Uttaranchal: Review of Public Expenditure on Health

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The limitations and errors in this report are entirely the responsibility of the authors'.

List of Abbreviations Used

AFS	Annual Financial Statement
AIDS	Acquired Immune Deficiency Syndrome
CAGR	Compound Annual Average Growth Rate
CMP	Common Minimum Programme
CSO	Central Statistical Organisation
CSS	Centrally Sponsored Schemes
CTO	Chief Treasury Officer
Ex-Rur.	Exclusive Rural
Ex-Urb.	Exclusive Urban
FC	Finance Controller
GDP	Gross Domestic Product
GNH	Gross National Happiness
GSDP	Gross State Domestic Product
HSDP	Health Systems Development Project
ICDS	Integrated Child Development Scheme
IMR	Infant Mortality Rate
JNU	Jawaharlal Nehru University
NFHS	National Family Health Survey
NGO	Non-Governmental Oraganisation
Non- Ex.	Non Exclusive
NRHM	National Rural Health Mission
NSSO	National Sample Survey Organisation
OoP	Out of Pocket
PD	Project Director
SC	Scheduled Caste
SPV	Special Purpose Vehicle
SRS	Sample Registration System
ST	Scheduled Tribe
UaPSVENN	Uttaranchal Peyjal Sansadhan Vikas Evam Nirman Nigam
UPA	United Progressive Alliance
UT	Union Territory
WHO	World Health Organisation

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Annexure Tables

Uttaranchal[1]: Review of Public Expenditure on Health

Until a few years ago, most governments across the world concerned themselves predominantly, with income growth strategies. Most, assumed rising incomes to transform into increased consumption and by analogy to improvement in quality of life. It has been realised that the linkage in this transformation may quite often be tenuous and, that all of what generally passes for as *growth* (in accounting terms) may not be contributing to *development*. Increasingly the governments have also realised that redistribution, to circumscribe relative deprivation, is often difficult to achieve by expenditure allocation, and much lesser by the extant tax handles. Over the years this has nudged people to identify alternative paradigms to analyse 'development'. Several policy makers have now been weaned away from merely concentrating on Gross Domestic Product (GDP), and to focus attention on measures to inculcate capacity and nurture capabilities.[2] Thus there has been a significant increase in the stress laid on *human development* with provisioning of quality basic education and health being the core assumed responsibilities of the State. Several countries have further institutionalized these as an unalienable right of the citizens.

Good health constitutes in being devoid of illness, leading a long life, be able to function normally and perform useful or productive work. Over the years statistics pertaining to incidence of disease or illness, disability, malnutrition, mortality, longevity, supply of labour etc. are routinely collated to measure changes in outcomes from public expenditure on health services.

This report is a review of public expenditure on health services in Uttaranchal. Section *one* presents, public and private (out of pocket (OoP)) expenditure on health across different states of India. These expenditures are discussed in the context of state incomes that is, their respective Gross State Domestic Product (GSDP).[3] The deviation of budget estimates from actual public expenditure in Uttaranchal is discussed in section *two*. In section *three*, we expand the domain of the health sector to include water supply, sewerage and sanitation, and nutrition services (see Annexure A, for definition of health sector). We analyse the structure of expenditure by sub-group of services and track the growth as well as share of these sub-groups. In section *four*, an attempt is made to segregate the expenditure over the rural and urban regions. The expenditure that could not be clearly allocated over either rural or urban regions has been categorised in the non-exclusive group. The structure of expenditure by economic classification is presented in section *five*. In section *six*, we attempt to identify public expenditure on health incurred by other agencies (that is central government, local bodies) in Uttaranchal that is the off-state-

[1] Recently (August 24, 2006), the state cabinet has given its nod to rechristen the state as Uttarakhand. The state was created on November 9, 2000 by combining the hill districts of Almora, Bageshwar, Chamoli, Champawat, Dehradun, Pauri Garhwal, Nainital, Pithoragarh, Rudraprayag, Tehri Garhwal and Uttarkashi with Udham Singh Nagar in the Tarai region and Hardwar in the foothills of erstwhile Uttar Pradesh. The 13 districts of this state lie between 28° 43' and 31° 28' north latitudes and between 77° 32' and 81° 00' east longitudes. It is surrounded by Himachal Pradesh in the West, Uttar Pradesh in the south, Nepal in the East and Tibet (China) in the North. There are 49 tehsils, 95 blocks and 16414 villages.

[2] Some advocate the use of Gross National Happiness (GNH).

[3] Apart from some cursory remarks in section one, the report does not attempt to establish the linkages between (commonly measured) health outcomes and public expenditure on health or its effectiveness and efficiency.

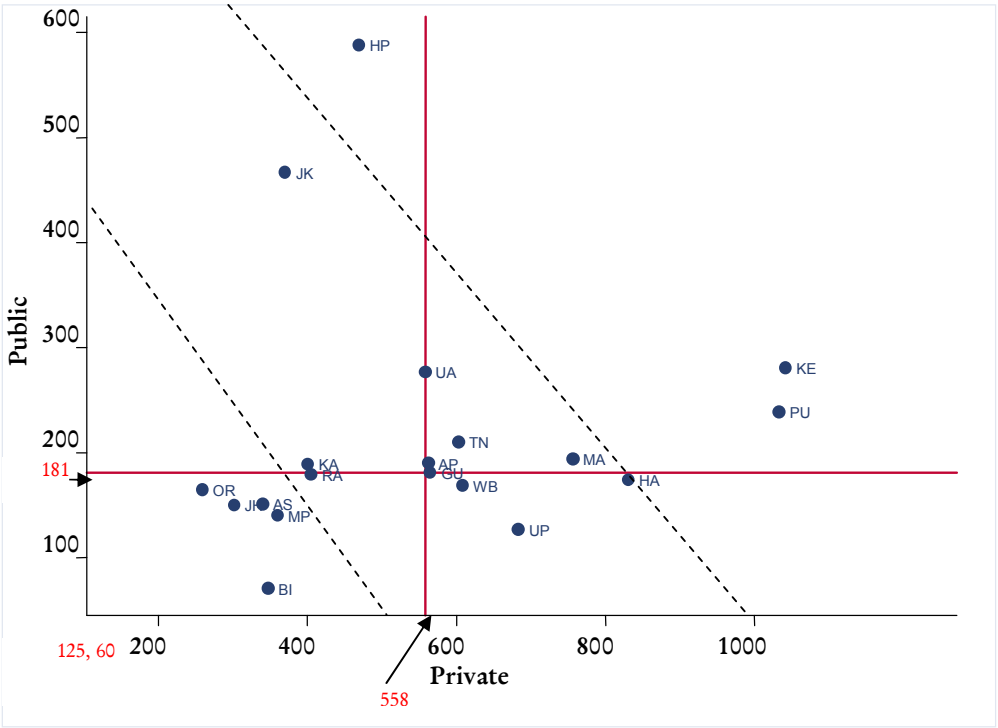
budget expenditures. This is followed (in section *seven*) by an analysis of the financing pattern (that is external, federal, provincial) of the expenditure along with the nature of (that is, revenue or recurring and capital or new asset creating) expenditures. Finally while summarising (section *eight*), the complementarity in expenditures is highlighted along with the recognition of the critical need to augment, synchronise and supplement these expenditures to derive the synergy in benefits as measured by the health outcome indicators.

1. Private and Public Expenditure on Health

Health services are envisaged as a State subject under the segregation of obligatory functions (between the Union and the States) as per the Constitution of India. The structure of public expenditure on health in Uttaranchal by the various levels of government is discussed later in section 6. Annexure B details the data sources and discusses the steps to derive the estimates for figures 1 to 3 in the text and Annexure Table A.1.

Figure 1: Private and Public Expenditure on Health: 2004-05

(Rupees per Capita)



Notes: Andhra Pradesh (AP), Assam (AS), Bihar (BI), Gujarat (GU), Haryana (HA), Himachal Pradesh (HP), Jammu & Kashmir (JK), Jharkhand (JH), Karnataka (KA), Kerala (KE), Madhya Pradesh (MP), Maharshtra (MA), Orissa (OR), Punjab (PU), Rajasthan (RA), Tamil Nadu (TN), Uttaranchal (UA), Uttar Pradesh (UP), West Bengal (WB).

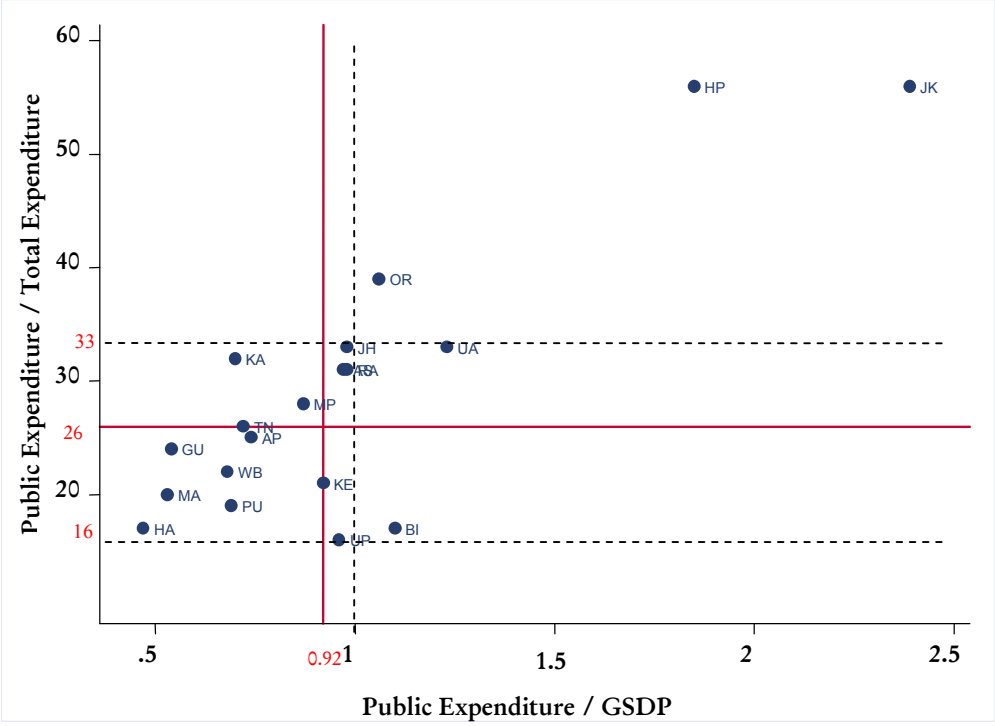
Figure 1 above shows the scatter of the states around the median values for private (558) and public (181) per capita expenditure. It is observed that five, of the 19, States portrayed have per capita health expenditure below Rupees 500 per annum (that is approximately 11 dollars per year, depicted by the points below the inner broken line).[4] Only four states

[4] These are Assam, Bihar, Jharkhand, Madhya Pradesh and Orissa.

namely, Haryana, Himachal Pradesh, Kerala, and Punjab report per capita health expenditure above Rupees 1000 per annum, (approximately 22 USD per annum, depicted by the points above the outer broken line).

