

# **Financing Human Development in Karnataka**

**Background Paper for Second Karnataka Human Development Report**

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### **1. Introduction**

This paper analyses the problems of State finances in Karnataka and the constraints these have on financing human resource development in the State. The issue has gained importance for a number of reasons. First, sharply deteriorating fiscal health of the state has posed serious difficulties in releasing resources for investment in human capital. Secondly, compression of expenditures as a part of fiscal adjustment strategy and competing claims on fiscal resources at the State level in general and in Karnataka in particular have underlined the need for prioritizing expenditures in favour of human resource development. Thirdly, achieving the Millennium Development Goals (MDGs)<sup>1</sup>, which in some sense are reflected in the targets set for the Tenth Five Year Plan, can not be achieved unless the social sector expenditures are augmented appreciably, and significant increase in the productivity in spending on social services is achieved by improving the delivery systems, and harnessing private investments to complement public spending.

Like in other States in India, there has been a sharp deterioration in the fiscal imbalance in Karnataka, particularly after the State had to accommodate severe burden of pay and pension revision in 1998-99 and meet rising interest costs throughout the 1990s. The sharply increasing debt service payments, continued deterioration in the power sector finances and the poor cost recovery from investment in irrigation systems have exacerbated the fiscal problems in the State. At the same time, the growth of revenues has sharply decelerated in the 1990s as compared to the previous decade. As a proportion of GSDP, the revenue from own sources has not shown much increase and the Central transfers under both plan and non-plan categories have declined.

The fiscal adjustment program initiated with the World Bank assistance in 2000 has seen a number of initiatives at restoring fiscal balance. The White Paper on State Finances placed in the State legislature presented the magnitude of the fiscal problem and identified the policy and institutional reforms needed to restore fiscal balance. The Medium Term

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<sup>1</sup> The eight MDGs are: (i) eradicate extreme poverty and hunger; (ii) achieve universal primary education; (iii) promote gender equality and empower of women; (iv) reduce child mortality; (v) improve maternal health; (vi)

Fiscal Plan (MTFP) prepared by the State Government and presented in the Legislature laid down the path of fiscal rectitude. Concurrently, most of the important departments related to human development such as primary and secondary education, health, family welfare and rural drinking water supply were required to prepare their own Departmental Medium Term Fiscal Plans (DMTFPs) so that in undertaking fiscal adjustment, outlays on these sectors are adequately safeguarded.<sup>2</sup> It is nevertheless, important to understand the implications of fiscal developments on the overall outlay position on social sectors in the State.

Providing adequate outlay on human resource development and ensuring efficiency in spending are extremely important in the context of a State with average level of development like Karnataka. Although among the States in India, Karnataka witnessed the highest growth rate of GSDP as well as per capita GSDP during 1990-2001, growing respectively at 7.6 per cent and 5.9 per cent, the State continues to be in the league of middle income States with per capita GSDP slightly below all-State average (Table 1). The State ranks seventh among the fourteen non-special category States. The relative position of Karnataka in respect of other developmental indicators such as per capita consumption and various indicators of human development also are close to the median value. The head count measure of poverty in the State is estimated at 19.1 per cent in rural areas and 27.1 in the urban areas, which is below the respective figures of 28.8 and 25.1 estimated for the country.

The Human Development Index (HDI) in Karnataka increased from 0.412 in 1991 to 0.478 in 2001 (National Human Development Report 2001, Planning Commission), which approximates the all India average value as well. Despite this increase over the decade, Karnataka continues to hold 7<sup>th</sup> rank among the States in India. Although Karnataka's standing in HDI and its various components is broadly similar to the all India average, its position is below the neighbouring states of Kerala, Maharashtra and Tamil Nadu (Table 2). Considerable resources as well as effort are needed to catch up with the achievements in these neighbouring states.

The worrisome feature in regard to both level of development generally and in human development in particular, is the prevalence of vast inter-district variations. The HDI

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combat HIV/AIDS, Malaria and other diseases; (vii) ensure environmental sustainability and (viii), develop a global partnership for development.

<sup>2</sup> At present however, all the departments are required to prepare DMTFPs.

estimated by the High Powered Committee for Redressal of Regional Imbalances (GOK, 2002) using projected life expectancy at birth and adult literacy rates shows significant inter-district variations within the State (Table 3). The HDI index was highest in Kodagu (0.76) and lowest in Raichur (0.54).<sup>3</sup> The sharp inter-district variations are seen in the case of individual components of human development as well. In general, the HDI of a district closely follows the level of development as indicated by the per capita District Income with a correlation coefficient of 0.9. The HDI is seen to be high in the coastal districts, and very low in the Hyderabad – Karnataka and Bombay – Karnataka regions of the State.

