484 (28)	484 (28)	351 (113)

Source: Compiled by Cehat.

Notes: Figures in brackets refer to vacant posts i.e. the number of sanctioned posts in excess of the number in position.

Box 4.1

Ensuring Accountability through Community Monitoring

It is not simply a case of unfilled posts. In Himachal, as elsewhere in the country, ensuring accountability of existing staff within the health department is also a persistent problem. Often what cannot be achieved by the dictat of official rule book can be ensured through community participation and monitoring of government programmes.

In a project on **Reproductive Health Through the Panchayats** designed and initiated by the **Institute of Social Studies Trust (ISST)**, **SUTRA**, the partnering organization in Himachal Pradesh, came across persistent complaints against a particular ANM leveled by the village women in a study site under one of the Gram Panchayats in Solan district. Apparently the said ANM was never to be found at her job. Every time she was accosted by the women, she would say that she was absent in a particular village on a particular date because she had been visiting some other village on that day and time. It soon transpired that this was a ploy to visit no place at all. After intensive discussions within the group on possible solutions to the problem of truancy, the group on its own decided on an ingenious solution. The very next day, boards went up on the walls of the Gram Panchayat building clearly demarcating the schedule of visits by location and time of the lady. The women explained to the ANM that this was the best thing that could be done to save her good name from being smeared by unnecessary gossips about shirking her work. The ANM knew she had lost out to the women and decided to show up for duty more regularly.

Source: Field Notes of 'Reproductive Health Through Panchayats' (1997-98) : A study conducted by ISST

5. PATTERNS OF HEALTH SECTOR EXPENDITURE IN THE STATE: PUBLIC AND PRIVATE

5.1 Trends and patterns in Health Care Financing in Himachal Pradesh

Theoretical literature on health care financing can be split into models of 'government-run national health service', which can provide care for all at a reasonable cost but cannot avoid the dangers of poor quality, and the 'insurance based system', which can achieve high quality but cannot ensure care for all at an affordable cost. A judicious mix of these two is believed to be the best way of financing health services. Indiscriminate privatization can result in lack of access, adequacy and affordability for large segments of users, while total financing of health care through the public coffers without user charges of any kind would obviously be non-feasible. The most appropriate way of building a successful health care system in India would be to develop a correct combination of public-private mix.

Like various other sectors of the Indian economy, in health sector also, both public and private sector exists. Within the public sector, the provision of health care services is the principal responsibility of individual state governments. Investment in health infrastructure has been a consistent policy of all state governments in India, irrespective of the sharp regional disparities and heterogeneous population.

State intervention is significantly visible in the health care financing of Himachal Pradesh. Twin indicators of the degree of government interventions in health services provision are (i) the proportion of health expenditure in the Gross State Domestic Product and (ii) the share of government expenditure set apart for health. It can be seen from the Chart I that, between 1987-88 and 1997-98, the health expenditure GSDP ratio of Himachal Pradesh was more than 2% in most of the years, which is remarkably higher than that in the neighbouring states of Punjab (= 0.6%) and Haryana (= 0.5%).

Table: 5.1.1 Trends in Medical and Public Health Expenditure, Social Service Expenditure and Developmental Expenditure as percentages of state government budgets in Himachal Pradesh, Haryana & Punjab

	1987-88	1990-91	1994-95	1995-96	1996-97	1997-98
Himachal Pradesh						
Medical & Public health expenditure	5.93	6.44	6.01	5.74	6.18	5.65
Social service expenditure	40.55	40.74	37.09	38.72	38.53	38.24
Developmental expenditure	74.73	70.14	69.01	68.47	68.77	69.81
Haryana						
Medical & Public health expenditure	4.01	3.54	1.80	2.41	2.25	2.84
Social service expenditure	36.18	34.20	19.16	30.23	21.15	24.62
Developmental expenditure	73.58	67.79	44.88	52.56	46.22	51.51
Punjab						
Medical & Public health expenditure	5.64	5.82	3.33	3.88	3.88	4.42
Social service expenditure	44.75	37.10	22.04	29.36	24.63	27.71
Developmental expenditure	74.32	66.66	37.94	46.43	57.95	54.00

Source: Finance Accounts of Himachal Pradesh, Haryana & Punjab.

It is to be noted that, during this period, in spite of the acute fiscal crisis of the states reflected in their revenue and fiscal deficits, the relative share of government expenditure in medical and public health remained constant at around 6% in Himachal Pradesh. This is quite remarkable in view of the fact that in the adjacent states of Punjab and Haryana, these figures show a clear decline. In Punjab, the ratio declined from 5.64% in 1987-88 to 4.42 in 1997-98 and in Haryana, it declined from 4.01% in 1987-88 to 2.84% in 1997-98 (see table 5.1.1). Similar observations can be made also for social service and developmental expenditure categories.

Chart 5.1

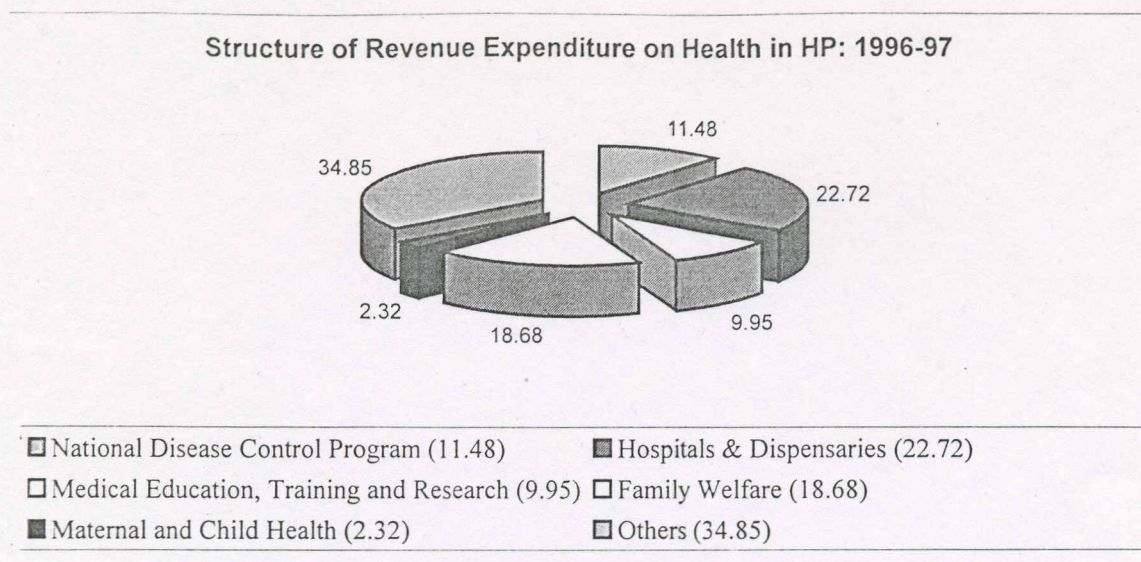
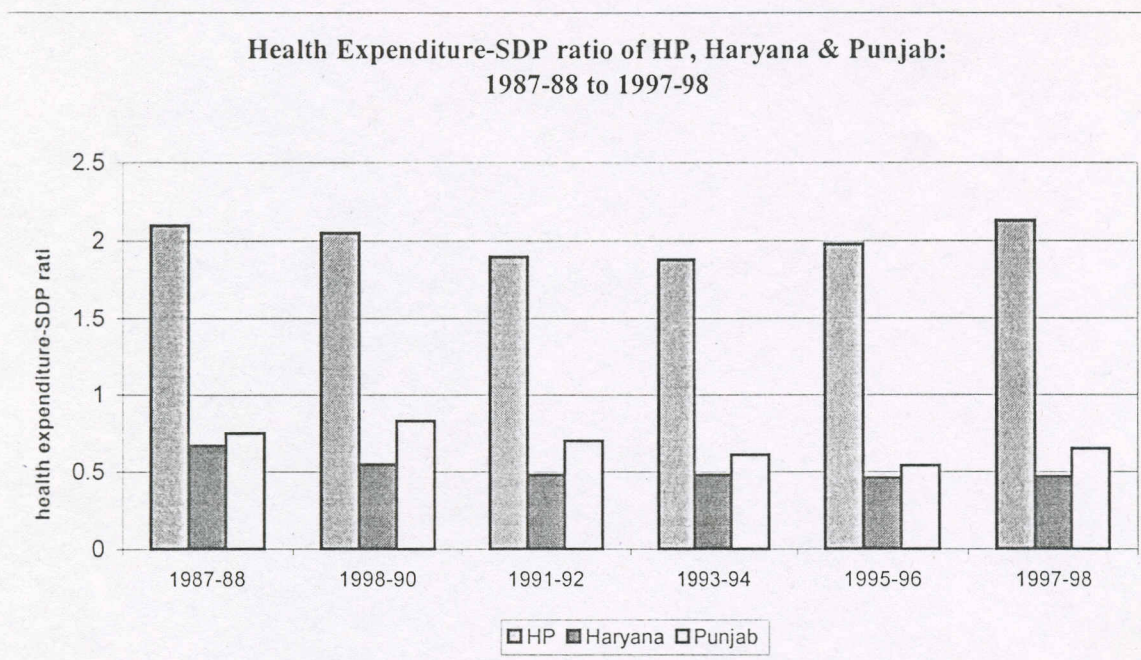