Figure 2 below reveals that in most states, public expenditure accounts for between one-sixth and one-third of the health expenditure (points between the broken horizontal lines). Further public expenditure on health, constitutes less than one percent of their respective GSDP (points to the left of broken vertical line). In comparison the common minimum programme (CMP) of the incumbant United Progressive Alliance (UPA) government envisages to raise the health expenditure to between two-three percent. At the end of 2004-05, Himachal Pradesh and Jammu & Kashmir were the only two states that met this policy target.

Figure 2: States' Public Expenditure on Health, 2004-05 (percent)

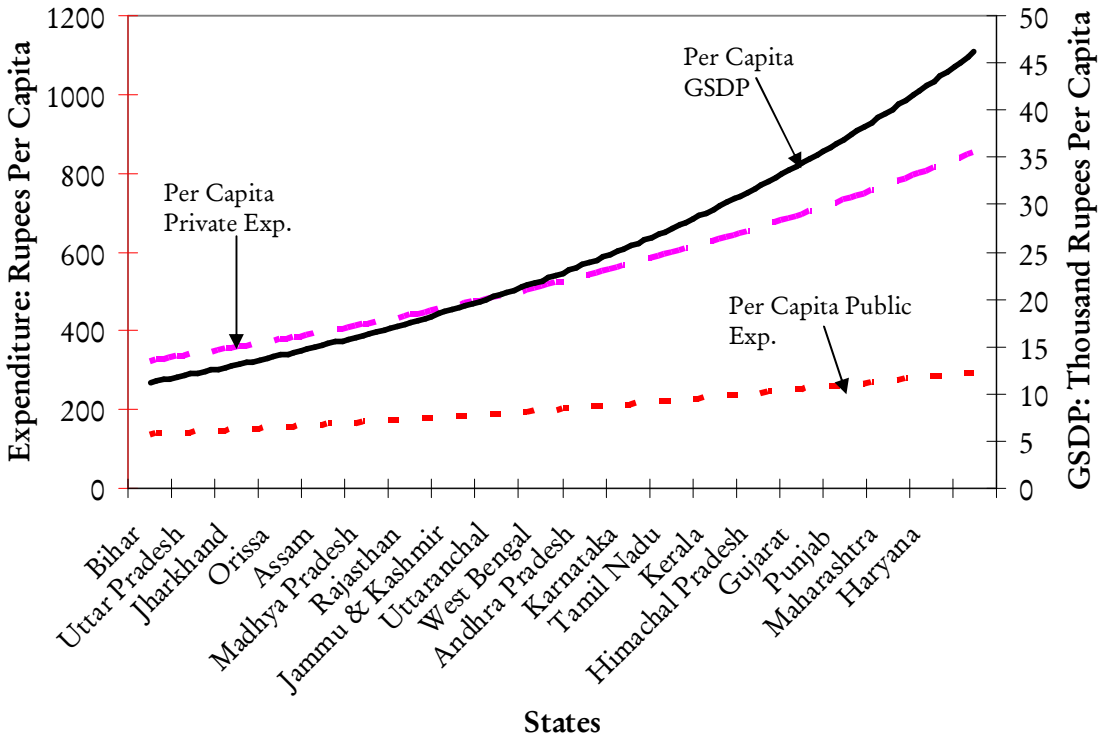


Notes: Same as in Figure 1

After arranging the states in ascending order of per capita GSDP, exponential curves denoting the trend are plotted for three variables namely, the per capita GSDP, the per capita private expenditure and the per capita public expenditure. Figure 3 depicts these below, and it is observed that the trend-curve for per capita GSDP (right-hand scale) is steeper than that for the per capita private expenditure (left-hand scale) which in turn is steeper than that for per capita public expenditure (left-hand scale). Two probable interpretations are offered for such a scenario. The first of these follows if we consider that the causation (or influence) runs from income to expenditure. It appears that for a one percent increase in per capita GSDP, the increase in per capita private expenditure is less than one percent and the increase in per capita public expenditure is yet lower. In economics parlance this is interpreted as, inelasticity of private or public health expenditures with respect to income. While, there is no denying that such causation may

well exist, the reverse causation perhaps has a stronger influence. Expenditure on health is an investment in human capital, and likely to yield an increase in earnings albeit with some lag. While we have not tested for simultaneity in the relationship (that is expenditure on health yielding increase in income in the same period) or the likely lag (present period expenditure on health yielding increase in income in future periods) in the transformation of health expenditures into increased incomes, what one may conjecture is that a one percent increase in expenditure on health leads to more than one percent increase in incomes. Public expenditure on health, in that sense, may have a larger (multiplier) effect on growth in average incomes.

Figure 3: Trends of Per Capita GSDP, Private and Public Expenditure on Health Across States in India, 2004-05



From figures 1 and 2 one observes that Uttaranchal is positioned close to or above the median state (out of the 19 Indian states in the analysis) on attributes like per capita public and private health expenditure, and per capita GSDP.[5] While such positioning may offer some consolation, constant efforts need to be made to not only maintain the relative ranking but also to narrow the gap with the one placed immediately above.

[5] Any measure of central tendency should also be supplemented with some measure of dispersion. For example, the maximum of the observed values are four, eight and six times the minimum values respectively for per capita private expenditure, public expenditure, and GSDP.

The prevalent notion especially in India (and perhaps in several less developed nations) is that with increase in incomes, peoples' willingness to access public institutions declines. This may not be un-equivocally true. On the contrary, increase in incomes and literacy perhaps increases the demands on the public systems, as is evidenced by the experience of several developed economies and even Indian states like Kerala and Haryana. It is quite likely though that the nature of public institutions, delivering health services, undergoes significant metamorphosis. Moreover, sustained public expenditure on health is likely to induce efficiency in private health expenditures and improve health outcomes.

2. Deviation of Budget Estimates from Actual Expenditure[6]

Annexure Table A.2 presents the expenditure figures for broad groups of services as well as the total expenditure on all services in the State of Uttaranchal. Here, we present a brief analysis of the deviation between the actual expenditures and the budget estimates of expenditure across some components. Deviation, for a given year, is defined as [(Budget Estimate – Actual Expenditure) / (Actual Expenditure) *100].[7] Thus a positive number denotes the over-estimation in the budgeted figure, while a negative number denotes under-estimation. Table 1 below provides a summary of this analysis, and it is evident that there is large deviation between the budget estimate and the actual expenditure across functions (or service groups). For example, between the years 2001-02 and 2004-05, the overestimation in the budget estimates for expenditure on 'All Services' varied between 49 to 53 percent.

Table 1: Fiscal Marksmanship: Deviation of Budget Estimates from Actual Expenditures (percent)

Public Expenditure on	2001-02	2002-03	2003-04	2004-05
Medical and Public Health	23	44	51	30
Family Welfare	10	28	21	24
Direct Health	21	42	48	29
Indirect Health	32	50	35	-13
Total Health	27	46	41	4
General Services	45	30	-2	34
Social Services	18	26	23	21
Economic Services	73	71	67	53
All Services	52	53	52	49

The overall fiscal marksmanship shows up in poor light and budget preparation in the health department appears to be more optimistic than the social services group as a whole. Over the period 2001-02 to 2004-05, among the broad groups, budget estimate for Social Services showed the lowest deviation (varying between 18 and 26 percent) from the actual expenditures while the group of Economic Services depicted the largest deviation (varying between 53 and 73 percent).

It is observed that the budgeted expenditures err more often as an overestimate. Very few observations of underestimation were deciphered (even across other services or service

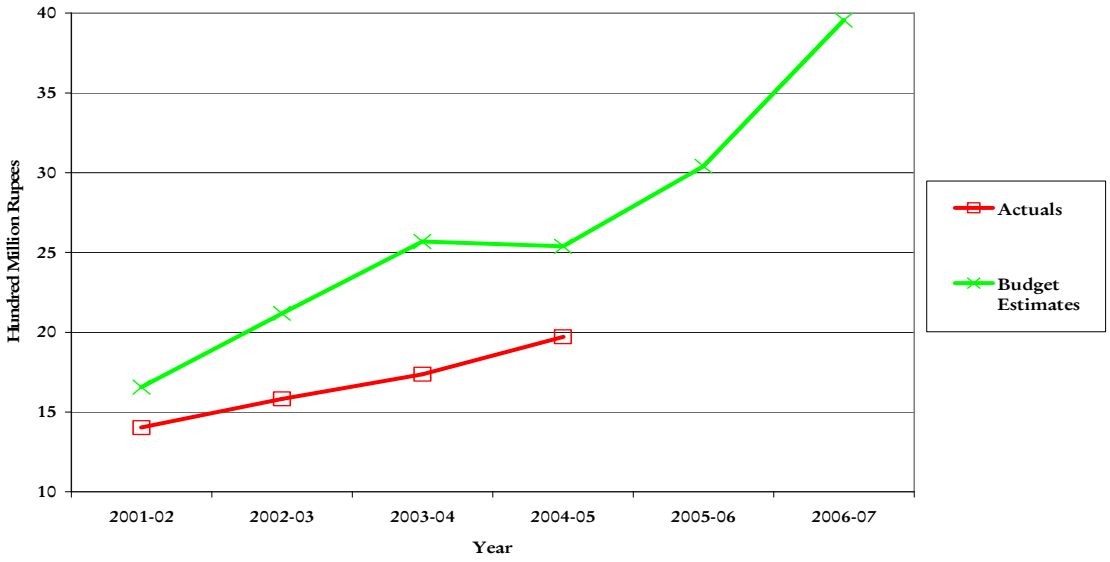
[6] Unless otherwise specified, henceforth in this report 'expenditure' signifies 'public expenditure', 'health' signifies 'direct health' and 'total health' signifies 'direct plus indirect health' as defined in Annexure A.

[7] Alternatively, one may define 'deviation' as [(Actual Expenditure - Budget Estimate) / (Budget Estimate) *100]. The difference between the two alternatives lies in the basis of reference. We chose to use the actual (realized) expenditure as the basis for deviation.

groups) suggesting an inherent tendency to project larger and bigger programmes without any commensurate exercise to adjudge the feasibility of such pronouncements. In literary parlance this has quite often been ridiculed as the incongruence between the 'walk' (actual expenditure) and the 'talk' (budget estimates).