Progress towards improving the welfare of the people in the State requires considerable augmentation of investment in both physical and human capital and improvement in the productivity of the capital invested.<sup>4</sup> The above discussion has underlined the fact that the State government has considerable catching up to do not only to the levels prevailing in some of the States but also to achieve the Millennium Development Goals. Besides, the problem is severe in some of the backward districts identified by the High Powered Committee.

The paper first attempts to analyse the fiscal trends in the State in the context of financing human development. This is followed by an analysis of trends in expenditures on human development in the State during the last decade. An attempt is also made to examine the distribution of expenditures across different districts and see whether these allocations are in any way related to the status of human development. The last section summarises the discussion.

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<sup>3</sup> These values are not comparable to the estimates of National Human Development Report (NHDR) due to differences in methodology as well as data used to estimate them.

<sup>4</sup> There are numerous examples of countries where social sector expenditure was given a priority in their development strategy and this priority have paid rich dividends. Sri Lanka and Cuba are two such countries.

**Table 1. Some important economic indicators of Karnataka**

Indicators	Karnataka		All India Value
	Value	Rank in 14 Major States	
GSDP/GDP 2001-02 (Current Prices) (Rs. Lakhs)	10565776	7 <sup>a</sup>	209095700 <sup>b</sup>
Per capita GSDP/GDP 2001-02 (Current Rupees)	19821	6 <sup>a</sup>	20164
Growth rate of GSDP/GDP in 1990-2001	7.56	1	6.1
Growth rate of per capita GSDP/GDP in 1990-2001	5.89	1	4.08
Per capita consumption expenditure 1999-2000 (Rs.)	639	7	591
Headcount percentage (Rural) – 1999-00	19.1	7	28.8
Headcount percentage (Urban) – 1999-00	27.1	8	25.1
Percentage of workers to total population 2001	44.6	3	39.26
Percentage of rural workers to rural pop. 2001	49.2	4	41.97
Growth in employment 1993-94 to 1999-00	1.6	6	1.6
Unemployment rate (per cent of labour force) 1999-00	1.4	5	2.3

Notes: <sup>a</sup> Ranks have been computed using GSDP data for 2000-01.,

<sup>b</sup> Provisional Estimate

Sources: GSDP figures for Karnataka have been taken from Directorate of Economics and Statistics, Karnataka.

All India GDP figures have been taken from Economic Survey, 2003-04.

Per capita and absolute growth Rate of GDP has been taken from Rao (2004).

Per capita consumption expenditure have been taken from National Human Development Report 2001

Headcount percentages have been taken from Sen and Himanshu (2004)

Rest of the figures have been taken from Inter-state Economic Indicators, Planning Department, Karnataka 2004.

**Table 2. Karnataka's position in terms of human development indicators**

Indicators	Karnataka	Tamil Nadu	Kerala	Maha-rashtra	Andhra Pradesh	Karnataka's rank in 14 major States
HDI (2001)	0.478	0.531	0.638	0.523	0.416	7 (.472)*
HDI (1991)	0.412	0.466	0.591	0.452	0.377	7 (.381)
Per capita consumption expenditure, 1999-2000 (Rs.)	639	681	816	697	550	7 (591)
Literacy rate 2001	67.04	73.47	90.92	77.27	61.11	8 (65.49)
Female literacy rate 2001	57.45	64.55	87.86	67.51	51.17	7 (54.28)
Infant mortality rate (per 1000 live births) (2000)	57	51	14	48	65	6 (68)
Life expectancy at birth (LEB) (female) (2001-06)	66.44	69.75	75	69.76	65	7 (66.91)
Birth rate (per 1000) 2000	22	19.3	17.9	21	21.3	7 (25.8)
Death rate (per 1000) 2000	7.8	7.9	6.4	7.5	8.2	7 (8.5)
Female work participation rates 2001	35.07	34.73	24.3	35.97	37.69	5 (31.56)

*Note:* Figures in parentheses indicate value of indicator for the country as a whole

\* Figure in parenthesis indicates value of the indicator for the 15 major states of India.

*Sources:* Data on HDI were taken from the National Human Development Report, 2001. For rest of the indicators, see Table 1.

**Table 3. Indicators of human development across different districts of Karnataka**

District	Education index, 1998	Index of life expectancy at birth, 1998	Income index, 1998	HDI, 1998
Bangalore	0.85	0.73	0.62	0.73
Bangalore (R)	0.64	0.74	0.5	0.63
Belgaum	0.66	0.73	0.51	0.63
Bellary	0.61	0.66	0.5	0.59
Bidar	0.59	0.7	0.42	0.57
Bijapur	0.63	0.69	0.47	0.60
Chikkmagalur	0.77	0.74	0.56	0.69
Chitradurga	0.68	0.67	0.48	0.61
D. Kannada	0.87	0.79	0.58	0.75
Dharwad	0.72	0.69	0.47	0.63
Gulbarga	0.53	0.71	0.46	0.57
Hassan	0.71	0.76	0.50	0.66
Kodagu	0.85	0.8	0.62	0.76
Kolar	0.67	0.68	0.47	0.61
Mandya	0.64	0.72	0.48	0.61
Mysore	0.59	0.7	0.53	0.61
Raichur	0.46	0.71	0.44	0.54
Shimoga	0.73	0.69	0.52	0.65
Tumkur	0.7	0.66	0.45	0.60
U. Kannada	0.77	0.78	0.5	0.68

*Source:* Report of the High Power Committee for Redressal of Regional Imbalances, June 2002.