Chart 5.2



5.2 Structure of Public Expenditure on Health in Himachal Pradesh

Public expenditure on health can be further desegregated for studying changes in the pattern of allocation of health expenditure under different categories. Although 'hospitals and dispensaries' has continued to contribute the highest percentage share in health

expenditure over the years, a declining trend in this share is visible over the last several years. The share of national disease control programmes has also shown a sharp decline over this period, while there is a significant rise in the share of expenditure on family welfare programmes. The proportion of health expenditure on revenue account on maternal and child health has shown a marginal rise as against a marginal decline in the share of expenditure on medical education and training. (see table: 5.2.1)

Table: 5.2.1 Structure of Public Expenditure on Health in Himachal Pradesh

Expenditure Items	1980-81	1985-86	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Health Administration	4.02	2.66	4.26	3.39	3.77	3.36	#	#
National Disease Control Program	13.54	11.68	10.05	11.51	11.53	11.17	11.30	10.73
Hospitals and Dispensaries	41.75	63.79	23.81	21.97	21.79	22.06	21.06	21.22
Medical Education, Training & Research	6.56	6.29	8.59	7.49	8.00	10.94	8.70	9.30
Family Welfare	10.30	18.06	16.50	15.59	18.51	15.44	18.82	17.45
Maternal & Child Health	1.03	1.18	1.14	1.59	2.17	2.42	1.59	2.17
Other Expenditure	11.78	14.13	27.63	26.75	28.11	27.34	32.88	32.56
Total Revenue Expenditure	88.98	90.79	91.97	88.28	93.88	92.73	94.35	93.44
Capital Expenditure	11.02	9.21	8.03	11.72	6.12	7.27	5.65	6.56
Total Expenditure on Health	100	100	100	100	100	100	100	100

Note : # : Expenditure on health administration is included in 'other expenditure' for the years 1995-96 and 1996-97.

Source : Data compiled from Controller and Auditor General, Government of India, "Combined Finance and Revenue Accounts [for 1980-81 & 1985-86] and "State Budgets" [for years 1985-86 onwards] by Cehat.

5.3 Trends in Public-Private mix on Health Care Utilisation and Expenditure:

Demand side Analysis

No analysis of health care provisioning in the state is complete without a discussion on the public-private mix of health care utilisation and financing. Paucity of information on private health expenditure at macro level is a major obstacle for such analysis in Himachal

Pradesh. Private sector participation in health care provisioning is significant in almost all Indian states, but Himachal Pradesh is more of an exception in this regard.

The utilisation of health care services depends on a plethora of factors, such as accessibility, availability, quality and cost of services. The NSSO 42nd and 52nd rounds reveal that more than 85% of people in the rural areas of Himachal Pradesh utilise public health care facilities for hospitalisation. Even in the urban areas, an increasing trend is noted in the utilisation of the public health care facilities for hospital treatment. (see Table: 5.3.1)

Table: 5.3.1 Utilisation of Health Care Service: Public-Private Differentials in Himachal Pradesh.

Utilisation by type of treatment [%]	Rural		Urban	
	<i>Public</i>	<i>Private</i>	<i>Public</i>	<i>Private</i>
<i>Hospitalisation cases</i>				
NSSO 42 nd round [1986-87]	87.93	10.09	80.98	19.02
NSSO 52 nd round [1995-96]	86.50	11.50	91.30	8.00
<i>Non-hospitalisation cases</i>				
NSSO 42 nd round [1986-87]	60.67	38.33	47.71	50.22
NSSO 52 nd round [1995-96]	61.00	39.00	48.00	52.00

Source: NSSO rounds compiled by Cehat.

A significant utilisation of health services of private sector is noted in the most of the states of India as revealed by the different rounds of NSSO. Himachal Pradesh is an exception in this regard. NSSO 52nd round revealed that 76% of treatments were availed from public population, which is significantly higher than is the neighbouring states of Punjab and Haryana. A distinct trend is visible in the utilisation of public hospitals in both rural and urban areas of Himachal Pradesh compared to the neighbouring states of Haryana and Punjab. (see table: 5.3.2)

Table: 5.3.2 Source of treatment: Public-Private Differentials in Himachal Pradesh

		Public Hospital	Primary Health	Public Dispensary	Private hospital	Nursing Home	Charitable Institutions	Others	Total
H.P.	Rural	76.1	4.3	0.8	13	1.5	2.3	0.5	100
	Urban	86.9	1.9	0.0	7.5	1.9	0.9	0.0	100
Haryana	Rural	30.2	0.6	0.3	45.2	19.3	2.8	0.6	100
	Urban	33.2	0.4	0.0	42.2	20.6	2.2	0.4	100
Punjab	Rural	32.1	0.4	0.2	60.1	0.7	3.7	0.0	100
	Urban	27.6	0.2	0.0	65.3	1.8	3.4	0.0	100

Source: NSSO 52nd Round

5.4 Cost of health care provisions: Public-Private differentials

The utilisation pattern of public-private health care facilities is a function, among other things, of the relative cost of services. The cost of health care for each distinct event of hospitalisation in public and private sector institutions is comprised mainly of expenses incurred on items like bed charges, cost of medicines and other materials and services provided by the hospital and the charges for diagnostic tests done.

The NSSO rounds show that the cost of treatment per hospitalisation case in public sector hospitals is lower on average than that in private sector hospitals in both urban and rural areas of H.P. and the neighbouring states, with the exception of urban Haryana. There is not much rural-urban difference in the cost of treatment in government hospitals in Himachal Pradesh as per the NSSO 52nd round. However this is not the case in the neighbouring states of Haryana and Punjab. A higher difference in the cost of treatment per hospitalisation as between public and private sectors was noted for urban centres as compared to the rural ones in the state of Himachal Pradesh, which is similar to what is found elsewhere in the country.

Table: 5.4.1 Average Public and Private expenditure per hospitalisation case in Rural Areas of Himachal Pradesh, Punjab, Haryana and India.