Figure 4 depicts the actual expenditures and budget estimates for the direct health services. It is observed that the actual expenditure in 2004-05 is lower than the budget estimate even for the year 2002-03. However the budgeted figures for 2005-06 and 2006-07 appear to be ballooning. There is thus a need to revamp the budgetary estimation process in the Department of Health and Family Welfare.[8] No clear conclusion may however be drawn, on whether the marksmanship in the budgetary exercise has improved or deteriorated over the years.[9]

Figure 4: Deviation of Budget Estimates from Actual Expenditures: Direct Health Services



Next, we analyse the growth pattern in expenditures presented in Annexure Table A.2, in the following section.

3. Growth and Share of Expenditure on Sub-Groups of Health Services

Admittedly, the four-year period from 2001-02 to 2004-05, is relatively short to establish any trend in expenditures. Moreover, within this short period, wide fluctuations are observed in

[8] It is likely that, due to low buoyancy of revenue and receipts, the health sector continues to face a bigger axe. This however calls for a deeper analysis of the overal structure of the budgetary exercise. A significant part of the overestimation is due to the element of notional budgeting for salary expenditures, in the hope to fill-up the vacant posts. But given that a large number of vacancies continue to exist for the last several years, this alone is insufficient to explain the fluctuation in the deviations.

[9] A simple average of all deviations across the various groups and subgroups showed no change in the extent of deviation between 2001-02 and 2004-05, while the intermittent years depicted an increase in this average. However, any measure of central tendency serves very little useful purpose for this analysis. For example, the lowest overestimation of four percent, is observed for expenditure on Total Health Services in the year 2004-05, but its regional break-up depicts a deviation varying from (-)31 percent for non-exclusive expenditure to 81 percent for expenditure on exclusively rural areas.

the year to year growth rates as presented in table 2 below (figures in a column give the growth over the previous year, and the last column gives the compounded annual average growth rate (CAGR)).

Table 2: Growth in Expenditures (Actuals, percent)

Public Expenditure on	2002-03	2003-04	2004-05	2001-2005
Medical and Public Health	24	19	20	21
Family Welfare	15	-18	5	0
Direct Health	22	14	19	18
Indirect Health	-8	22	64	22
Total Health	5	18	42	21
General Services	13	23	34	23
Social Services	34	18	13	21
Economic Services	38	16	38	30
All Services	27	22	25	25

Some broad patterns may however be deciphered, for example, there has been virtually no growth in expenditure on Family Welfare programmes between the years 2001-02 to 2004-05. But, the expenditure on Medical and Public Health, over the same period, has grown at an average rate of 21 percent per annum. The expenditure on Total Health Services (direct plus indirect) has also grown at an average rate of 21 per cent per annum.

The growth in expenditure on the indirect health services has a salubrious impact, both in the long term as well as in the short term, and thus, needs to be not only sustained but also augmented. However given the resource constraint the allocation exercise has to be carefully calibrated. While the indirect expenditures maybe assumed to be preventive in nature, the direct expenditures have both curative and preventive components. In a developing country with low average educational attainments,[10] it is quite likely that a significant number of cases of disease and affliction may be unreported or undetected.[11] Thus it is perhaps imperative that a large component of direct health expenditures may continue to be allocated towards curative care.[12]

Table 2 also revealed that the Total (Public) Expenditure on all services has grown at 25 per cent per annum over the period 2001-02 to 2004-05. However, Expenditure growth on

[10] Literacy figures (presented in the table below) are often criticised as misleading – given the narrow definition adopted.

Percentage of Literates Out of Population Aged 7 and Above, 2001

Territory	Male	Female	Persons
Uttaranchal	84	60	72
Uttar Pradesh	70	43	57
India	76	54	66

Source: Registrar General of India, Census of India, 2001

[11] For example, in the state of Kerala, the state with the best reported figures on literacy, IMR and expectation of life in India, morbidity is reported to be as high as 255 and 240 per 1000 persons respectively in the rural and urban areas. In comparison, Uttaranchal records 52 and 65, per 1000 persons, respectively in rural and urban areas (See NSSO, Report No. 507, March 2006).

[12] The distinction between curative and preventive expenditure depends critically upon the basis for reference. For example, expenditure on treating any Tuberculosis afflicted person maybe considered as curative from the point of view of the individual, but given the contagiousness of the disease, from the society's point of view this may be categorised as preventive expenditure.

both, Social and General Services have lagged behind growth in expenditure on Economic Services. Thus while the expenditure on General Services,[13] Social Services and Economic Services constituted respectively 34, 36 and 28 percent of the Total Expenditure in 2001-02, by 2004-05 the shares stood respectively at 33, 33 and 32 percent (Table 3).

Expenditure on direct health services constituted 4.64 percent of the total expenditure on all services in 2001-02. This share has declined to 3.96 percent by 2004-05. However, the drop over the same period is sharper, from 5.50 percent to 4.55 percent, if we consider the share of expenditure on direct health services out of total primary expenditure on all services (see memo items at the bottom of Annexure Table A.5).

The lower panel in Table 3 (row 6 - 8) depicts the share of broad groups of services in total expenditure (on all services, row 9). The residual share is accounted for under 'grant-in-aid & contributions' (not shown in the table). In the upper panel, rows 1 and 2 represent the respective share of medical and public health, and family welfare out of expenditure on direct health services. Rows 3 and 4 represent the share of total health expenditure respectively on direct and indirect health services. Row 5 shows total health expenditure as a proportion of expenditure on social services (Row 7).

Table 3: Share in Expenditures (Actuals, percent)

Row	Public Expenditure on	2001-02	2002-03	2003-04	2004-05
1	**Medical and Public Health**	86	87	90	91
2	**Family Welfare**	14	13	10	9
3	**Direct Health**	44	51	49	41
4	**Indirect Health**	56	49	51	59
5	**Total Health**	30	23	23	29
6	**General Services**	34	30	30	33
	Of which **Interest Payments**	16	13	12	13
7	**Social Services**	36	38	37	33
8	**Economic Services**	28	31	29	32
9	**All Services**	100	100	100	100

It is observed that the share of expenditure on direct health services after rising to almost 51 percent in 2002-03, from 44 percent in 2001-02, has again declined sharply to about 41 percent in 2004-05. The increase in the share of expenditure on indirect health services has been on account of the rapid increase in the expenditure on Nutrition programmes in the years 2002-03 and 2003-04, and a sharp increase on Water Supply, Sewerage and Sanitation in the year 2004-05.

The expenditure on direct health services is largely concentrated on Medical and Public Health. Its share in direct health expenditure was about 86 percent in 2001-02 and is observed to be growing steadily, consuming almost 91 percent in 2004-05. As a corollary, the expenditure on Family Welfare (largely comprising of preventive interventions)[14] has

[13] For the period under analysis, interest payments constituted between one-eighth and one-sixth of total expenditure on all services or above 40 percent of the expenditure on general services.

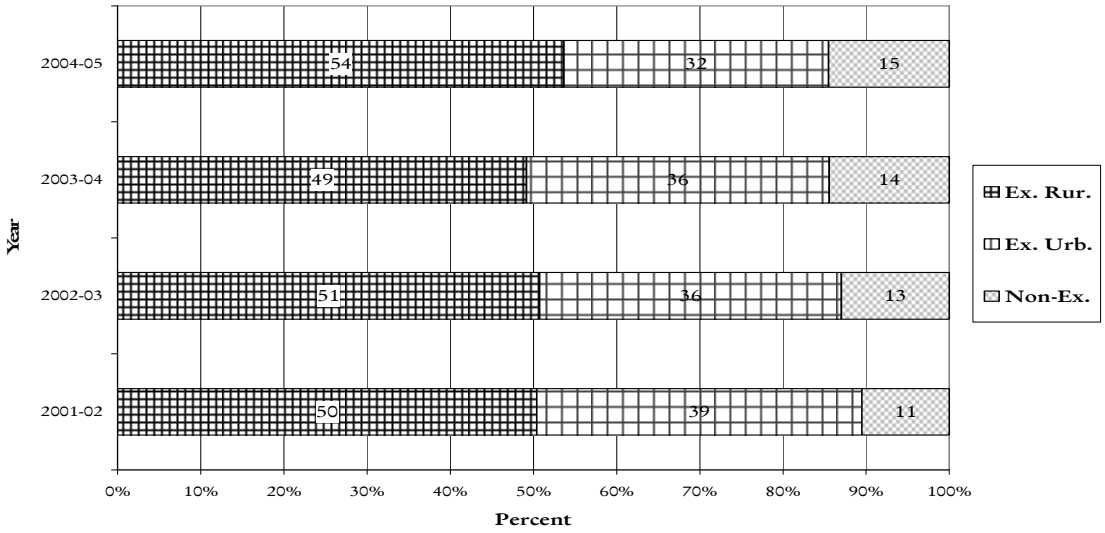
[14] In practice it maybe difficult to segregate expenditure that could be strictly grouped under alternative classifications like say, preventive or curative functions. Similarly, it is extremely difficult to analyse the expenses directed towards primary, secondary, tertiary or quarternary care, from a strictly budget-based analysis.

been declining steadily from 14 percent in 2001-02 to about nine percent in 2004-05 and continuing with the downslide to seven percent in 2005-06 (revised estimates).

4. Regional Distribution of Expenditure

In the year 2001-02, almost 47 percent of the expenditure on Medical and Public Health was allocated over the rural areas and this share has risen to 52 percent in 2004-05 (see Annexure Table A.5 for a summary statement of the expenditure budget). However, in the case of family welfare, almost three-quarters of the expenditure accrued to the rural areas. Figure 5 below depicts the regional shares of the direct health expenditure. It is observed that the share of rural areas has increased from 50 percent in 2001-02 to 54 percent in 2004-05. While the share of urban areas has declined from 39 percent in 2001-02 to 32 percent in 2004-05, the share of non-exclusive expenditure has increased from 11 to 15 percent during the same period. It is quite likely that a relatively larger share of the non-exclusive expenditure is incidental on the urban areas. However, it cannot be easily deciphered if the beneficiaries from this expenditure are mostly urban residents, although there is a high probability of such an incidence due to ease of access (lower private transportation costs in the urban areas as compared to the rural areas).

Figure 5: Regional Distribution of Expenditure on Direct Health Services



Even if all the non-exclusive expenditure is assumed to benefit the rural residents, the distribution of public expenditure over the rural and urban areas remains inequitous, as almost 74 percent of the population inhabits the rural areas.[15]

15

Population Statistics (2001)

Territory	Males	Females	Persons	Rural	Urban
Uttaranchal	4325924 (51)	4163425 (49)	8489349 (01)	6310275 (74)	2179074 (26)
Uttar Pradesh	87565369 (53)	78632552 (47)	166197921 (16)	131658339 (79)	34539582 (21)
India	532223090 (52)	496514346 (48)	1028737436 (100)	742617747 (72)	286119689 (28)

Notes: Figures in parenthesis represent percent of total within a territory.