## **2. Trends in State Finances in Karnataka**

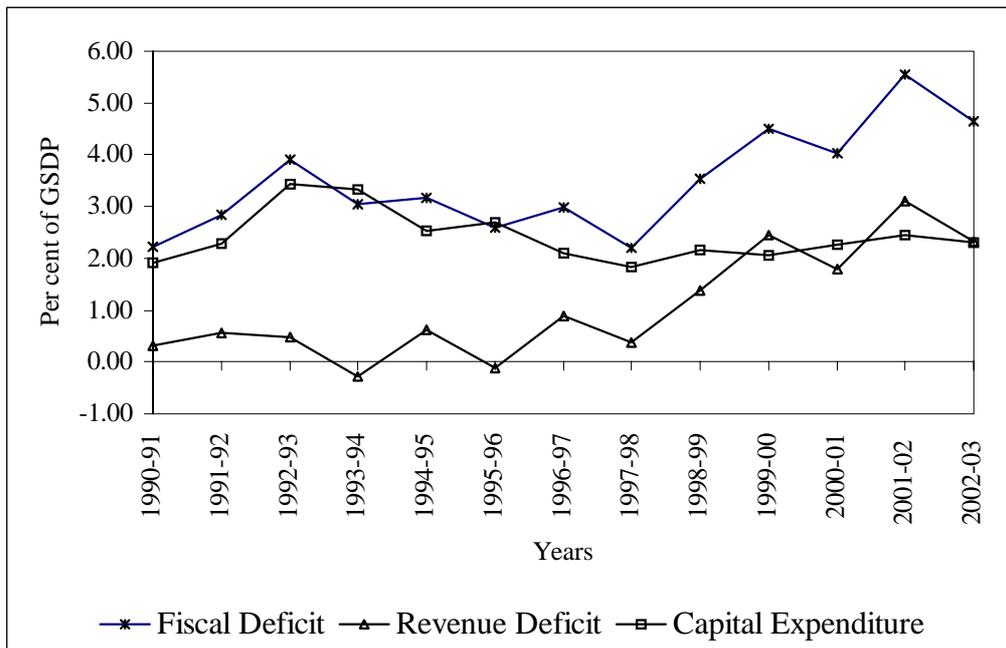
The White Paper on State Finances presented in the State Legislature in 2000 has clearly noted the sharp deterioration in State finances during the 1990s. It identified the factors contributing to deteriorating fiscal imbalance in the State and suggested a number of policy measures aimed at restoring fiscal balance. On the revenue side, the problem was attributed to decelerating own revenues as well as Central transfers. Both the items decelerated during the 1990s as compared to the previous decade and the deceleration in the latter was more than the former. On the expenditure front, the single most important item causing significant deterioration was the revision of salaries and pensions. Expenditures on debt servicing and implicit and explicit subsidies contributed to worsening fiscal outcomes. Equally, if not more, important problem was the deficits in the power sector. In the past, in fact, the revenue and fiscal deficit numbers did not fully capture the deficits in the power

sector, but after the fiscal adjustment program was undertaken, the deficit figures fully reflect the power sector losses.