	Public				Private			
	Free Ward	Paying General Ward	Paying Special Ward	All	Free Ward	Paying General Ward	Paying Special Ward	All
H.P.								
42nd round	827.57	1601.10	609.78	NA	1232.08	1422.62	1973.29	NA
52nd round	2494	2935	2992	2542	1433	3753	2378	2889
Haryana								
42nd round	1149.57	871.47	1887.02	NA	535.62	1473.42	3910.90	NA
52nd round	2459	3928	20000	2667	592	3420	5430	3496
Punjab								
42nd round	1088.76	1303.19	2471.15	NA	1750.16	1407.42	3575.16	NA
52nd round	3474	4065	1200	3645	1317	6266	12692	6171
India								
42nd round	630.40	1040.21	1482.62	NA	665.65	1031.15	1637.85	NA
52nd round	1781	3281	10540	2080	1463	9281	4300	3202

Source: Sarvekshana, April-June 1992 [for 42nd NSSO Round data] & NSSO Report No. 441 on Morbidity and Treatment of Ailments. NSSO 52nd round [July 1995-June 1996].

It may be noted that contrary to what is seen in the neighbouring states of Punjab and Haryana, more people seem to be using public institutions for hospitalization services in Himachal Pradesh in spite of the fact that costs are higher. This could be due to one or a combination of more than one factor. For one, this could be because of relatively better quality of services. Alternately it could be a reflection of the fact that there are very few private hospitals in Himachal Pradesh so that in spite of higher costs, people are forced to go to public institutions. If it is more due to the latter factor, then one needs eliminate the rental element in the cost of public health services and make it more cost-effective.

5.5 Health Status and Per capita Health Expenditure

One could investigate the extent to which increased public expenditure on health improves the health status of the community. Clearly the link between these two variables will be mediated by a host of other variables such as literacy levels, women's status, nutritional standards, levels of living and such other factors.

Some of the variables that can be taken as good indicators of health status are disability adjusted life expectancy (DALE), life expectancy at birth and infant mortality rate. The level of health consciousness is reflected in the declining rate of infant mortality and the betterment in the life expectancy at birth. In the absence of reliable estimates of others, Infant Mortality Rate estimated by Sample Registration General of India has been used as a proxy for health status in the bivariate analysis attempted below. It may be noted that IMR is a widely accepted indicator of general health of a population and health care services available in a region.

In order to investigate the links between the two variables, the following bi-variate equation has been estimated:

$$IMR_t = \alpha_t + \beta PCH_t + \mu_t$$

where IMR = Infant Mortality Rate, and

PCH = Per capita expenditure on Health

μ is the error term

The dependent variable IMR is a proxy for health status. The data relate to annual figures for the period 1973 to 1996. After correcting for first order auto-correlation using Cochrane-Orcutt process, the result of the regression comes out as follows:

$$IMR_t = 104.3 - 0.179 PCH_t$$

$$R^2 = 0.73$$

$$DW = 1.85$$

$$\rho = 0.5$$

The result shows that IMR is negatively and significantly related to per capita expenditure on health, which is to be expected.

5.6 Health Care Financing by Systems of Medicine

Allopathic system of medicine dominates the health system of all states of India including Himachal Pradesh. However Himachal has a special feature in this respect. More than it is

the case in other states, there is a growing presence of the Indian system of medicine and homeopathy in Himachal Pradesh. This could have very well been propelled by a strong and persistent intervention by the state in promoting the Indian system of medicine and homeopathy. The following table (Table 5.6.1) shows that relatively speaking, plan expenditure for Ayurvedic system of medicine increased considerably over a period of ten years. Also, the increase of expenditure in the rural sector is higher than in the urban sector.

Table: 5.6.1 Distribution (%) of Plan and Non-plan health services expenditure by Systems of Medicine

Systems of Medicine	1987-88			1997-98		
	Plan	Non-plan	Total	Plan	Non-plan	Total
Urban						
Allopathy	4.53	95.47	100	18.39	81.61	100
Ayurvedic	18.30	81.70	100	41.20	58.80	100
Unani	--	--	--	--	100	100
Rural						
Allopathy	20.34	79.66	100	36.11	63.89	100
Ayurvedic	5.04	94.96	100	32.55	67.45	100
Unani	5.50	94.50	100	--	100	100
Homeopathy	--	--	--	100	--	100

Source: Finance Accounts of Himachal Pradesh, 1987-88 and 1997-98.

6. USE OF 'INDIAN SYSTEM OF MEDICINE' IN THE CONTEXT OF ECOLOGY OF THE STATE

Indian System of Medicine and Homeopathy play a vital role in the health care system of Himachal Pradesh. The state has a rich tradition of folk medicine and ancient Ayurvedic System of medicine. Moreover, Himachal Pradesh is a storehouse of herbal medicinal plants. The state is one of the major suppliers of raw medicinal plant products in India and abroad. More than forty species as enlisted by the state forest department are exported from the state. The actual list of products could well be much longer. The revenue collected by the state government in the year 1995-96, in terms of tariffs and collection fees, was almost Rupees 5.5 crores. Though the state has become one of the major suppliers of raw herbs, it has not been possible to establish many processing units in the state. Extraction rates are high and most of the product is exported out of the state, some of it illegally, some at considerable danger to bio-diversity sustainability considerations, out

of the state the state for processing. (See ISST's study on Herbal Medicinal Plants in Himachal Pradesh for details).

Utilisation of health care services across the systems of medicine in Himachal Pradesh vis-a-vis the neighbouring states and India as a whole reveal that the percentage of treatments in allopathic system in rural Himachal Pradesh [93%] is slightly lower than that in the neighbouring states of Punjab and Haryana [97%] and compared to the Indian average [95.9%]. This is mainly because of the greater popularity of ayurvedic system of medicine in Himachal (4.3%) as against Punjab [1.12%], Haryana [0.35%] and India [1.53%]. The preference for allopathic system of medicine for treatment of ailments is observed in the urban areas of Himachal Pradesh [97.39%] which is similar to that in Punjab [97%], Haryana [98.24%] and the average for India [96.31%] (see table: 6.1).

Table: 6.1 Utilisation of Health care services: by Systems of Medicine

	Allopathic	Homeopathic	Ayurvedic	Unani	Any combination	Others
Rural						
Himachal Pradesh	93.00	1.93	4.30	0.09	0.39	0.29
Punjab	97.80	0.21	1.12	0.39	0.06	0.42
Haryana	97.00	1.91	0.35	0.04	0.04	0.29
India	95.91	1.78	1.53	0.27	0.07	0.44
Urban						
Himachal Pradesh	97.39	0.41	0.45	1.41	0.00	0.34
Punjab	97.80	0.92	0.64	0.44	0.00	0.20
Haryana	98.24	0.74	0.61	0.15	0.26	0.00
India	96.31	2.09	1.03	0.27	0.05	0.25

Source: Sarvekshana, April-June 1992.

The State Government had been playing a very pro-active role in promoting the Indian System of Medicine. A separate Department for ISM and Homeopathy was opened in 1985. During the 8th Plan, state government laid special emphasis on the expansion of ISM services and 300 new dispensaries and two hospitals were added to the existing strength of 532 institutions. About of 1/3rd of total patients in the state numbering about 32 lakhs came for treatment in ISM institutions despite of very poor infrastructure in terms of building, equipment, specialised services etc.