Source: Table 1.1, Page 3, Statistical Abstract of India, 2004, in turn, Office of Registrar General of India, Ministry of Home Affairs, Census of India, 2001.

Figure 6: Regional Distribution of Expenditure on Total Health Services

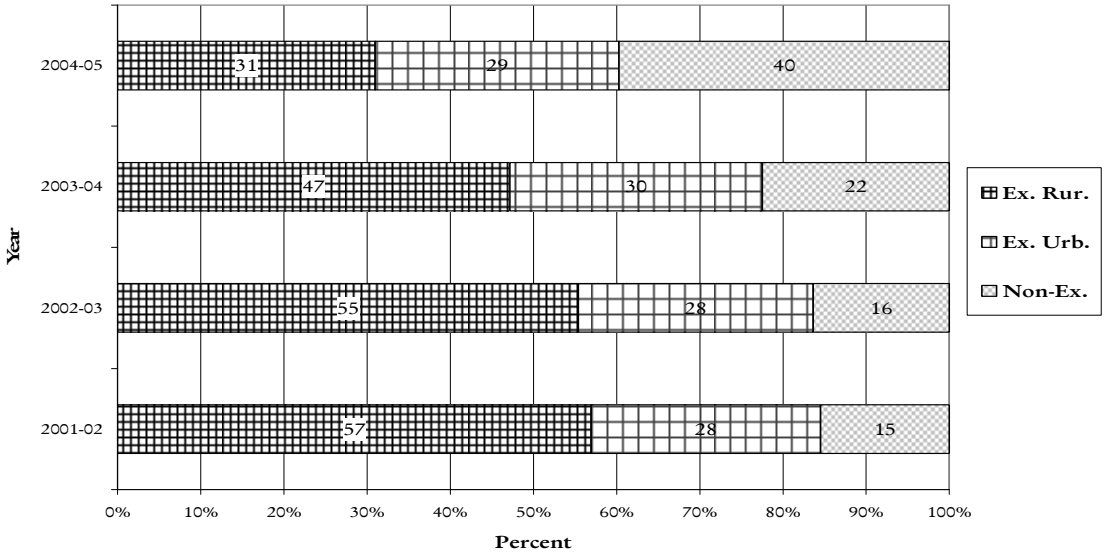


Figure 6 depicts the regional distribution of total (direct plus indirect) health expenditure. It transpires that while the share of expenditure exclusively on the urban areas has remained constant, the share of exclusively rural expenditure has seen a sharp reduction from 57 percent in 2001-02 to 31 percent in 2004-05. However, this needs to be carefully interpreted because the expenditure on Nutrition has been classified under the non-exclusive region and a significant share of expenditure on Water Supply, Sewerage and Sanitation now by-passes the state budget. In any case this presents a disturbing trend if a large share of public expenditure does not get reflected in the budget and the regional incidence of expenditures becomes more obscure.[16] Such an allocation of expenditure, perhaps, significantly impacts the (long-term) measurable outcomes like expectation of life or infant mortality rate.

For example, Table 4 below reveals that infant mortality rate in Uttaranchal is almost 35 percent lower than the all-India average (41 in Uttaranchal as compared to the all-India average of 63). However, a wide difference exists between the rural (62) and urban (21) areas in Uttaranchal. The reported IMR in rural areas is almost thrice that in the urban areas. Thus while the IMR in the urban areas of Uttaranchal is almost half that of the all-India average, the achievement in the rural areas is only about 10 percent better than that for India as a whole. The observed outcome (on the IMR attribute) in Uttar Pradesh is significantly inferior to the all-India average, and is almost twice that for Uttaranchal.

Table 4: Infant Mortality Rate, 2002 (per 1000 Live Births)

Territory	Total	Rural	Urban
Uttaranchal	41	62	21
Uttar Pradesh	80	83	58
India	63	69	40

Source: Table 1.5, Page 21, Statistical Abstract of India, 2004.[17]

[16] Public expenditure may get further obfuscated with the expansion of the central government financed National Rural Health Mission (NRHM) whereby the funds are directly routed to the state health societies.
[17] IMR for 2002 for smaller states and union territories (UTs) are based on the three-year period 2000-2002.

Data relating to expectation of life, estimated from the sample registration system (SRS), is available for the major States only. As such this is not available separately for the state of Uttaranchal. For expositional purpose, we assume that the outcome on this attribute for Uttaranchal is analogous to that for the state of Uttar Pradesh. Table 5 then reveals a significant difference between Uttar Pradesh and the all-India average. Further, Uttar Pradesh appears to be an aberration where, the expectation of life (at birth) for females is lower than that for males. The observed life expectancies at various ages are also lower in Uttar Pradesh as compared to the all-India average as shown below.

Table 5: Expectation of Life (years)

Territory	Region	At Birth			Age 60			Age 70		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
India	Rural	61.2	60.3	61.8	16.9	15.7	17.6	11.1	10.2	11.4
	Urban	67.9	66.3	69.2	19.1	17.6	19.9	13.1	11.8	13.4
	Total	62.5	61.6	63.3	17.2	16.1	18.3	11.4	10.6	12
Uttar Pradesh	Rural	58.2	58.9	57.6	15.6	15.3	15.8	9.5	9.5	9.4
	Urban	63.1	62.4	63.7	18.1	16.4	19.5	12.4	10.9	13.6
	Total	59.1	59.4	58.5	16.1	15.5	16.6	10.1	9.8	10.2

Notes: Data relates to 1998-2002.
Source: Table 1.8, Page 26-7, Statistical Abstract of India, 2004

The expectation of life for females in Uttar Pradesh varies between six to 15 percent below the all-India average at different ages, while that for males varies between one to eight percent below the all-India average (at corresponding ages). Significant differences are also observed across the rural and urban regions, and these are more pronounced for women across all ages.

5. Economic Classification of Expenditure

Annexure Table A.4 depicts the detailed break-up of the direct health expenditure incurred through the state budget under five broad (economic) heads of expenses. The first of these is a) *staff*ing expenses (compensation to employees or employee remuneration) consisting of Pay, Wages, Dearness Allowance, Travelling Allowance, Transfer Travelling Allowance, Other Allowances, Medical Reimbursement, Interim Relief, Leave Travel Concession and Dearness Pay. The second group of expenses, referred as b) *non-staff personnel* expenses, is similar to staffing expenses. It may also have some component benefitting own staff, but is distinguished from expenditure on regular wages and salaries.[18] It includes expenditure on Honourarium Payments, Professional and Special Services, Grant-in-Aid / Contributions, Student Salary / Scholarships and Training Expenditures. The third group consists of c) *Office Administration* including Office Expenses, Electricity Dues, Water Taxes / Water Charges, Printing & Stationery, Office Furniture and Equipment, Rents, Rates and Taxes, Major and Minor Construction Works, Maintenance, Other Expenses, Purchase of Computer Hardware and Computer Stationery. A fourth group designated as d*) Tansportation and Communication* expenses, includes Telephone Expenses, Purchase of Jeep & Car and Petrol & Oil / Maintenance of Vehicles. The last group consists of expenses that arise out of patient interaction or expenditure directly imbibed by the patients or recipients of health services. These e) *Drugs and Material*

[18] Often, there is a tendency to exclude 'wages' from staffing expenses and to exclude 'construction' (major and minor) from office administration. While, in certain instances there maybe some merit in such exclusion, in most cases this maybe misleading.

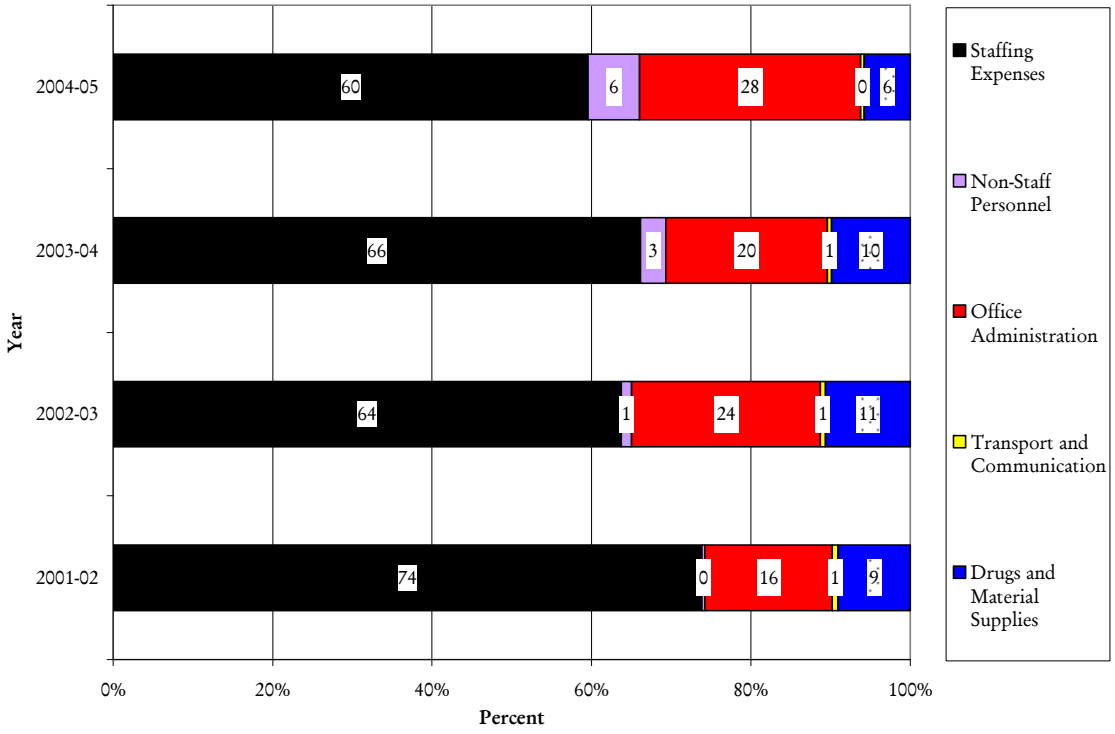
Supplies expenditures include those on Machine Tools, Material and Supplies, Medicine and Chemicals, Maintenance of Dispensary and Diet Expenses.

The data pertaining to the economic classification is drawn from the detailed demand for grants. As such the totals from the detailed demands may not match with the totals as shown in the data collected from the Finance Accounts. There are two probable reasons for the difference, (a) the figures reported in the detailed demands are the *gross* figures whereas those reported in the Finance Accounts and the Annual Financial Statement (AFS) of the Budget are the *net* figures. The difference between gross and net appears due to the presence of some *recoveries*. Thus the presence of recoveries may lower the figures presented in the Finance Accounts. The second reason for divergence is (b) the *transfer to / from reserve funds*. When money is transferred to a fund then the Finance Accounts and the AFS figure would be higher and when money is transferred from a reserve fund the Finance Accounts figures would be lower. Both recoveries and transfers to / from funds appear in the Finance Accounts, but a detailed break-up is not available by economic classification.