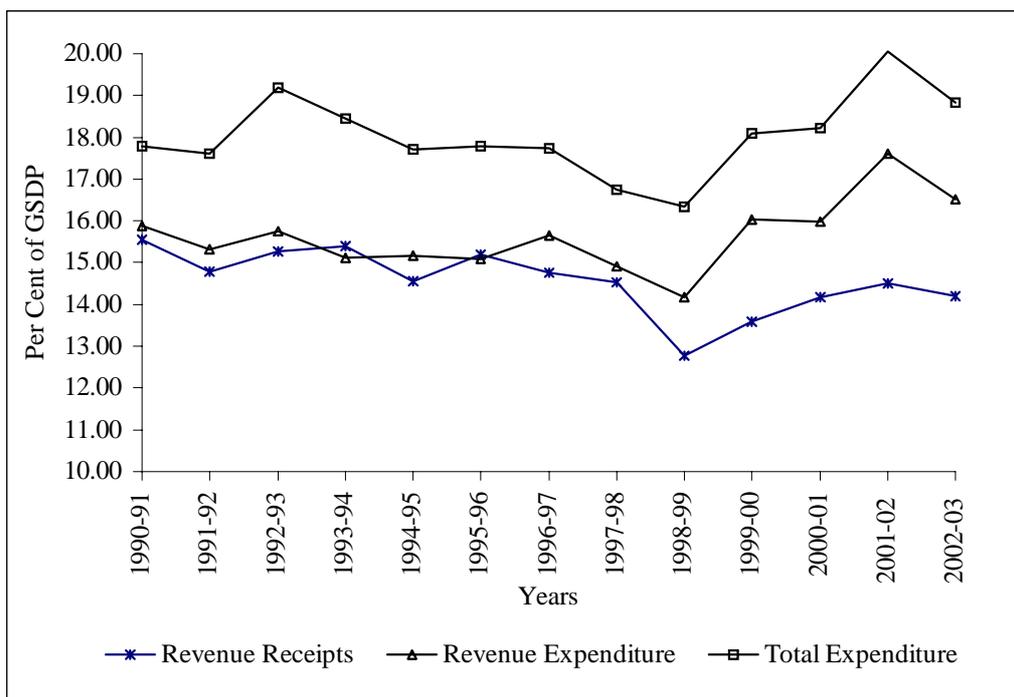
Despite the attempt by the State government to arrest the deteriorating trend in State finances, the slide has continued. Both revenue and fiscal deficits in the State have shown a sharp deterioration despite the revenues increasing as a percentage of GSDP from 12.8 per cent in 1998-99 to 14.20 per cent in 2002-03. Similarly, the fiscal deficit in Karnataka increased from 3.5 per cent to 4.64 per cent of GSDP during the period. The ratio of capital expenditure to GSDP remained just above 2 per cent during the period (Figure 1). The ratio of revenue deficit to fiscal deficit, an important indicator of the quality of deficit, increased sharply from 39 per cent in 1998-99 to 50.1 per cent in 2002-03. Thus the slide has continued and in some ways worsened after the fiscal adjustment program was initiated in the State.

While the revenue receipts of the State between 1990-91 and 2002-03 increased at the compound rate of 11.9 per cent per annum, the growth of revenue expenditures was much faster at 13.4 per cent. The gap between the growth of expenditures and revenues has continued even after the program of fiscal adjustment was put in place and the MTFP was drawn up. While the revenue receipts as a ratio of GSDP increased by 1.4 percentage points between 1998-99 and 2002-03, the ratio of revenue expenditure to GSDP increased by 2.3 percentage points, thus increasing the revenue deficit (Figure 2). As the capital expenditure to GSDP ratio remained broadly at the same level of about two per cent, the increase in fiscal deficit was mainly due to the increase in revenue deficit. Thus, the share of revenue deficit in fiscal deficit has increased from about 39 per cent in 1998-99 to 50.1 per cent in 2002-03 (Figure 3).

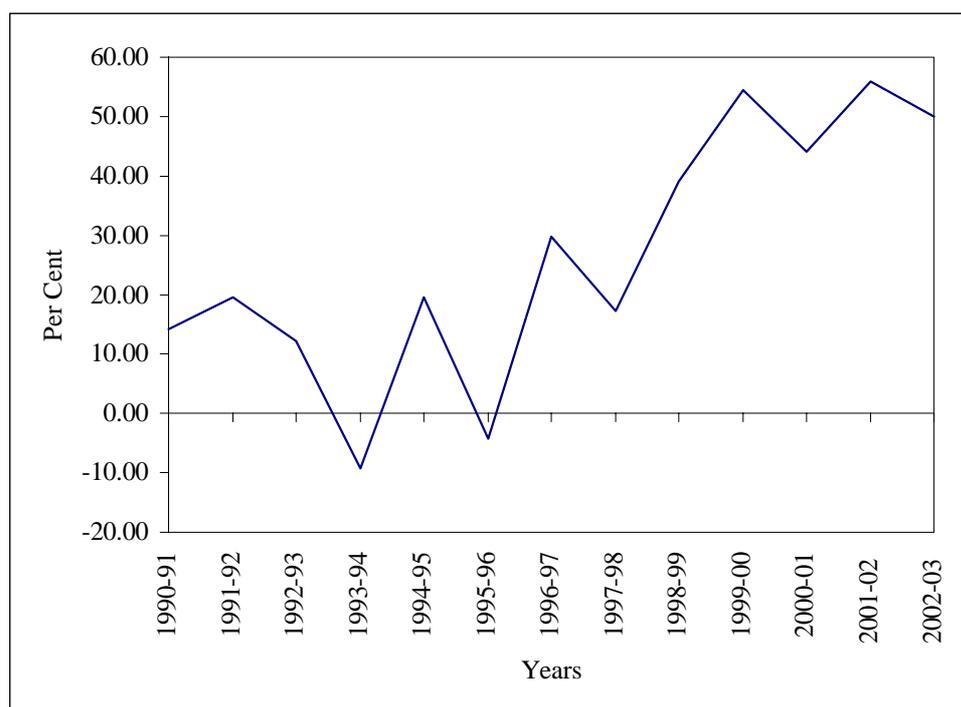
**Figure 1. Fiscal imbalance in Karnataka 1990-91 to 2002-03**