Box 6.1

Special measures taken by the state government of Himachal Pradesh for promoting the ISM

- *Government of Himachal Pradesh has decided to undertake functional integration of department of ISM with department of H&FW for the purpose of implementation of Reproductive and Child Health Programme and other national programmes with immediate effect. [Govt. of H.P. Notification, No. HFW-A(F)9-1/99, dated Nov. 25, 1999]*
- *All Government Ayurvedic Dispensaries (GADs) will have their territorial jurisdiction delineated on the pattern of PHCs i.e. villages to be covered, population etc. In places where GAD is located at a place where there is some allopathic institution i.e. sub-centre/PHC/CD, delineation of the area shall not be undertaken. [ibid]*

In Himachal Pradesh, treatment by Indian System of Medicine and Homeopathy is being provided to the population of the state through 2 regional ayurvedic hospitals, 10 district ayurvedic hospitals, 2 ayurvedic pharmacies, 3 homeopathic dispensaries, 3 unani dispensaries, one nature care unit, 1057 ayurvedic dispensaries and one Ayurvedic Research Institute (as on 31 March, 1999). There are 2922 panchayats in the state, it is proposed to have one dispensary for every 2 panchayats by the end of 9th Plan. The ayurvedic pharmacies, one at Jogindernagar (Mandi dist.) and the other at Majra (in Sirmour dist.), process and pack the medicines which are supplied to the government ISM health institutions. The Ayurvedic Research Institute is located at Jogindernagar in Mandi district.

Box 6.2

Government Ayurvedic College, Paprola

A government Ayurvedic College with an annual intake capacity of 30 students, which increased to 50 students in 1998 for BAMS degree, is functioning at Paprola in Kangra district for providing ayurvedic education in Himachal Pradesh. The State Government created 42 new posts for 7 more new departments and some of these posts are yet to be filled. During the 9th Plan, it is proposed to double the seats, which would require some expansion of the hospital. A hospital is also attached to the college with a bed capacity of 85 beds, which is proposed to be increased to 120 in the next Plan.

The department of Indian System of Medicine remained associated with National Health Programme like malaria, family welfare and immunisation etc. the ayurvedic institutions organised family welfare camps to motivate the eligible couples and camps for after-care

of operated cases were also organized. In 1998, 24433 indoor and 4746108 outdoor patients were treated under this system. In 1998, Department has organized 18 free ayurvedic Medical Camps in which 840 patients were treated under this system (Economic Review, Government of Himachal Pradesh, 1999)

The demand for herbal medicines is increasing throughout the world but India's share in the world trade is hardly 2%. There is tremendous scope for improving the share of the products in the world market. The Department of ISM&H in Delhi has already announced a plan to upgrade the state drug testing laboratories and modernise the pharmacies manufacturing alternative medicine. The Annual Plan for 2000-01 has earmarked a sum of Rs. 20 crore for this purpose.

Box 6.3

Vanaspati Van (Herbal Garden)

A herbal garden at Joginder Nagar where a number of medicinal herbs are being grown for demonstration purposes as well as use in pharmacies, has been established. A Herbarium, which is visited by a number of scholars within and outside the country, has also been set up. The annual production of herbs is estimated at Rs. 1.00 lakh. This is likely to be substantially increased with the irrigation and land development work in progress. Himachal Pradesh has also been selected by the Task Force on Conservation and Sustainable Use of Medicinal Plants to develop Vanaspati Vans. The Family Welfare Department will fund the entire five-year project, providing a total of Rs. 5 crores in phases. The aim is to identify between 3,000 to 5,000 hectares of denuded forestland where at least 100 species can be grown. These could well provide affordable healthcare and conserve biodiversity.

7. NGO INVOLVEMENT IN HEALTH PROGRAMMES

The presence of NGO's in the social sector, including the health sector, has been quite pervasive in the country. Because of the greater flexibility and the higher outreach they enjoy as compared to government outfits, many NGO's have been able to reach the poor and deprived sections of the society in a manner that has not been possible for official agencies. (See for instance Pachauri, 1994)

There are several types of NGOs, functioning at various levels and for different purposes. Even among health NGO's, they may range from purely charitable organizations concentrating on service delivery at one end to those that may use health as an entry point to address issues of social and economic inequalities for initiating the process of empowerment of the disempowered.

From the mid-Eighties onwards, there has been an explicit official recognition of the potential of NGO-government partnerships for effectively dealing with social sector issues. However oftener than not, such 'partnership' has not been on an equal footing, and NGOs have been perceived as structures operating more as extension agencies for implementing government programmes. Fortunately, things seem to be changing for the better, and with increasing awareness and networking among NGOs, there is greater inclination towards exploring and capitalizing on the complementarities in such partnerships. NGOs have become relatively more proactive in deciding what are the issues they would like to raise and also in the planning and implementation of various programmes.

Unlike in many other places in the country, NGO presence has not been very prominent in Himachal in any sector, including the health sector. However the insistence by most international donor agencies in recent years on the involvement of non-governmental agencies in programme design has generated a demand-induced transformation in the scenario. This is true for most sectors, including the health sector. However in Himachal, many of the NGOs that have come into being in the recent couple of decades, operate as long arms of the government, working within the confines of government programmes. Some have managed to graduate from that status to chart out a separate vision for their work, while others continue to be engaged primarily in service delivery within official programmes.

One could cite the instance the example of SUTRA, an NGO working in the Solan district of Himachal which had started primarily as a service delivery organisation more than two decades back, has over the years developed into an organisation working for Gender Sensitisation and training in various sectors but primarily in Health. The Society for Environmental and Rural Awakening (ERA) operating in Kangra district specialises in

promotion of better health practices in primary health care mainly through the traditional system of medicine. The Voluntary Health Association of Himachal Pradesh situated in the district of Shimla is an association of NGOs working on health related activities within the state. Like the VHAs in other states of the country, this association also works on a range of training services delivery activities through its membership net works.

Himachal is quite unusual in that unlike most other states in the country the extent of dependence of the population of the state on the public sector health delivery system is much more pervasive, relatively speaking, than that on the private sector, especially in rural areas. Considering that the data on health expenditure in the private sector includes expenditure through NGOs, the low share of the expenditure on health in private sector in the state is quite striking. There could be three sets of reasons for this phenomenon. One possibility is that the supply of health services through the public sector agencies in the state is, relatively speaking, better and more accessible to the population than in other states. It may be noted here that Himachal Pradesh spends a much larger share of the state budget on health than any of the neighbouring states. It is difficult to surmise whether the high public sector investment in health in the state has been instrumental in crowding out private sector investment in the area, or whether the former was necessitated by the paucity of private sector involvement in health. Perhaps it is a bit of both. On the other hand it may be equally possible that because of the difficult terrain in much of the state, and the problems of physical access, private sector units may have found it less profitable to set up business. A third related reason could be the fact that given the rich bio-diverse resources in the state and the abundance of herbal medicinal plants, the dependence of local population on traditional system of medicines has been high enough to make substantive dents into the demand for private sector health services, especially in rural areas.

To sum up, while a number of NGOs are currently working in the Health Sector in Himachal and the network and outreach of the Himachal Pradesh Voluntary Health Association (HPVHA) has expanded considerably in recent years, much of the NGO involvement in health sector in the state is derived from donor-driven initiatives. A prominent feature of the private health sector in the state is the presence of some prominent missionary hospitals like the Lady Willingdon Hospital in Kullu district or

religious trusts delivering health service to the community, such as the Chinmaya Tapovan Trust of the Kangra district, which have been providing health service to the local communities for many years. The other important feature in this regard is the dependence of the local population on cantonment hospitals in the state, which as a rule cater to the needs of the local civil population over and above their primary brief on servicing the defence forces.

Box 7.1

NGOs in Health: Some Glimpses

1. **Himachal Pradesh Voluntary Health Association:** This State level unit of the Voluntary Health Association of India and functions as an association of NGOs working on health related activities within the state. The organisation helps in creating an environment for building a people's health movement through networking and provides support services to members in terms of training and capacity building and funding. The HPVHA acts as an intermediary for collaboration between the government and the voluntary organizations working in the field of health within the community.

HPVHA has focussed on various issues, covering nutrition and low cost primary health care, home remedies through traditional system of medicine and knowledge about medicinal plants, laws related to the health and social protection of women and children, child care, TBA training, reproductive health issues and HIV/AIDS, involving Panchayati Raj institutions. The training programmes are organised for field level workers of member NGOs, community based organizations like Mahila Mandals and Panchayati Raj representatives, traditional birth attendants, local men, women and adolescent girls, and government officials.