Figure 7 below portrays the structure of expenditure on direct health services by economic classification. As per the categorisation described above, staffing expenses constitute the largest proportion, although its share has declined sharply from 74 percent in 2001-02 to 60 percent in 2004-05. The expenditure on non-staff personnel appears to be increasing, although it constitutes only about six percent of the total expenditure in 2004-05. A probable reason could be a gradual move towards outsourcing of some activities. However, the rapid expansion of the share of office administration expenditure indicates otherwise. Its share in total expenses increased from 16 percent in 2001-02 to 28 percent in 2004-05. This increase could, possibly, be due to the relative newness of the state that calls for an expansion in the administrative machinery to deliver the services. Whatever be the reasons, this has contributed to a decline in the share of expenditure on drugs and material supplies. As described earlier, expenditure under this head are the direct expenses imbibed by the service recipients. The share of such expenses appears to be falling precipitously and constituted a mere six percent of the total in 2004-05.[19]

[19] Apart from the usual limitation in drawing up the expenditure groups, one cannot presume that the share across the economic classification should remain unchanged. Given the size of the state, and its predominantly hilly terrain, it was expected that transport and communication expenses could be a significant component of the total expenditure. However, its share was found to be negligible. It is quite likely that a large part of the transportation costs (Ambulance services, etc) are borne by individuals and provided by private operators only.

Figure 7: Structure of Expenditure by Economic Classification: Medical and Public Health, and Family Welfare (Direct Health)



The structure of expenditure across the rural and urban regions, are similar, except some minor differences in the proportions for the categories. Within the expenditure on direct health services, the expenditure structure of Medical and Public Health component presented some sharp differences with the expenditure structure of Family Welfare service.[20] Table 6 below presents the structure of expenditure on sub-groups of services and one observes that almost 90 percent of the expenditure under family welfare can be classified under staffing expenses with the remaining accounted under either office administration or drugs and material supplies.

Table 6: Economic Classification of Public Expenditure on Health (Percent)

Service	Year	Staffing	Non-Staff Personnel	Office Administration	Transportation and Communication	Drugs and Material Supplies
Medical and Public Health	2001-02	71	0	18	1	10
	2004-05	57	7	30	0	6
Family Welfare	2001-02	89	1	5	1	4
	2004-05	92	0	6	1	1
Direct Health	2001-02	74	0	16	1	9
	2004-05	60	6	28	0	6

As per the available information for the Department of Health and Family Welfare, in the State of Uttaranchal, 23 percent of the sanctioned strength (manpower) continues to

[20] Due to the relatively smaller proportion of the family welfare component, this difference gets masked when analysing the structure of total (direct) health expenditure. The total expenditure thus mimics the structure of expenditure on Medical and Public Health.

remain vacant and the figure is as high as 48 percent for the critical cadre of medical personnel. District-wise distribution of the vacancies may likely reveal severe asymmetry.[21] However, it is obvious that if these positions were to be filled, a much larger proportion of the expenditure would be consumed by staffing expenses. Some researchers' lament that a high proportion of Wages and Salaries (that is *staffing* expenses, and by corollary a low proportion on Drugs and Material Supplies) in the total expenditure is reminiscent of poor service delivery.[22] Significant complementarities exist between the expenditure categories chosen above, for efficient delivery of service. However, if one were to prioritise expenditure, it is imperative that the first claim or charge would be towards appropriate staffing. This maybe followed by expenditure on drugs and material supplies. The share of expenditure on office administration, may be substantial initially, but should soon start to decline over time.

We must hasten to add that the approach towards expenditure analysis based on observed shares and proportions across regions has clear limitations in providing cues towards redirecting or restructuring of expenditures. This has to be supplemented with analysis that could decipher the distinctive needs of the rural and urban areas or between the hill and the terai areas. For example, the per capita cost of servicing a densely populated area may be lower, due to technological indivisibility and economies of scale, than that for a widely dispersed population. On the contrary a densely arranged population may have larger needs either due to higher reporting of incidence or due to enhanced vulnerability from proximity with the afflicted individuals.

6. Public Expenditure on Health by Different Levels of Government

The discussion in the previous sections concentrated on the analysis of public expenditure as reflected in the State budget only. In this section we attempt to identify expenditures incurred in Uttaranchal by levels of government and in the next section we analyse the financing pattern of these expenditures.

Public expenditure on health, ideally, should include three components corresponding to the three levels of government in the Indian federal structure. Although, health services are essentially envisaged as a State subject under the segregation of obligatory functions (between the Union and the States) as per the Constitution, the amendments (73rd and 74th) to the Constitution further envisaged the delegation and devolution of some of these functions to the IIIrd tier of local governments. It transpires that in the state of Uttaranchal, the local governments have nil / negligible own revenue[23] and correspondingly negligible allocation on health services.[24] Expenditure incurred through the local Bodies (or even NGOs and certain individuals, shown distinctively in the table below) are essentially grants-in-aid and contributions from the state budget.

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[21] The data available on the district-wise manpower in position could not be utilized due to inconsistencies in the totals for the various posts.

[22] This report however does not argue that a higher or increasing share of expenditure on drugs and material supplies would make for a more desirable expenditure structure or that this may be suggestive of improvement in service delivery.

[23] Dehradun Municipal Corporation may be an exception.

[24] For example, *Rogi Kalyan Samiti's* in several states collect some user-charges (for hospitalisation services) which are then pumped back for enhancement of public expenditure on health and improvement in service delivery. No such *Samitis* have been formed yet in Uttaranchal.

Table 7: Direct Health Expenditure by Type of Expenditure and Levels of Government (percent)

Type of Expenditure	Level of Government	2001-02	2002-03	2003-04	2004-05
Revenue	Central Government	0.2	1.0	1.1	0.9
	State Government	93.7	84.8	79.4	78.8
	Local Bodies	0.0	0.9	2.9	0.1
Capital	Central Government	0.0	0.0	0.0	0.0
	State Government	6.0	13.3	16.6	20.2
	Local Bodies	0.0	0.0	0.0	0.0

The off-(state)-budget expenditure, given the extant nascent capacity at the local (IIIrd tier) level, essentially comprises of (direct) central funding through Special Purpose Vehicles (SPVs) operating at the state level such as State AIDS Control Society, and other state health societies (for Health), Swajal Dhara (for Water Supply, Sewerage and Sanitation) etc. The central government expenditure on direct health services in the states' is likely to increase significantly with the launch of National Rural Health Mission (NRHM) in 2005-06 (see Annexure C).

Expenditure by each level of government, maybe grouped under three heads, (i) revenue expenditure, (ii) capital expenditure, and (iii) net loans and advances.[25] It is observed that the direct central funding (or expenditure) is on account of revenue expenditure only, and among the services analysed here, only for the sub-groups Medical and Public Health, and Water Supply, Sewerage and Sanitation services. Net Loans and Advances from the State budget appear only for the sub-group on Water Supply, Sewerage and Sanitation. These however, constitute a negligible proportion and are not discussed any further.

Table 7 reveals that there has been very little progress in terms of decentralisation of expenditure and the local governments play a minor role. Moreover, almost four-fifths of expenditure on direct health services is current (revenue) in nature. Between 2001-02 and 2004-05, the share of capital expenditure has grown from six percent to 20.2 percent, but it must be borne in mind that such expenditures may entail a commensurate increase in current expenditures in the immediate future.

Expenditure structure for total health services (direct plus indirect) shown in table 8, reveals a reversal in the process of decentralisation (to local bodies). While, local bodies expended almost half of the total health expenditure in 2001-02, the share is negligible for the year 2004-05.

[25] This budgetary classification into *revenue* expenditure (starting with the digit 2 in the accounts) is to signify expenditure on operations and maintenance as opposed to *capital* expenditure (starting with the digit 4) corresponding to creation of new assets. *Loans and advances* (starting with the digit 6) are extended to para-statals or to individuals. Quite often, in most states, there is little or no effort to recover such loans by the department. In several cases these loans maybe converted into equity (if it is a para-statal) or waived-off (if it is an individual), effectively impinging as public expenditure. The analysis in this section and the following one does not include loans and advances.

Table 8: Total Health Expenditure by Type of Expenditure and Levels of Government (percent)

Type of Expenditure	Level of Government	2001-02	2002-03	2003-04	2004-05
Revenue	Central Government	0.1	13.1	7.8	7.8
	State Government	46.9	80.3	71.4	83.0
	Local Bodies	50.2	0.4	10.5	0.0
Capital	Central Government	0.0	0.0	0.0	0.0
	State Government	2.8	6.1	10.3	9.2
	Local Bodies	0.0	0.0	0.0	0.0

In contrast to the direct health services, there appears to be a negligible increase in capital expenditure on indirect health services as a result the share of capital expenditure on total health services has grown from about 2.8 percent in 2001-02 to 9.2 percent in 2004-05.

7. Structure of Financing of Health Expenditure

Expenditure incurred through the State budget may be categorised into two groups corresponding to States expenditure on own programmes and the allocation on centrally sponsored schemes (CSS).[26] The contribution of central government towards the CSS along with the direct funding of SPVs gives the value of expenditure financed by the central government. The other important source of finance for public expenditure is External Aid (by donors). Table 9 below presents the financing of public expenditure on health in the state of Uttaranchal.

External aid has been the fastest growing source of finance, and it appears that this has been utilised largely to scale-up capital expenditure. Thus the share of external aid has increased from one-half of a percent in 2001-02 to 9.2 percent in 2004-05. On the contrary central financing has grown very little with the result that its share has shrunk from 15.4 percent in 2001-02 to 11.1 percent in 2004-05. It thus appears that a substantial part of the growth in public expenditure (between 2001-02 and 2004-05) on health in Uttaranchal is contributed by the finances made available from external aid and much less by any expenditure reallocation from the states own resources.

Table 9: Financing of Direct Health Expenditure by Type of Expenditure (percent)

Type of Expenditure	Financing Agency	2001-02	2002-03	2003-04	2004-05
Revenue	External Aid (Donor)	0.4	2.5	2.4	3.6
	Central Government	15.4	18.1	11.6	10.3
	State Government	78.3	66.1	69.4	65.9
Capital	External Aid (Donor)	0.1	2.7	2.4	5.6
	Central Government	0.0	0.6	3.6	0.8
	State Government	5.9	10.0	10.7	13.8

While this calls for a much more detailed study, care must be taken about the particular incentives faced by the state government. For example, it transpires that in the year 2001-

[26] Note that most of the centrally sponsored schemes (CSS) directed at augmenting health services are (almost) 100 percent financed by the centre and routed through the State budget. For example, on an average, the center's share in the health sector CSSs was above 95 percent in the years 2001-02 to 2004-05, although there are some CSSs with a central component of 88, 75 and 50 percent. In certain other services though, the allocation on CSS may be contingent upon larger, matching or proportional, contribution by the state.