**Figure 2. Trends in revenues and expenditures in Karnataka 1990-91 to 2002-03**



**Figure 3. Revenue deficit as a percentage of fiscal deficit, 1990-91 to 2002-03**



Very high growth of expenditure relative to revenues is a worrisome feature and needs to be analysed in greater detail. The disaggregated analysis of the expenditure trends in Karnataka shows that a large proportion of the increase in revenue expenditures is accounted for by increase in expenditures on salaries, pensions and interest payments. Increase in expenditure on salaries and pensions accounted for almost 34 per cent of the increase in revenue expenditures between 1997-98 and 2001-02. Increase in interest payments accounted for about 17 per cent of the increase in revenue expenditure between 1997-98 and 2001-02. Together, interest payments, salaries and pensions accounted for about 51 per cent of the rise in revenue expenditures in the State between 1997-98 and 2001-02. In comparison, less than 10 per cent of the expenditure has been spent on physical capital outlay between the period 1997-98 and 2001-02.

The persistence of large revenue and fiscal deficit at the State level has caused the significant increase in the debt burden on the State. The outstanding debt of the State government as a proportion of GSDP increased from about 17.6 per cent in 1995-96 to about 25.7 per cent of GSDP in 2001-02. Correspondingly, interest payments increased from 12.35 per cent of total revenue expenditure in 1995-96 to 14.4 per cent in 2001-02. With the

significant volume of debt restructuring by swapping the high interest loans contracted by the State with low interest loans, the burden of debt servicing is likely to come down in the next few years. In the short and medium term, this will provide the much needed fiscal space for spending on more productive sectors.

### **3. Expenditure on Human Development**

The States in India have a predominant role in the provision of services such as basic education, healthcare and water supply and sanitation. Over 85 per cent of the expenditure on these services is incurred by the State governments. Therefore, deterioration in State finances and undue pressure to compress their expenditures as a part of the fiscal adjustment strategy reduces the fiscal space to the State governments. Given that the constituency demanding larger allocation to social sector expenditures is not strong (except of course, the government employees and teachers demanding higher salaries), the expenditure compression at the State-level tends to have adverse impact on allocation to these items, notwithstanding their high social productivity.

Thus, at a time where the State government has to create additional fiscal space to enhance allocations to social sectors, the deteriorating fiscal imbalance place serious constraints on the ability of the State government even to safeguard the existing allocations. In the prevailing environment of deteriorating finances of the State, it is important to understand the trends in social sector allocations in the 1990s.

#### *3.1 Trends in Investment in Human Development*

The analysis of spending on human resource development is done in terms of four ratios suggested by UNDP's 1991 Human Development Report. These are (i) public expenditure ratio (PER), (ii) social allocation ratio (SAR); (iii) social priority ratio (SPR), and (iv) human expenditure ratio (HER). The public expenditure ratio (PER) refers to the total budgetary expenditures of the State government as a proportion of GSDP in the State. The social allocation ratio refers to the share of budgetary expenditures on the social sector (social services and rural development) as a proportion of total budgetary expenditures of the

State government<sup>5</sup>. The social priority ratio refers to the budgetary expenditures on human priority areas as a percentage of expenditure by the State government on the social sector. Human priority areas include elementary education, health and family welfare<sup>6</sup>, nutrition, water supply and sanitation and rural development. Finally, human expenditure ratio (HER) is the product of the first three ratios and measures the expenditure by the State government in human priority areas as a proportion of GSDP in the State. The different indicators of spending on human development and their trends for Karnataka for the years 1990-91 and 2002-03 estimated from the Finance Accounts of the State government are presented in Table 4 and Figure 4.<sup>7</sup>

**Table 4. Indicators of expenditure on human development in Karnataka**

(Per cent)

Year	Public Expenditure ratio	Social allocation ratio	Social priority ratio	Human expenditure ratio
1990-91	17.78	41.22	55.45	4.06
1991-92	17.61	40.20	53.72	3.80
1992-93	19.18	36.77	52.54	3.71
1993-94	18.45	39.50	54.03	3.94
1994-95	17.70	39.19	53.83	3.73
1995-96	17.79	37.62	51.94	3.48
1996-97	17.75	36.90	51.02	3.34
1997-98	16.73	38.40	51.99	3.34
1998-99	16.33	39.49	52.55	3.39
1999-00	18.09	37.75	54.86	3.75
2000-01	18.22	37.89	52.84	3.65
2001-02	20.06	34.96	52.29	3.67
2002-03	18.83	34.36	50.69	3.28

*Source:* Estimated from Finance Accounts of Karnataka, Accountant General, Government of India.