2. **Society for Social Uplift Through Rural Action (SUTRA):** SUTRA was established in 1977 in Jagjit Nagar in Solan district. Its area of operation covers the two districts of Solan and Sirmaur. This NGO has produced excellent training manuals, which is used to generate awareness on reproductive health issues for rural audiences, on topics ranging from menarche to menopause, using the life cycle approach to health. They also do training of trainers for generating awareness in Panchayati Raj members for identifying issues and raising a demand for locally appropriate and relevant health services at the field level as a part of the decentralised target free approach.
3. **People's Action for People in Need (PAPN):** With other activities, this NGO has also been involved with a Project on Prevention and Management of Reproductive Tract Infections in Women, from 1996 to 1999, has done a substantial amount of work in generating awareness on the causes and prevention of gynecological morbidity as well as capacity building of its own staff. Health camps organised for diagnosis and treatment of RTIs by this organisation as a part of the project, received a tremendous response from the community and went a long way in generating awareness on these infections within the community as also within the health service providers.
4. **Chinmaya Tapovan Trust, Kangra:** This organisation's present programme on rural primary health care and training serves around 150 villages in Kangra district, runs training programmes for 11 village health guides, 20 traditional birth attendants, 20 bal sevikas, 18 mahila mandal workers, 9 multipurpose health workers and 3 adolescent field workers. Centre's awareness-generation programme is run through 150 mahila mandals, 120 yuvati samoohs (adolescent girls' groups), 146 women's self-help credit groups.
5. **Society for Environmental for Environmental and Rural Awakening (ERA):** Health has been a major thrust area of ERAs activities. The emphasis has been on promotion of health care through preventive and curative services. This has been done by assessing PHC services, documentation of local health practices, promotion of herb plantation, and processing and promoting the usage of traditional system of medicine in primary health care.

ERA also organises health awareness camps in different primary schools in the district. It organises health check-up for primary school students as well as geriatric patients. Out Patient Clinic has also been in operation with medical facilities and referral services.

8. HEALTH POLICY AND HEALTH SECTOR REFORMS

Himachal Pradesh State Government has under taken several programmes and schemes during the Ninth Plan (1997 - 2002) in order to improve the health status of the population of the state. Under the Basic Minimum Services Scheme, construction of several Health Sub-Centres, Primary Health Centres and Community Health Centres with staff quarters was completed. The state government has already taken initiatives to convert 17 Rural Hospitals into Community Health Centres. There are plans to specialized services in medicine, surgery, gynecology and obstetrics in these CHC's. Other than this, there is also a scheme to strengthen the services at district hospitals and zonal hospitals. Measures have been taken to improve the quality and infrastructure of training of health workers at the grassroots level. Two schools each for general nurses and for male health workers have been opened recently to overcome the shortage of these essential paramedics in the Medical Institutions.

The state government has also established a Composite Testing Laboratory at Kandaghat. To strengthen services for the physically handicapped, a specialized health centre has already been opened at Sundernagar in Mandi district. Recently a Civil Registration and Vital Statistics Cell has been opened in the Health Directorate for keeping the account of births and deaths in the state. A Research, Monitoring and Evaluation Cell for the implementation of Family Welfare Programme has also been established in the Health and Family Welfare Directorate.

The state government has been continuing with the expenditure on Leprosy Control Programme. National Leprosy Control Programme has been converted into Leprosy Elimination Programme and the scheme transferred to the status of a state plan from a fully sponsored scheme of the central government. The state government has made provisions for fulfilling their responsibilities in the National Disease Control Programmes.

The state government has taken the decision that the strategy of integrating the Indian System of Medicine and Homeopathy (ISM&H) within the health care delivery system, which was adopted during the Eighth and earlier plans, will continue to be pursued with

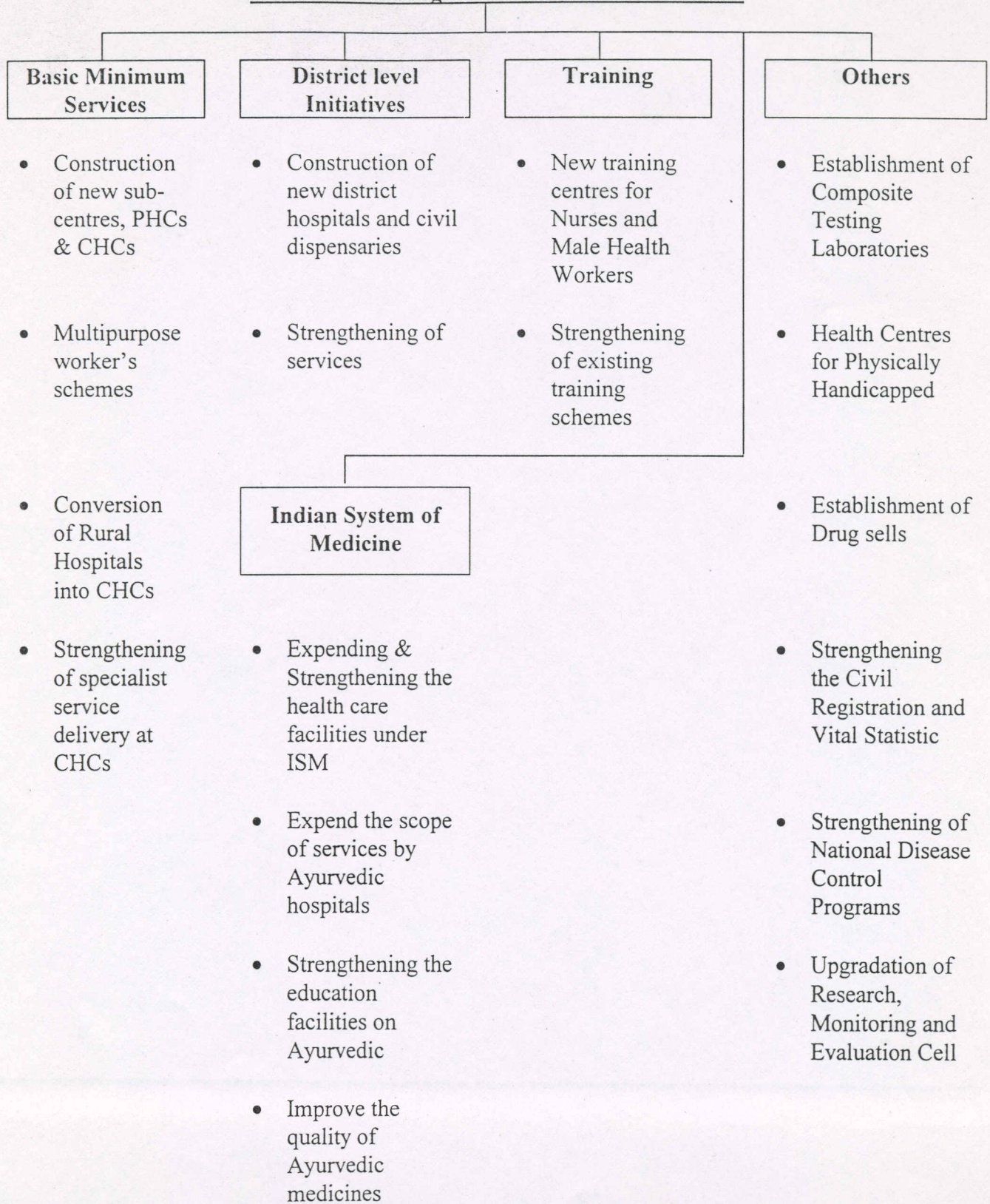
added emphasis during the Ninth Plan period. Efforts are on to improve the reach of ISM&H both in rural and in urban areas. The government is also sparing no effort to upgrade the quality and expand the scope of services offered by ayurvedic hospitals and to improve the quality of ayurvedic medicines. A couple of schemes are in place to strengthen the training component of the Indian System of Medicine.