02, external aid financed less than one-half of a percent of Uttaranchal state's current expenditure on direct health services, while by 2004-05 this had risen to almost five percent. During the same period, the share of current expenditures financed by states own resources, remained almost unchanged (at about 83 percent). Again, between the years 2001-02 and 2004-05, the share of capital expenditure, on direct health services in Uttaranchal, financed by external aid increased rapidly from 1.7 percent to more than 28 percent, while the share of such expenditure financed from state's own resources declined from 98.3 percent to less than 70 percent. Thus external aid appears to have come to play a critical role in the health service provisioning in the state of Uttaranchal.

8. Summary

This report reviews public expenditure on health in the State of Uttaranchal. The expenditure is explored along several dimensions, by nature of intervention and functions ((a) direct, that is, medical and public health, and family welfare, and (b) indirect, that is, water supply, sewerage and sanitation, and nutrition), by type of expenditure (revenue, capital), by regions (rural, urban) and by economic (staffing, transportation, drugs etc) classification.

On several attributes (like, per capita GSDP, per capita public expenditure on health, per capita private expenditure on health), Uttaranchal is placed close to the median among the Indian states. However, when wide disparities exist this provides for poor consolation. In the year 2004-05, public expenditure constituted about one-third of the direct health expenditures incurred by the residents of Uttaranchal (Table 1). Public expenditure on health constituted about 1.23 percent of the state GSDP for that year. The national CMP of the incumbant UPA government has proposed to raise health expenditure to between 2-3 percent of GDP by the year 2008. Preliminary analysis indicates that there may be significant multiplier effect of health related public expenditure on income generation.

It is observed that the budgeted expenditures often err as an overestimate. In the year 2004-05, the budget estimates for direct health services, exceeded the actual expenditures by 29 percent. The actual expenditure in 2004-05 is lower than the budget estimate for the year 2002-03. Clearly, there is a need to improve fiscal marksmanship and bring about some semblance between the 'walk' (actual expenditures) and the 'talk' (budget estimates).

In Uttaranchal, the rate of growth in public expenditure on social services is lower than the rate for economic services. Within the social services, public expenditure on indirect health services has grown faster than that on direct health services. Increase in incomes and literacy often increases the demands on the public systems, as is evidenced by the experience of several developed economies and even Indian states like Kerala and Haryana. It is quite likely that the nature of public institutions, delivering health services, would have to undergo significant metamorphosis. But, sustained public expenditure on health is most likely to induce efficiency in private health expenditures (and costs) and improve health outcomes.

Regional distribution (between rural and urban areas) of direct health expenditure appears to be inequitous, that is further magnified upon inclusion of the indirect health expenditures. Indirect health services are often complementary to the direct health

services, and a greater co-ordination in these expenditures may provide the requisite synergy for speedier achievement of the desired outcomes.[27]

Incidence-analysis from budgetary classification is severely circumscribed as the extant budget description is not amenable to map outlays onto outcomes. Efforts should be inititated to decipher the impact of expenditure benefiting the poor and non-poor, the scope for preventive and curative intervention, as also the emphasis on primary, secondary or tertiary care. Further, computerisation of treasury transactions would assist in tracking expenditure distribution across districts and promote bottom-up planning.

Staffing expenses consume nearly two-thirds of the public expenditure on health. Some researchers' lament that a high proportion of Wages and Salaries (that is *staffing* expenses, and by corollary a low proportion on Drugs and Material Supplies) in the total expenditure is reminiscent of poor service delivery. But, there is no reason to believe that a higher proportion of health expenditure on drugs and material supplies makes for a better quality of expenditure (in terms of improving welfare). Significant complementarities exist between the expenditure categories chosen above, for efficient delivery of service. However, if one were to prioritise expenditure, it is imperative that the first claim or charge would be towards appropriate staffing. This maybe followed by expenditure on drugs and material supplies. The share of expenditure on office administration, may be substantial initially, but should soon start to decline over time. Thus a simple analysis of expenditure structure may not be sufficient to suggest an exercise in expenditure restructuring.

A large number of vacancies exist in the critical cadre of medical personnel, and the vacancies perhaps asymmetrically and unfavourably impact the rural or remote areas and districts. Attempt to fill-up the existing vacancies, may lead to a rapid expansion of staffing expenses – but, without commensurate complementary (and also supplemental expenditures like roads, schools), this is unlikely to retain incentive and motivation, and unlikely to yield tangible benefits.

No perceptible progress is noticed in terms of decentralisation of direct health expenditure to local governments. On the contrary, expenditure structure for total health services (direct plus indirect) shown in table 8, signals a reversal in this process. Local bodies

[27] Several states, including Uttaranchal, commonly desire to set health outcome targets achieved by Kerala. But given their features (see table below), Uttaranchal more closely resembles Himachal Pradesh and perhaps faces similar cost disabilities. Health targets already achieved by this neighbouring state may therefore be a feasible benchmark for Uttaranchal, in the short term.

Description	Uttaranchal	Himachal Pradesh	Kerala
Area (Square Kilometers)	53483	55673	38863
Forest Area (percent of total, 2003)	65	67	29
Population in Thousands, March 1, 2004	8927	6309	32707
Proportion of SC / ST, Census 2001	20.9	28.7	10.9
Rural Population Share (percent, March 1, 2004)	73.5	89.8	74.2
Poverty Ratio, 1999-2000, NSSO	31.15	7.63	12.72
Literacy Rate (percent)	72 (M: 83, F: 60)	77 (M: 85, F: 67)	91 (M:94, F:88)

expended almost half of the total health (direct plus indirect) expenditure in 2001-02, but this has plummeted to a negligible figure for the year 2004-05.

In the year 2001-02, external aid financed less than one-half of a percent of Uttaranchal state's current expenditure on direct health services, while by 2004-05 this had risen to almost five percent. During the same period, the share of current expenditures financed by states own resources, remained almost unchanged (at about 83 percent). This reflects a gradual withdrawal of central government financing of current expenditures.

Between the years 2001-02 and 2004-05, the share of capital expenditure, on direct health services in Uttaranchal, financed by external aid increased rapidly from 1.7 percent to more than 28 percent, while the share of such expenditure financed from state's own resources declined from 98.3 percent to less than 70 percent. External aid appears to have come to play a critical role in the health service provisioning in the state of Uttaranchal.

The share of capital expenditure has grown from six percent to 20.2 percent between the years 2001-02 and 2004-05. This is likely to place severe demands for increase in current expenditures for the immediate future. Further, if capital expenditure is thinly spread-out, it is likely to force thin spreading of recurring (current or revenue) expenditure, adversely impacting the effectiveness / efficiency of public expenditure.

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Annexures

Annexure A: Definition of Health Service

In this report, *health* is defined in two ways. The first, a narrow definition, covering the *direct* expenditures impacting health services in the State, consists of those on Medical and Public Health, and Family Welfare.[28] These are the functions administered by the directorate of health in the Indian states. The second, and an extensive, definition includes expenditures that are often complementary to the effectiveness of the direct expenditure programmes. Such (*indirect*) expenditures, in this report, include those on Water Supply, Sewerage and Sanitation, and Nutrition programmes under Social Security and Welfare. [29] It is, perhaps, fair to assume that expenditure on these services have a profound influence on health outcomes and the corresponding indicators like, 'infant mortality rates' and 'expectation of life', commonly used for analytical and comparative purposes.

One may argue that there are other services (and corresponding expenses) that go on to improve the health outcomes, but perhaps their influence is significantly weaker than those included above. Two such important services influencing health and quality of life (well-being) consists of expenditure on Mid-day Meal Scheme[30] and Housing (or shelter).[31] A secondary influence is also attributed to expenditure on Education, while some tertiary influence could be deciphered from improved expenditure on Infrastructure especially Transportation and Energy. Such expenditures with relatively weaker influence over health outcomes are however not included in this report. As described above, most of the discussion, in this report, pertains to the expenditure (or, definition) of health under the administrative umbrella of the department of health, however, before summarising, we have attempted to include an analysis encompasssing the wider definition.

[28] In budgetary terms these correspond to the accounting (major) heads 2210 and 2211 for revenue expenditure and 4210 and 4211 for capital expenditure.

[29] Revenue expenditure on Water Supply, Sewerage and Sanitation appears under the major head 2215. Also, note that we have included all the expenditure on Social Welfare as Nutritional expenditure. Normally, Nutrition (2235.02.102) appears as a minor head (102) under the major sub-head (02) Social Welfare. However, in several states the budget presentation does not clearly distribute such expenditures over the minor heads (perhaps due to practical difficulties in adhering to the finer distinctions). The expenditure under this head goes towards welfare of handicapped, destitutes, women and children. For example, for the handicapped this may take the form of provisioning of transport and communication aids, for children there are nutritional programmes included under the Integrated Child Development Scheme (ICDS) with a major component to provide supplementary nutrition (and forming more than 80 percent of the total expenditure under this major sub-head). Similarly, there may be expenditure for nutritional programmes directed towards pregnant women etc.

[30] The Mid-day Meal programme (2202.01.101.01) is a 100 percent centrally sponsored scheme, administered in all government and government-aided primary schools (under the sub-head of 'Elementary Education'). In the extant form the expenditure under this programme is routed through the state budgets, however, this is proposed to be routed outside the state budgets when the programme is reoriented under the Sarva Shiksha Abhiyan (a 100 percent central scheme directed for achievement of 100 percent literacy across the nation).

[31] The government mostly had a very limited role in housing services. In recent years though, there has been a considerable increase in public expenditure, especially with projects under Indira Awaas Yojana, Slum rehabilitation schemes etc.

Annexure B: Estimation of Private Expenditures and Comparison Across States

The state Finance Accounts present the audited accounts of revenues and expenditures. The expenditure on Medical and Public Health services and Family Welfare services under the two heads of account namely, revenue, and capital, are added to arrive at the total public expenditure on health. In budgetary terms these correspond to the accounting (major) heads 2210 and 2211 for revenue expenditure respectively on Medical and Public Health, and Family Welfare services. Analogously, the capital expenditures are recorded under the codes 4210 and 4211. We have utilised the final audited figures for 2004-05.