*Note:*

PER= Public Expenditure/GSDP

SAR= Expenditure in the social sector/GSDP

SPR= Expenditure in Human Priority Areas/Expenditure in the Social sector

Expenditure under different heads has been estimated as the sum of revenue expenditure and capital expenditure (including loans and advances net of repayments)

<sup>5</sup> Social Services include: (i) Education, Sports, Art and culture; (ii) Medical and Public Health; (iii) Family Welfare; (iv) Water Supply and Sanitation; (v) Housing; (vi) Urban Development; (vii) Welfare of SCs, STs and OBCs; (viii) Labour and labour welfare; (viii) Social Security and Welfare; (ix) Nutrition; (x) Relief on Account of Natural Calamities; (x) Other Social Services; (xii) Rural development.

<sup>6</sup> Excluding medical education, training and research, employees state insurance scheme and transport and compensation for family welfare.

<sup>7</sup> For each of the indicators, expenditure has been calculated as the sum of revenue expenditures, capital expenditures and loans and advances (net of repayments).

The trend in PER, the first of the four indicators presented in column 2 of Table 2 denotes the level of spending on various public services in Karnataka. The PER increased from 17.78 per cent in 1990-91 to 19.18 per cent in 1992-93 before declining to 16.33 per cent in 1998-99. Thereafter, pay and pension revision caused it to increase back to 18.83 per cent in 2002-03. Considering the fact that the unit cost of providing public services sharply increased with the pay revision, the actual increase in provision of services was much lower.

**Figure 4. Trends in human development expenditures**



*Note:* Y-axis in these graphs is scaled in per cent.

The extent of expenditures in the social sector, which constituted about 34 to 41 per cent of State expenditures between 1990-91 and 2002-03, is indicated by the SAR. As mentioned earlier, expenditure on social sector includes expenditures on social services and rural development. The SPR is a sub-set of SAR as it only includes the items within SAR which are considered priority expenditures. Both the SAR and SPR presented in columns 3 and 4 of Table 4 show an overall declining trend in the 1990s, the decline being much sharper since 1998-99, particularly in the case of SAR. Thus, as compared to 1990-91, both SAR and SPR in 2002-03 were lower. This shows that the expenditure on areas which are considered to have high social

priority was squeezed when there was a pressure due to stagnant revenues and increasing pay, pension and interest payments.

HDR 1991 suggested that PER for a country should be around 25 per cent, SAR should be about 40 per cent and SPR about 50 per cent. Consequently, HER should be about 5 per cent. PER in Karnataka has been less than the suggested norm of 25 per cent over the entire decade. Also, SAR is inflated in the current calculation as expenditure on rural development has been added to social services to arrive at the value of SAR. With this inflation, SAR in Karnataka in the early 1990s was about 40 percent. However, SAR has been declining over the years and moving away from the suggested norm. Similarly, in the calculation of SPR, due to inclusion of more heads of expenditure than those used by UNDP, the ratio is somewhat inflated. With the inflated figure, SPR in Karnataka was just around the norm of 50 per cent in 2002-03. HER in Karnataka was lower than the suggested norm of 5 per cent in all the years. Moreover, HER showed a declining trend in the State over the years and has moved away from the UNDP suggested norm of 5 per cent.

A comparison of the PER, SAR and SPR for different States shows that while the relative ranking of Karnataka in terms of PER has improved in the 1990s, there has been a fall in its rank in terms of SAR (Table 5). In terms of SPR and HER however, although the ratios are lower in 2001-02 than in 1990-91, the relative ranking of Karnataka has not changed much over the decade.

It may be noted that the ranking of Bihar and Orissa in terms of Public Expenditure Ratio (PER) are very high relative to their Human Development Indicators. Such a high ranking of these states in terms of PER has also been documented in earlier studies. Calculation of PER by Seeta Prabhu (1999) also showed that Bihar and Orissa ranked first and third respectively in PER among the 15 major states of India. The reason for a low HDI ranking of these states despite a high PER (as well as HER) is due to their low per capita state income. Table 7 which shows the per capita public expenditure, social sector expenditure and human priority expenditure across states shows that Bihar ranked 14<sup>th</sup> (last) and Orissa 11<sup>th</sup> among the 14 major states of India in terms of per capita public expenditure in 2001-02.

Although expenditures on social sector and human priority areas have declined as a proportion of total public expenditure, in absolute terms, there has been an increase in per capita expenditures in Karnataka over the 1990s (Table 6). In fact, Karnataka has had one of the highest growth rates of per capita expenditures in the 1990s. Between 1990-91 and 2001-02, Karnataka

registered the highest percentage increase in per capita public expenditure among the 14 major States (shown in table 7). From the rank of 9<sup>th</sup> in 1990-91 in terms of per capita public expenditure, Karnataka has moved up to 4<sup>th</sup> position in 2001-02. Similarly, the percentage increase in per capita social expenditure and per capita human priority expenditure in Karnataka was next only to that of Gujarat and Maharashtra respectively in the 1990s. The rank of Karnataka has therefore improved over the decade both in terms of per capita social expenditure and per capita human expenditure (Table 7).