Himachal Pradesh has decided to come out with standard treatment guidelines and drug formulary to improve the quality of medical care in Government institutions. In a recent press club meeting at Shimla, the Health Minister of Himachal Pradesh said that a Task Force had been set up in the state for preparing the Health 2020 document in Himachal Pradesh which will endeavor to encourage eradication of major diseases like malaria, leprosy, polio, and water borne diseases. The Health Minister also disclosed that a list of 375 essential drugs has already been notified to provide inexpensive treatment to common people. This will help in reducing cost of treatment and help check malpractice, he said. Guidelines would be publicized to the NGOs and the general public with a view to educating patients. Feedback about services will be ensured through quality assurance schemes which have been launched in Shimla hospitals on an experimental basis.³

³ See *Pioneer*, dated August 24, 2000 for details.

Chart 8.1

Health Sector Programmes under the Ninth Plan



9. CONCLUDING REMARKS

The address by Shri Prem Kumar Dhumal, Chief Minister of Himachal Pradesh delivered on the occasion of the First Meeting of the National Population Commission on July 2, 2000 rightly emphasised the commendable advances made by the State of Himachal Pradesh in the area of health. The significant decline in the incidence of communicable diseases such as malaria, tuberculosis and leprosy in the state, as well as the high commitment of the state government to provide quality health care to the population reflected in the high percentage of state budget allocated to health needs, bear out these claims.

Nevertheless, certain areas continue to be plagued by persistent problems, necessitating strong and focused interventions. Excessively high maternal and infant mortality rates, high incidence of anaemia among women and children, and the alarming signs of a declining sex ratio, especially in some of the districts of the state, are causes for worry. Low incidence of institutional deliveries and persistence of various taboos associated with child-birth are issues that need to be addressed urgently. Also important is the need for investigation into the causes and prevention of excessively high vitamin A deficiency, blindness and bronchial problems in the state.

The support being given by the state government to the promotion of ayurvedic and Indian system of medicines is laudable, especially the attempt to tie it up with the public health delivery system. However, without adequate investments in road transport and other infrastructural facilities, and in the provision of specialist medical services in the state, these problems might continue to persist.

It has been noted above that the presence of NGOs and the private sector in the area of health is far less pervasive in Himachal Pradesh than in many other states in the country. It would be advisable to involve NGOs and the private sector on a much wider scale than is currently the case in the state if the challenge of ensuring health for all is to be met in the near future.

Appendix

Table 1 : Estimated Crude Birth Rate by Districts in Himachal Pradesh, 1998 and 1991

District	Crude Birth Rate, SRS 1998			CBR, Census 1991
	Rural	Urban	Total	Total
Bilaspur	15.5	51.9	18.0	27.89
Chamba	14.5	30.8	15.8	35.18
Hamirpur	17.7	66.9	21.2	25.36
Kangra	18.9	79.2	22.2	28.21
Kinnaur	7.9	0.0	7.9	30.52
Kullu	18.5	74.8	22.3	32.63
Lahaul & Spiti	8.6	0.0	8.6	28.14
Mandi	19.3	44.2	21.1	30.12
Shimla	11.7	31.0	16.7	28.92
Sirmaur	15.9	32.1	17.9	34.25
Solan	17.4	31.1	19.4	29.81
Una	20.3	30.9	21.1	27.82
Himachal Pradesh	17.2	44.1	19.8	29.37

Source: Annual Report on the Working of the Registration of Births and Deaths Act, 1969 for the year 1998, Chief Registrar, Director of Health Services, H.P. & Census 1991.

Table 2 : District-wise Total Fertility Rate in Himachal Pradesh, 1981 and 1991

Districts	TFR 1981	TFR1991
Bilaspur	4.5	3.3
Chamba	4.9	4.5
Hamirpur	4.3	3.0
Kangra	4.8	3.4
Kinnaur	4.9	4.0
Kullu	4.9	4.0
Lahaul and Spiti	4.2	3.8
Mandi	4.6	3.5
Shimla	4.1	3.5
Sirmaur	4.9	4.5
Solan	4.6	3.5
Una	4.9	3.5
Himachal Pradesh	4.7	3.6

Source: Census of India 1981 and 1991

Table 3 : Estimated Crude Death Rate by District with Rural Urban Breakups in 1998

Districts	Rural	Urban	Total
Bilaspur	4.3	8.9	4.6
Chamba	4.9	9.3	5.3
Hamirpur	5.3	14.8	6.0
Kangra	4.8	14.1	5.3
Kinnaur	2.9	-	2.9
Kullu	4.3	17.7	5.2
Lahaul and Spiti	3.3	-	3.3
Mandi	4.5	8.2	4.7
Shimla	4.6	7.3	5.2
Sirmaur	3.6	7.9	4.1
Solan	4.5	4.5	4.5
Una	4.8	4.3	4.7
Himachal Pradesh	4.6	8.8	5.0

Estimated by ISST

Source : Rural Urban Mid-year population 1998 in Family Welfare Programme Year Book 1997-98, Dept. of H&FW, H.P; No of Deaths in 1998 in Annual Report on the Working of the Registration of Births and Deaths Act, 1969 for the year 1998, Chief Registrar, Director of Health Services, H.P.

Table 4 : District-wise Distribution of Infant Mortality Rate and Child Mortality Rate in Himachal Pradesh with Gender break-ups, 1991

Districts	Infant Mortality Rate			Child Mortality Rate		
	Male	Female	Total	Male	Female	Total
Bilaspur	70	71	71	80	84	82
Chamba	109	93	104	113	114	113
Hamirpur	65	65	65	82	79	81
Kangra	79	74	77	100	99	100
Kinnaur	124	122	123	159	145	152
Kullu	101	102	102	115	116	116
L & Spiti	61	56	59	124	118	122
Mandi	69	69	69	92	87	90
Shimla	112	77	104	133	119	126
Sirmaur	94	93	94	124	111	118
Solan	87	81	84	105	99	101
Una	70	74	72	92	97	96
H P	84	81	82	98	92	95

Source: Himachal Pradesh District Profile 1991, Census of India 1991.

Table 5 : Health Index by District in 1981 and 1991 with Rank

Districts	Health Index 1991	Rank	Health Index 1981	Rank
Bilaspur	0.809	2	0.739	3
Chamba	0.584	6	0.413	8
Hamirpur	0.952	1	0.969	1
Kangra	0.734	4	0.736	4
Kinnaur	0.045	12	0.103	12
Kullu	0.417	10	0.324	10
L & Spiti	0.474	8	0.470	7
Mandi	0.812	3	0.734	5
Shimla	0.386	11	0.274	11
Sirmaur	0.435	9	0.395	9
Solan	0.568	7	0.551	6
Una	0.709	5	0.773	2
H.P.	0.678	-	0.611	-

Estimated by ISST.

Table 6 : Gender Related Health Index of the Districts in Himachal Pradesh with Rank, 1991

Districts	Gender Related Health Index	Rank
Bilaspur	0.805	2
Chamba	0.429	8
Hamirpur	0.962	1
Kangra	0.721	5
Kinnaur	0.045	12
Kullu	0.396	10
L & Spiti	0.475	7
Mandi	0.794	3
Shimla	0.304	11
Sirmaur	0.403	9
Solan	0.538	6
Una	0.753	4
Himachal Pradesh	0.656	-

Estimated by ISST.

Table 7 : Sex Ratio (1991), Mean Age of Marriage (females) and No. of Maternal Deaths (1997) in H.P.