The out of pocket expenses incurred by the individuals in the states, is estimated from the NSSO report (Report No. 507). This report presents certain results on Morbidity, Health Care and the Condition of the Aged, from the 60th round of survey conducted between January – June 2004. These are presented separately for those residing in the rural and urban areas. In particular, we have utilised the data on (a) proportion of ailing persons (Statement 13), (b) percentage of ailing persons undertaking treatment (Statement 19), (c) average medical expenditure for non-hospitalised treatment (Statement 29.R and 29.U), (d) proportion of persons hospitalised (Statement 21.2), (e) percentage of persons undergoing treatment in public and private hospitals (Statement 24.1), and (f) average medical expenditure incurred on hospitalisation (Statement 34.1R and 34.1U). The private expenditure reported in Table 1 (in the text) does not include other related expenditures or loss of income due to ailment. We assume medical expenditure to be synonymous with private health expenditure. The proportion of ailing persons is based on a 15-day recall while the proportion of persons hospitalised is based on 365 days recall. We have not adjusted for the likely duplicacy of the latter being included in the former.

The population data is collected from the Report of the Technical Group on Population Projections Constituted by the National Commission on Population. We have utilised the projection results for July 1, 2004.

The Gross State Domestic Product (GSDP) for the states was collected from the July 21, 2006 update of the Central Statistical Organisation (CSO). We have utilised the figures for 2004-05 at current prices (1993-94 series).[32]

Annexure Table A.1 presents the sharing of expenditure on health between the state governments and individuals residing in those states alongwith some summary statistics. Column 2 gives the estimated per capita expenditure incurred by individuals out of their own pockets while column 3 presents the per capita public expenditure on health through the state budget.[33] Column 4 presents the per capita GSDP of the state while column 5 depicts the public expenditure as a percentage of state's GSDP and column 6 expresses it as a percentage of total expenditure on health.

[32] Chattisgarh and Delhi were dropped from the tables as the GSDP figure for Chattisgarh (for 2004-05) and the audited expenditure figures for Delhi were not available.

[33] This does not include the expenditure on health incurred directly by the central government, the local governments and certain other societies or non-governmental organisations (NGOs), in the states. Such expenditures are not reflected in the budgets of the state governments. See section 6 & 7 in the text for the distinction between expenditure and financing.

Annexure C: National Rural Health Mission (NRHM)

The NRHM (2005-12) was "launched to carry out necessary architectural correction in basic health care delivery system" by the Government of India. Further, "[T]he goal of the mission is to improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children."

The NRHM funds are directly routed to the state-level societies and thus by-pass the state budget. The analysis in the text mostly pertains to actual (public) expenditures over the period 2001-2005 and thus relates to the period prior to the launching of the mission.

Public expenditure on health under the NRHM, financed by the central government, envisages a sum of Rupees 746 lakhs and 1208 lakhs respectively for the years 2005-06 and 2006-07, for the state of Uttaranchal. The extant size of these funds, for the years 2005-06 and 2006-07, amounts respectively to 2.0 and 2.2 percent of the state budget estimates for expenditure on direct health services in these years. However, "[T]he mission adopts a synergistic approach by relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water." The funds envisaged under NRHM for Uttaranchal thus amount to 0.95 and 1.26 percent of the budget estimates for total (direct plus indirect) health services respectively for the years 2005-06 and 2006-07.

While the present size of such expenditure may not be large, it is not insignificant either. Analysis of public expenditure on health in future may thus need to include the monies spent through societies established for implenting NRHM.

Sources: http://www.mohfw.nic.in/national_rural_health_mission.htm
http://www.mohfw.nic.in/NRHM%20Mission%20Document.pdf

Annexure Table A.1: Private and Public Expenditure on Health: Comparison Across States, 2004-05

States	Rupees Per Capita			Percent	
	Private	Public	GSDP	Public Expenditure / GSDP	Public Expenditure / Health Exp.
1	2	3	4	5 = 3/4	6 = 3/(2+3)
Andhra Pradesh	562	190	25553	0.74	25
Assam	340	151	15539	0.97	31
Bihar	347	71	6474	1.10	17
Gujarat	565	181	33510	0.54	24
Haryana	831	174	36732	0.47	17
Himachal Pradesh	469	588	31717	1.85	56
Jammu & Kashmir	370	467	19555	2.39	56
Jharkhand	302	150	15305	0.98	33
Karnataka	401	189	26928	0.70	32
Kerala	1042	281	30647	0.92	21
Madhya Pradesh	360	140	15999	0.87	28
Maharashtra	756	194	36401	0.53	20
Orissa	259	165	15521	1.06	39
Punjab	1033	239	34649	0.69	19
Rajasthan	405	179	18293	0.98	31
Tamil Nadu	603	210	29391	0.72	26
Uttaranchal	558	277	22510	1.23	33
Uttar Pradesh	683	127	13275	0.96	16
West Bengal	608	169	24732	0.68	22
Summary Statistics					
Maximum	1042	588	36732	2.39	56
Minimum	259	71	6474	0.47	16
Median	558	181	24732	0.92	26
Average	552	218	23828	0.97	29

Source: See Annexure B.

Notes: The median and the average reported above are unweighted. The population weighted measures of central tendency would be significantly lower for all variables. The state of Uttaranchal is highlighted in grey and for each of the columns (variables), the poorest figures are highlighted in red and the best figures are highlighted in green.

Annexure Table A.2: Public Expenditure on Health and other services in the State of Uttaranchal (Rupees in lakhs)

Description		Actuals				Budget Estimates					
		2001-02	2002-03	2003-04	2004-05	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Medical and Public Health (MPH)	**Ex. Rur.**	6012.15	7503.75	8712.38	11701.78	8463.43	13117.82	13113.25	15976.31	16649.44	21271.58
	Ex. Urb.	5767.34	6563.79	7471.37	7743.45	6194.05	8212.24	9700.20	9085.68	12531.19	18150.78
	Non-Ex.	1040.82	1781.52	2688.22	3216.33	1166.32	1520.16	5689.47	4298.73	5631.75	10202.12
	Total	12820.31	15849.06	18871.97	22661.56	15823.80	22850.22	28502.92	29360.72	34812.38	49624.48
Family Welfare (FW)	**Ex. Rur.**	1513.88	1772.07	1551.64	1591.98	1324.61	2118.85	1708.07	1795.69	2092.81	4993.75
	Ex. Urb.	69.65	77.54	121.08	137.13	84.32	91.32	98.32	187.82	37.45	55.86
	Non-Ex.	531.12	589.71	327.89	376.85	907.34	907.81	608.93	629.89	897.01	971.61
	Total	2114.65	2439.32	2000.61	2105.96	2316.27	3117.98	2415.32	2613.40	3027.27	6021.22
Direct Health Services (MPH + FW)	**Ex. Rur.**	7526.03	9275.82	10264.02	13293.76	9788.04	15236.67	14821.32	17772.00	18742.25	26265.33
	Ex. Urb.	5836.99	6641.33	7592.45	7880.58	6278.37	8303.56	9798.52	9273.50	12568.64	18206.64
	Non-Ex.	1571.94	2371.23	3016.11	3593.18	2073.66	2427.97	6298.40	4928.62	6528.76	11173.73
	Total	14934.96	18288.38	20872.58	24767.52	18140.07	25968.20	30918.24	31974.12	37839.65	55645.70
Water Supply, Sewerage and Sanitation (WSSS)	**Ex. Rur.**	11890.37	10595.91	9662.75	5237.39	13000.00	13101.10	16230.00	15798.06	14169.32	15943.24
	Ex. Urb.	3563.19	3493.66	5237.39	9662.75	6413.16	4839.13	2465.63	3105.74	15965.00	12100.00
	Non-Ex.	1520.04	521.52	961.30	14678.03	1815.00	1198.63	2382.65	2587.98	2192.96	2304.96
	Total	16973.60	14611.09	15861.44	29578.17	21228.16	19138.86	21078.28	21491.78	32327.28	30348.20
Nutrition Social Welfare (NSW)	**Ex. Rur.**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ex. Urb.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Non-Ex.	2179.21	2976.94	5527.86	5477.70	4011.90	7267.30	7726.16	8930.67	8086.26	10148.50
	Total	2179.21	2976.94	5527.86	5477.70	4011.90	7267.30	7726.16	8930.67	8086.26	10148.50
Indirect Health Services (WSSS + NSW)	**Ex. Rur.**	11890.37	10595.91	9662.75	5237.39	13000.00	13101.10	16230.00	15798.06	14169.32	15943.24
	Ex. Urb.	3563.19	3493.66	5237.39	9662.75	6413.16	4839.13	2465.63	3105.74	15965.00	12100.00
	Non-Ex.	3699.25	3498.46	6489.16	20155.73	5826.90	8465.93	10108.81	11518.65	10279.22	12453.46
	Total	19152.81	17588.03	21389.30	35055.87	25240.06	26406.16	28804.44	30422.45	40413.54	40496.70
Total Health Services (Direct + Indirect)	**Ex. Rur.**	19416.40	19871.73	19926.77	18531.15	22788.04	28337.77	31051.32	33570.06	32911.57	42208.57
	Ex. Urb.	9400.18	10134.99	12829.84	17543.33	12691.53	13142.69	12264.15	12379.24	28533.64	30306.64
	Non-Ex.	5271.19	5869.69	9505.27	23748.91	7900.56	10893.90	16407.21	16447.27	16807.98	23627.19
	Total	34087.77	35876.41	42261.88	59823.39	43380.13	52374.36	59722.68	62396.57	78253.19	96142.40
General Services		109250.09	123819.48	151829.99	203944.43	158000.79	160855.56	149394.10	272348.54	252957.23	285752.34
Of Which **Interest Payments**		50706.48	55275.76	59685.22	81858.06	53067.58	56148.60	79556.59	79436.44	89132.97	100625.49
Social Services		115403.99	154481.31	182735.84	206705.78	136354.76	195347.97	223913.04	251045.55	273782.46	365329.76
Economic Services		91094.15	125440.81	145690.75	200907.51	157440.51	213967.94	243332.83	307622.30	278739.66	355399.27
Grants-in-Aid and Contributions		6373.71	6914.94	20288.56	14143.24	37066.22	59709.59	142209.97	102023.15	16338.15	21328.86
Total Expenditure		322121.94	410656.54	500545.14	625700.96	488862.28	629881.06	758849.94	933039.54	821817.50	1027810.23

Notes: Ex., Rur. and Urb. respectively denote exclusive, rural and urban.
Source: Budgets, Finance Accounts.