**Table 5. Indicators of human development expenditure, fourteen major States of India, 1990-91 and 2001-02**

States	PER		SAR		SPR		HER	
	1990-91	2001-02	1990-91	2001-02	1990-91	2001-02	1990-91	2001-02
Andhra Pradesh	17.83 (6)	18.86 (7)	43.12 (6)	36.43 (7)	48.88 (10)	54.14 (7)	3.76 (9)	3.72 (6)
Bihar	20.97 (2)	24.47 (2)	43.79 (5)	35.47 (9)	66.35 (1)	69.12 (1)	6.09 (1)	6.00 (1)
Gujarat	17.52 (8)	17.69 (8)	37.01 (11)	39.80 (2)	56.36 (6)	35.46 (14)	3.66 (10)	2.50 (13)
Haryana	15.63 (12)	17.17 (10)	32.75 (13)	29.55 (13)	44.73 (13)	49.38 (11)	2.29 (13)	2.51 (12)
<b>Karnataka</b>	17.78 (7)	20.06 (3)	41.22 (8)	34.96 (10)	55.45 (7)	52.29 (8)	4.06 (7)	3.67 (7)
Kerala	19.42 (3)	16.18 (12)	45.57 (3)	39.33 (4)	54.86 (8)	50.88 (10)	4.86 (5)	3.24 (8)
Madhya Pradesh	15.64 (11)	17.66 (9)	43.03 (7)	39.49 (3)	59.02 (4)	55.76 (4)	3.97 (8)	3.89 (5)
Maharashtra	15.51 (13)	15.43 (14)	33.27 (12)	36.46 (6)	47.19 (12)	54.42 (6)	2.43 (12)	3.06 (10)
Orissa	24.46 (1)	25.45 (1)	39.12 (10)	34.96 (11)	54.28 (9)	55.59 (5)	5.19 (2)	4.94 (3)
Punjab	17.49 (10)	19.63 (5)	29.07 (14)	23.25 (14)	39.52 (14)	38.27 (13)	2.01 (14)	1.75 (14)
Rajasthan	17.52 (9)	19.95 (4)	44.25 (4)	42.73 (1)	63.60 (3)	61.58 (3)	4.93 (3)	5.25 (2)
Tamil Nadu	17.88 (5)	15.85 (13)	46.88 (2)	38.19 (5)	58.68 (5)	52.14 (9)	4.92 (4)	3.16 (9)
Uttar Pradesh	18.61 (4)	18.97 (6)	39.82 (9)	31.97 (12)	65.13 (2)	65.09 (2)	4.83 (6)	3.95 (4)
West Bengal	15.30 (14)	16.83 (11)	47.94 (1)	35.72 (8)	47.86 (11)	44.24 (12)	3.51 (11)	2.66 (11)

Note: Figures in brackets indicate the rank of the State with respect to that indicator.

PER= Public Expenditure/GSDP

SAR= Expenditure in the social sector/GSDP

SPR= Expenditure in Human Priority Areas/Expenditure in the Social sector

Expenditure under different heads has been estimated as the sum of revenue expenditure and capital expenditure (including loans and advances net of repayments)

**Table 6. Per capita real expenditures on human development in Karnataka**

(Rupees)

Year	Per Capita Public Expenditure	Per Capita Social Sector Expenditure	Per Capita Social Priority Expenditure
1990-91	1313	541	300
1991-92	1435	577	310
1992-93	1580	581	305
1993-94	1606	634	343
1994-95	1598	626	337
1995-96	1677	631	328
1996-97	1794	662	338
1997-98	1783	685	356
1998-99	1935	764	402
1999-00	2229	842	462
2000-01	2437	923	488
2001-02	2613	914	478
2002-03	2520	866	439

*Source:* Based on data from Finance Accounts of Karnataka, Accountant General, Government of India. Expenditure under different heads has been estimated as the sum of revenue expenditure and capital expenditure (including loans and advances net of repayments)

**Table 7. Real per capita public expenditure, social sector expenditure and human priority expenditure, fourteen major States, 1990-91 and 2001-02 (Rs.)**