Districts	Sex-Ratio	Mean Age at Marriage (females)*	No. of Maternal Deaths (No. in the sample of 1000 hhs)
Bilaspur	1002	18.91	6
Chamba	949	19.19	0
Hamirpur	1105	19.52	1
Kangra	1024	20.32	0
Kinnaur	856	19.49	2
Kullu	920	19.31	0
L & Spiti	817	20.33	9
Mandi	1013	19.01	1
Shimla	894	19.93	3
Sirmaur	897	18.92	1
Solan	909	19.43	0
Una	1017	20.60	1
H.P.	976	19.62	-

Note : * Females married during 1986-91.

Source: Census 1991 and District Surveys, Ministry of Health and Family Welfare.

Table 8 : Immunisation of Pregnant Women and Institutional Deliveries in the Districts of Himachal Pradesh, 1997

Districts	(in percent)			
	Pregnant Women who had full antenatal care (3 checkups)	Pregnant Women who had IFA tablets (full course)	Pregnant Women who had TT (2 doses)	Institutional Deliveries
Bilaspur	61.4	46.3	58.1	36.8
Chamba	48.4	30.7	49.0	22.5
Hamirpur	61.3	46.0	39.5	27.8
Kangra	54.3	29.4	45.6	29.8
Kinnaur	47.9	47.1	29.3	28.1
Kullu	57.5	21.0	59.5	34.0
L & Spiti	46.3	23.4	50.2	25.8
Mandi	48.7	31.4	54.3	31.8
Shimla	41.3	30.6	56.1	53.3
Sirmaur	42.7	33.5	26.8	22.9
Solan	55.8	36.5	50.0	32.1
Una	64.3	30.6	40.4	27.7
H.P.	52.5	33.9	46.6	31.1

Source: FW Indicators-District Surveys, Ministry of Health and Family Welfare.

Table 9 : Immunisation of Children (given all doses) in the Districts of Himachal Pradesh, 1997 (in percent)

Districts	Fully Immunised	BCG	DPT	Polio	Measles	Vitamin A
Bilaspur	84.6	96.9	88.7	88.7	93.8	11.2
Chamba	84.8	93.5	93.1	90.8	98.9	50.4
Hamirpur	92.5	98.6	97.9	98.6	93.2	4.0
Kangra	77.2	97.4	98.7	79.7	97.4	91.7
Kinnaur	56.2	96.8	96.2	67.5	96.2	56.2
Kullu	87.0	96.8	94.5	91.4	89.8	0.0
L & Spiti	70.0	88.3	83.2	81.0	73.7	2.8
Mandi	87.0	97.0	95.5	92.0	93.5	69.9
Shimla	82.0	92.1	87.5	88.2	89.0	3.9
Sirmaur	62.9	90.2	86.3	64.6	87.4	70
Solan	91.0	95.9	93.8	93.2	93.2	0.0
Una	95.5	98.8	97.7	97.4	98.5	86.7
H.P.	80.9	95.2	92.8	86.1	92.1	37.2

Source: FW Indicators-District Surveys, Ministry of Health and Family Welfare.

Table 10 : Child Morbidity Patterns in Himachal Pradesh, 1997

(in percent)

Districts	Children who had diarrhea (during last two months)	Children Treated by ORS due to diarrhea in last two months	Children who had breathing problem	Treated by ANM/PHC /Govt. facilities for breathing problem	Baby weight found below 2.5 Kgs.	No of infant deaths due to Tetanus (no in 1000 sample h.h.)	Adolescent girls suffering from Anemia
Bilaspur	7.3	53.8	3.9	42.8	17.8	0	9
Chamba	19.2	16.6	25.7	80.7	3.3	2	6.3
Hamirpur	6.0	21.4	12.1	64.2	65.9	0	18.5
Kangra	32.0	9.2	22.7	50.0	8.3	0	5.0
Kinnaur	18.4	13.6	17.5	83.3	3.3	0	6.4
Kullu	7.0	42.8	7.5	60.0	12.4	2	5.5
L & Spiti	5.4	54.5	1.9	100.00	9.4	1	12.1
Mandi	22.5	12.5	20.7	75.0	2.7	2	3.7
Shimla	12.9	35.7	11.1	62.5	9.3	0	27.3
Sirmaur	25.9	5.1	15.6	61.5	4.3	1	2.4
Solan	13.2	71.4	14.3	50.0	14.7	0	63.2
Una	26.0	10.3	22.7	34.6	3.8	1	7.4
H.P.	16.3	28.9	14.6	63.7	12.9	-	13.9

Source: FW Indicators-District Surveys, Ministry of Health and Family Welfare.

Table 11 : District wise Couple Protection Rate in Himachal Pradesh since 1985

Districts	1985	1990	1995	2000
Bilaspur	40.80	53.00	70.20	68.15
Chamba	27.20	38.10	44.21	38.50
Hamirpur	36.60	53.90	66.18	60.14
Kangra	32.30	50.20	57.03	46.05
Kinnaur	34.30	41.70	45.01	45.33
Kullu	37.20	50.30	59.00	56.55
L & Spiti	26.10	32.60	46.87	50.18
Mandi	36.90	55.60	63.23	57.71
Shimla	42.40	52.60	62.33	54.59
Sirmaur	32.10	47.50	54.44	45.03
Solan	37.00	51.30	60.51	56.50
Una	27.60	41.50	47.31	42.25
H.P.	35.70	50.10	58.37	51.57

Source: Dept of Health & Family Welfare, H.P.

Table 12 : District wise and Method wise Couple Protection Rate in Himachal Pradesh in 1998

Districts	Percentages of couples effectively protected with			
	Sterilization	IUD Insertion	CC	OP
Bilaspur	45.35	13.67	5.38	3.42
Chamba	29.82	4.88	1.07	2.18
Hamirpur	45.60	10.00	3.89	2.15
Kangra	38.41	6.88	3.15	2.11
Kinnaur	35.72	7.36	5.80	2.57
Kullu	41.67	9.53	4.94	3.03
L & Spiti	35.29	7.39	3.61	2.58
Mandi	43.10	10.33	3.46	2.82
Shimla	42.57	9.70	3.33	2.40
Sirmaur	35.90	5.09	3.14	2.08
Solan	42.62	12.04	2.83	1.97
Una	33.33	6.23	2.84	1.88
H.P.	39.76	8.55	3.33	2.37

Source: Dept of Health & Family Welfare, H.P.

Table 13 : District-wise Growth of Allopathic Medical Institutions in Himachal Pradesh between 1996 and 2000

Districts	General Hospital		CHC/Rural Hospital		Primary Health Centre		Sub-Centre		Civil Dispensary	
	1996	2000	1996	2000	1996	2000	1996	2000	1996	2000
Bilaspur	1	2	4	5	11	17	108	118	11	11
Chamba	3	4	5	7	24	28	159	169	11	11
Hamirpur	1	2	4	5	14	17	146	153	6	6
Kangra	7	8	9	12	35	47	407	434	35	34
Kinnaur	2	2	3	3	9	17	35	32	1	0
Kullu	1	2	3	5	14	12	97	100	5	5
L&S	1	1	2	3	7	9	32	35	6	5
Mandi	3	6	7	9	36	44	296	312	15	13
Shimla	11	11	5	6	42	55	238	259	30	31
Sirmaur	4	5	1	3	20	24	143	148	16	13
Solan	4	5	2	3	18	20	169	178	20	17
Una	1	2	2	4	14	12	124	131	9	9
H.P.	39	50	47	65	244	302	1954	2069	165	155

Source: Directorate of Health Services, H.P.