Annexure Table A.3: Financing of Public Expenditure on Health in the State of Uttaranchal: Budget and Off-Budget (Actual, Rupees in lakhs)

Item Description	Medical and Public Health				Family Welfare				Direct Health				Total Health			
	01-02	02-03	03-04	04-05	01-02	02-03	03-04	04-05	01-02	02-03	03-04	04-05	01-02	02-03	03-04	04-05
Rev. Exp.	11957	13583	15603	17844	2115	2439	2001	2106	14072	16022	17604	19950	33069	38674	40836	58706
St. Bud. of wich	11923	13397	15365	17610	2115	2439	2001	2106	14038	15836	17366	19716	33035	33269	37284	53687
Cent. Spons. Sch.	157	722	219	254	2115	2439	2001	2106	2272	3161	2219	2360	11375	3161	7816	4666
of wich Cent. Cont.	152	719	207	243	2115	2439	2001	2106	2267	3158	2208	2349	2267	3158	2208	2349
St. Exp.	11766	12675	15146	17356	0	0	0	0	11766	12675	15146	17356	21660	30108	29468	49021
Ext. Aid / Donors Cont.	54	468	500	900					54	468	500	900	2054	NA	900	1416
Grants-in-Aid to NGOs, Loc. Bod. and Indl.	5	167	612	15	0	5	0	0	5	172	612	15	17072	172	4769	28
Dir. Cent. Funding to SPVs	34	186	238	234	0	0	0	0	34	186	238	234	34	5405	3553	5019
Cap. Exp.	897	2452	3507	5052	0	0	0	0	897	2452	3507	5052	947	2521	4678	5948
St. Bud. of wich	897	2452	3507	5052	0	0	0	0	897	2452	3507	5052	947	2521	4678	5948
Cent. Spons. Sch.	0	110	755	207					0	110	755	207	0	110	1672	207
of wich Cent. Contr.	0	110	755	207					0	110	755	207	0	110	755	207
St. Exp.	897	2342	2752	4845	0	0	0	0	897	2342	2752	4845	947	2411	3006	5741
Ext. Aid / Donors Cont.	15	500	500	1400					15	500	500	1400	15	500	500	1400
Grants-in-Aid to NGOs, Loc. Bod. and Indl.									0	0	0	0	0	0	0	0
Dir. Cent. Funding to SPVs									0	0	0	0	0	0	0	0
Loans and Adv.									0	0	0	0	106	87	300	189
Total Exp. from St. Bud.	12820	15849	18872	22662	2115	2439	2001	2106	14935	18288	20873	24768	34087	35876	42262	59824
Total Dir. Cent. Govt. Exp.	34	186	238	234	0	0	0	0	34	186	238	234	34	5405	3553	5019
Grand Total	12854	16035	19110	22896	2115	2439	2001	2106	14969	18474	21111	25002	34122	41281	45814	64843

Notes: Rev., Cap., Exp., St., Bud., Wich, Spons., Sch., Dir., Cent., Ext., Cont., NGOs, Loc. Bod., Indl., Adv., and Govt. respectively denote Revenue, Capital, Expenditure, State, Budget, Which, Sponsored, Scheme, Direct, Central (or Centrally), External, Contribution, Non-Governmental Organisations, Local Bodies, Individuals, Advances, and Government. NA denotes not available. Highlighted rows denote financing by the central government and external aid or donors' contribution.

Annexure Table A.4: Expenditure on Medical and Public Health, and Family Welfare by Economic Classification (Rupees in thousand)

Des.	Region	Medical and Public Health						Family Welfare						Total					
		Actuals				Estimates		Actuals				Estimates		Actuals				Estimates	
		2001-02	2002-03	2003-04	2004-05	2005-06 (R)	2006-07 (B)	2001-02	2002-03	2003-04	2004-05	2005-06 (R)	2006-07 (B)	2001-02	2002-03	2003-04	2004-05	2005-06 (R)	2006-07 (B)
Staffing Expenses	Ex. Rur	431653	444159	489100	522835	790538	1121462	144122	170156	141430	156682	204667	260300	575775	614315	630530	679517	995205	1381762
	Ex. Urb	395380	401755	495768	526531	836871	956965	6571	7421	11408	13467	16215	18595	401951	409176	507176	539998	853086	975560
	Non-Ex.	61906	96660	224565	238576	337704	401170	38328	46762	21126	22848	35998	35767	100234	143422	245691	261424	373702	436937
	Total	888939	942574	1209433	1287942	1965113	2479597	189021	224339	173964	192997	256880	314662	1077960	1166913	1383397	1480939	2221993	2794259
Non-Staff Pers.	Ex. Rur	0	0	9300	40106	53052	92376	278	259	285	166	1028	1022	278	259	9585	40272	54080	93398
	Ex. Urb	1750	12776	42283	114638	131209	189940	0	0	500	0	500	1	1750	12776	42783	114638	131709	189941
	Non-Ex.	1508	10877	14151	5879	12501	18076	2063	0	19	0	126	856	3571	10877	14170	5879	12627	18932
	Total	3258	23653	65734	160623	196762	300392	2341	259	804	166	1654	1879	5599	23912	66538	160789	198416	302271
Office Admin.	Ex. Rur	120313	184812	234678	374686	533709	686259	2047	1750	3179	2350	5959	282117	122360	186562	237857	377036	539668	968376
	Ex. Urb	79481	173549	143337	237119	510560	590429	395	334	199	246	5366	476	79876	173883	143536	237365	515926	590905
	Non-Ex.	23384	67362	36462	64487	134609	456288	7502	5963	5866	9870	25353	2722	30886	73325	42328	74357	159962	459010
	Total	223178	425723	414477	676292	1178878	1732976	9944	8047	9244	12466	36678	285315	233122	433770	423721	688758	1215556	2018291
Trans. and Comm.	Ex. Rur	2003	2267	3051	2979	10442	27970	139	115	0	0	0	0	2142	2382	3051	2979	10442	27970
	Ex. Urb	4542	4862	3971	4782	14986	20245	0	0	0	0	0	0	4542	4862	3971	4782	14986	20245
	Non-Ex.	1260	835	1258	752	905	1131	2431	3162	2559	3129	3290	261	3691	3997	3817	3881	4195	1392
	Total	7805	7964	8280	8513	26333	49346	2570	3277	2559	3129	3290	261	10375	11241	10839	11642	29623	49607
Drugs and Matl. Suppl.	Ex. Rur	78291	81592	75968	62168	112510	161583	4804	4934	213	0	1	0	83095	86526	76181	62168	112511	161583
	Ex. Urb	43388	103117	125167	67699	492234	174809	0	0	0	0	0	0	43388	103117	125167	67699	492234	174809
	Non-Ex.	2811	2419	3081	11939	65230	32679	3414	3088	2579	1838	7375	5	6225	5507	5660	13777	72605	32684
	Total	124490	187128	204216	141806	669974	369071	8218	8022	2792	1838	7376	5	132708	195150	207008	143644	677350	369076
Grand Total	Ex. Rur	632260	712830	812097	1002774	1500251	2089650	151390	177214	145107	159198	211655	543439	783650	890044	957204	1161972	1711906	2633089
	Ex. Urb	524541	696059	810526	950769	1985860	1932388	6966	7755	12107	13713	22081	19072	531507	703814	822633	964482	2007941	1951460
	Non-Ex.	90869	178153	279517	321633	550949	909344	53738	58975	32149	37685	72142	39611	144607	237128	311666	359318	623091	948955
	Total	1247670	1587042	1902140	2275176	4037060	4931382	212094	243944	189363	210596	305878	602122	1459764	1830986	2091503	2485772	4342938	5533504
Grand Total*	Ex. Rur	632260	712830	812097	1002774	1500251	2089650	151390	177214	145107	159198	211655	543439	783650	890044	957204	1161972	1711906	2633089
	Ex. Urb	527839	696685	813251	950769	1985860	1932388	6966	7755	12107	13713	22081	19072	534805	704440	825358	964482	2007941	1951460
	Non-Ex.	90869	178153	279517	321633	550949	909344	53738	58975	32149	37685	72142	39611	144607	237128	311666	359318	623091	948955
	Total	1250968	1587668	1904865	2275176	4037060	4931382	212094	243944	189363	210596	305878	602122	1463062	1831612	2094228	2485772	4342938	5533504

The Grand Total for Exclusive Urban does not include Rupees 3298, 626 and 2725 (in Thousands) respectively for the Years 2001-02, 2002-03 and 2003-04 (under Medical and Public Health; (01) Urban Health: Allopathic, 110) Hospitals and Dispensaries), as the detailed economic break-up were not available. Including this the Grand Total of Expenditure is as shown under Grand Total*.

Annexure Table A.5: Expenditure Budget for Medical and Public Healh, and Family Welfare: Summary Statement (Rupees in lakhs)

Code	Description	Accounts				Estimates	
		2001-02	2002-03	2003-04	2004-05	2005-06 (R)	2006-07 (B)
Revenue Expenditure							
2210	**Medical and Public Health**	**11612**	**13425**	**15542**	**17700**	**32961**	**36347**
01	Urban Health Services - Allopathic	3128	3979	4229	5639	12951	9605
02	Urban Health Services - Other Medicine	2014	2086	2575	2751	4350	6215
03	Rural Health Services - Allopathic	5460	5568	5991	6445	9875	13810
04	Rural Health Services - Other Medicine	101	110	152	182	1385	1074
05	Medical Education and training	151	335	330	467	1387	908
06	Public Health	758	1346	2265	2215	3012	4736
2211	**Family Welfare**	**2121**	**2439**	**1894**	**2106**	**3059**	**3206**
001	Direction and Administration	149	170	159	160	276	262
003	Training	22	26	30	47	42	60
101	Rural Family Welfare Services	1514	1772	1451	1592	2117	2619
102	Urban Family Welfare Services	70	78	121	137	221	191
103	Maternity and Child Health	23	31	24	37	37	56
104	Transport	27	34	33	41	42	0
105	Compensation	83	74	71	91	302	0
106	Public Education	21	4	4	2	16	9
200	Other Services	213	251	0	0	0	0
796	Tribal Areas Sub-Plan	0	0	0	0	5	9
Capital Expenditure							
4210	**Medical and Public Health**	**897**	**2452**	**3507**	**5052**	**7588**	**13278**
01	Urban Health Services	136	902	1329	1117	2545	3475
02	Rural Health Services	761	1450	1978	3401	3933	6353
03	Medical Education, Research and Training	0	100	200	534	1110	3450
4211	**Family Welfare**	0	0	0	0	0	**2815**
101	Rural Family Welfare Services	0	0	0	0	0	2815
Memo Items (in Percent)							
Rev. Exp. on Direct Health Services / Tot. Rev. Exp. on All Services		4.78	4.31	3.98	3.92		
Rev. Exp. on Direct Health Services / Primary Rev. Exp. on All Services		5.77	5.07	4.62	4.68		
Tot. Exp. on Direct Health Services / Tot. Exp. on All Services		4.64	4.45	4.17	3.96		
Tot. Exp. on Direct Health Services / Primary Exp. on All Services		5.50	5.15	4.73	4.55		

Notes: (R) and (B) denote respectively Revised and Budget estimates. Primary Expenditure equals Total Expenditure less Interest Payments. Primary Revenue Expenditure equals Total Revenue Expenditure less Interest Payments. Total Expenditure is the sum of Revenue Expenditure, Capital Expenditure, and Net Loans and Advances.