Table 14 : District-wise Growth of Medical Institutions under I.S.M & Homeopathic Department in Himachal Pradesh between 1996 and 2000

Districts	Ayurvedic Hospitals		Ayurvedic Dispensaries		Unani Dispensaries		Homeopathy Dispensaries	
	1996	2000	1996	2000	1996	2000	1996	2000
Bilaspur	1	2	36	63	0	0	1	1
Chamba	1	2	58	98	0	0	1	1
Hamirpur	1	3	31	68	0	0	0	0
Kangra	2	4	128	226	1	1	0	0
Kinnaur	1	1	35	40	0	0	0	0
Kullu	1	1	38	63	0	0	0	0
L&S	0	1	14	20	0	0	0	0
Mandi	1	2	91	162	0	0	0	0
Shimla	1	2	92	145	1	1	0	0
Sirmaur	1	1	49	80	0	0	0	0
Solan	1	1	46	75	1	1	0	0
Una	1	2	41	69	0	0	0	0
H.P.	12	22	659	1109	3	3	2	2

Source: Directorate of Health Services, H.P.

Table 15 : District-wise Coverage of Population by a single unit of Sub-Centre, Primary Health Centre and Community Health Centre in Himachal Pradesh, 1996 and 2000.*

District	Population per Sub-Centre		Population per PHC		Population per CHC	
	1996	2000	1996	2000	1996	2000
Bilaspur	2989	2937	29344	20384	80697	69305
Chamba	2781	2873	18423	17343	88432	69371
Hamirpur	2725	2761	28418	24849	99463	84487
Kangra	3140	3152	36517	29104	142009	113990
Kinnaur	2228	2618	8663	4928	25990	27927
Kullu	3509	3742	24314	31181	113465	74834
L& Spiti	966	874	4414	3398	15450	10195
Mandi	2878	2941	23664	20854	121698	101951
Shimla	2852	2827	16159	13310	135738	122012
Sirmaur	2953	3107	21115	19158	422296	153264
Solan	2539	2645	23843	23540	214586	156935
Una	3330	3381	29495	36912	206468	110736
H. P.	2909	2965	23300	20312	120960	94372

Source: Directorate of Health Services, H.P. * Calculated on the basis of estimated population of 1996 and 2000.

Table 16 : District-wise Beds per Thousand Population in Himachal Pradesh as on 31-03-2000

Districts	Estimated Mid-Year Population	Total No. of Beds Available	Beds per Thousand Population
Bilaspur	346527	436	1.3
Chamba	485598	691	1.4
Hamirpur	422434	478	1.1
Kangra	1367884	1706	1.2
Kinnaur	83780	279	3.3
Kullu	374171	489	1.3
L& Spiti	30586	143	4.7
Mandi	917559	1419	1.5
Shimla	732074	2428	3.3
Sirmaur	459793	697	1.5
Solan	470804	1120	2.4
Una	442943	424	0.9
H. P.	6134153	10310	1.7

Source: Directorate of Health Services, H.P. Note: No. of Beds includes the available beds in State Special hospitals, mission hospitals and other private hospitals.

Table 17 : District-wise Distribution of Medical Institutions in Back-ward Contiguous Back-ward and Dispersed Back-ward areas in Himachal Pradesh as on 31-03-2000

Districts	Hospitals	Community Health Centre	Primary Health Centre	Civil Dispensary	Sub Centre	Beds Available
Bilaspur	0	0	2	0	10	6
Chamba	1	3	9	6	69	120
Hamirpur	0	0	3	0	9	17
Kangra	0	0	2	0	8	6
Kinnaur	0	0	0	0	0	0
Kullu	0	3	4	2	40	48
L& Spiti	0	0	0	0	0	0
Mandi	0	2	12	4	92	54
Shimla	0	1	13	1	54	76
Sirmaur	0	0	2	0	18	12
Solan	0	0	1	0	5	0
Una	0	0	0	0	3	0
H. P.	1	9	48	13	308	339

Source: Directorate of Health Services, H.P.

Table 18 : District-wise Distribution of Medical Institutions with Rural-Urban Breakups in H.P. as in 31-03-2000

District	General Hospitals		Community Health Centres		Primary Health Centres		Civil Dispensaries	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Bilaspur	0	2	5	0	16	1	10	1
Chamba	1	3	7	0	28	0	11	0
Hamirpur	1	1	3	2	16	1	6	0
Kangra	3	5	10	2	47	0	32	2
Kinnaur	2	0	3	0	17	0	0	0
Kullu	0	2	4	1	11	1	5	0
L& Spiti	1	0	3	0	9	0	5	0
Mandi	2	4	9	0	43	1	13	0
Shimla	3	8	4	2	54	1	23	8
Sirmaur	1	4	3	0	24	0	12	1
Solan	2	3	2	1	20	0	15	2
Una	1	1	2	2	12	0	7	2
H. P.	17	33	55	10	297	5	139	16

District	TB Institutes		Leprosy Institutes		STD Institutes		Ayurvedic Institutes	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Bilaspur	0	1	0	0	2	2	61	4
Chamba	2	1	16	2	8	1	99	1
Hamirpur	0	1	0	0	0	1	70	1
Kangra	1	1	2	4	0	1	227	4
Kinnaur	3	0	0	0	5	0	41	0
Kullu	0	1	4	1	5	3	62	2
L& Spiti	1	0	0	0	2	0	21	0
Mandi	0	1	12	4	7	3	161	3
Shimla	0	5	12	8	8	8	134	14
Sirmaur	0	1	11	5	5	4	80	1
Solan	1	1	1	0	3	2	74	3
Una	0	1	0	0	0	1	70	1
H. P.	8	14	58	24	45	26	1100	34

Note:

TB Institutes include Hospitals, Dist. TB Clinic/centres, and TB Sub-Clinic

Leprosy Institutes include Hospitals, Clinics, and Sub-clinics

STD Institutes include Clinics/Sub-clinics, Units

Ayurvedic Institutes include Ayurvedic hospitals, Ayurvedic Dispensaries and Unani dispensaries

Table 19 : District-wise Distribution of Beds with Rural-Urban breakup in Himachal Pradesh, as on 31-03-2000

Districts	Beds Available (Sanctioned)	
	Rural	Urban
Bilaspur	143 (32.8%)	293 (67.2%)
Chamba	325 (48.9%)	340 (51.1%)
Hamirpur	193(43.2%)	254 (56.8%)
Kangra	782 (52.5%)	708 (47.5%)
Kinnaur	249 (100%)	0 (0.00%)
Kullu	121 (28.8%)	300 (71.2%)
L& Spiti	143 (100%)	0 (0.00%)
Mandi	479 (39.6%)	731 (60.4%)
Shimla	498 (22.6%)	1708 (77.4%)
Sirmaur	225 (32.8%)	460 (67.2%)
Solan	525 (55.9%)	415 (44.1%)
Una	143 (36.8%)	246 (63.2%)
H. P.	3826 (41.2%)	5455 (58.8%)

Source: Directorate of Health Services, H.P.

Note: Beds available in Mission Hospitals, State Special Hospitals and Other Private Hospitals are not included

Table 20 : Inadequate intake of foodstuff at the district level (foodstuff= g/cu/day)

District with consumption level below RDA	Cereals	Pulses	Green leafy vegetables	Root & Tubers	Other vegetables	Milk and its products	Fats & Oils	Sugar
Bilaspur	✓		✓					
Chamba								
Hamirpur	✓	✓	✓ *	✓			✓	✓ *
Kangra					✓			✓
Kinnaur	✓ *				✓	✓		✓
Kullu			✓		✓			✓
L& Spiti								
Mandi					✓	✓	✓	✓
Shimla	✓		✓					
Sirmaur		✓ *			✓	✓	✓	✓ *
Solan			✓				✓	✓
Una	✓	✓					✓	✓ *
H. P.								

Note : * Marginally below the RDA

Source : Government of India (1996) *India Nutrition Profile 1995-96*, Dept. of Women and Child Development, New Delhi.

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