	Per Capita Public Expenditure			Per Capita Social Sector Expenditure			Per Capita Human Priority Expenditure		
	1990-91	2001-02	% change	1990-91	2001-02	% change	1990-91	2001-02	% change
Andhra Pradesh	1,361 (7)	2,198 (7)	61.50	587 (6)	801 (7)	36.46	287 (8)	434 (5)	51.22
Bihar	1,026 (13)	915 (14)	-10.82	449 (13)	325 (14)	-27.62	298 (6)	224 (14)	-24.83
Gujarat	1,775 (3)	3,048 (2)	71.72	657 (4)	1,213 (1)	84.63	370 (3)	430 (6)	16.22
Haryana	1,962 (2)	2,814 (3)	43.43	642 (5)	832 (6)	29.60	287 (7)	411 (7)	42.86
<b>Karnataka</b>	1,313 (9)	2,574 (4)	96.04	541 (9)	900 (4)	66.36	300 (5)	471 (4)	57.00
Kerala	1,481 (6)	1,996 (9)	34.77	675 (2)	785 (8)	16.30	370 (2)	400 (8)	8.11
Madhya Pradesh	1,111 (11)	1,590 (12)	43.11	478 (11)	628 (11)	31.38	282 (10)	350 (9)	24.11
Maharashtra	1,758 (4)	2,572 (5)	46.30	585 (7)	938 (2)	60.34	276 (11)	510 (2)	84.78
Orissa	1,206 (10)	1,791 (11)	48.51	472 (12)	626 (12)	32.63	256 (13)	348 (10)	35.94
Punjab	2,278 (1)	3,246 (1)	42.49	662 (3)	755 (9)	14.05	262 (12)	289 (12)	10.31
Rajasthan	1,315 (8)	1,997 (8)	51.86	582 (8)	853 (5)	46.56	370 (4)	525 (1)	41.89
Tamil Nadu	1,561 (5)	2,364 (6)	51.44	732 (1)	903 (3)	23.36	429 (1)	471 (3)	9.79
Uttar Pradesh	1,098 (12)	1,295 (13)	17.94	437 (14)	414 (13)	-5.26	285 (9)	269 (13)	-5.61
West Bengal	1,011 (14)	1,922 (10)	90.11	484 (10)	687 (10)	41.94	232 (14)	304 (11)	31.03

Note: Figures in brackets indicate the rank of the State with respect to that indicator

Differences in the figures on Karnataka between Table 6 and 7 for the year 2001-02 are on account of use of differences in provisional population figures.

### 3.2 Composition of expenditure on social sectors

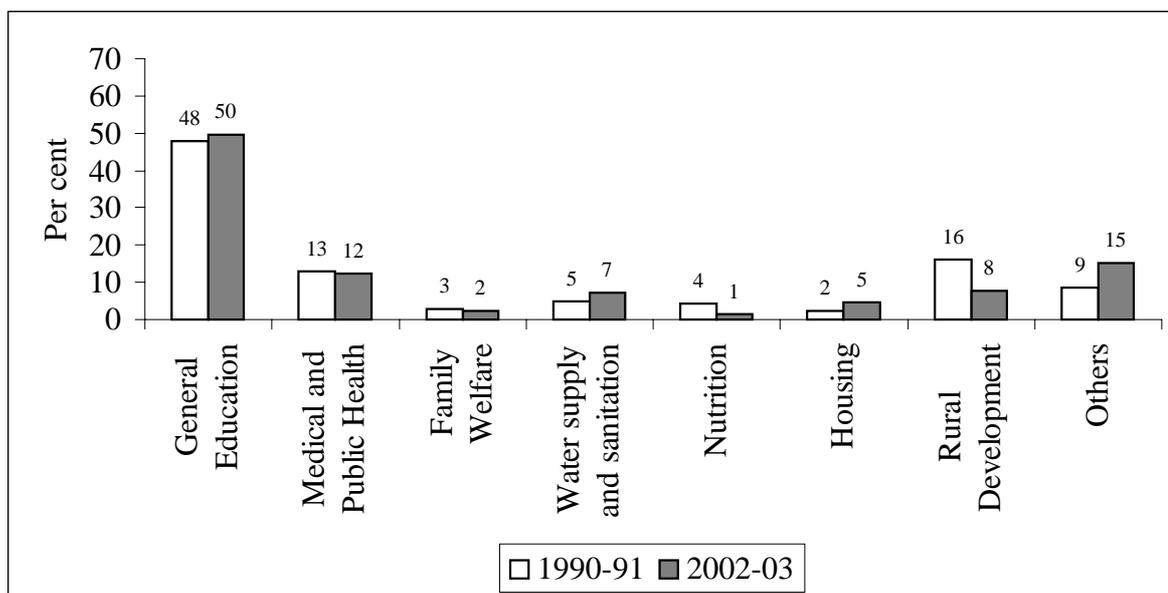
An analysis of the expenditure in the social sector shows that between 1990-91 and 2002-03, social sector spending has declined from 6.32 per cent of GSDP to 6.01 per cent of GSDP (Table 8). The disaggregated analysis of expenditure particularly in human priority areas shows that this was caused mainly by the decline in the spending on public health, nutrition and rural development (Table 8 and Figure 5). It is important to note that a substantial part of the expenditure for rural development is not routed through the State budget (funds devolved directly to DRDAs by the Centre on Centrally Sponsored and Central Sector Schemes). To account for this, expenditure by the Centre on rural development schemes was added to the actual expenditure incurred by the State on rural development. Even after adjustment is made to include the central transfers, it is seen that the rural development expenditure as a ratio of GSDP declined from almost 1.8 percent in 1993-94 to about one per cent in 2002-03 (Figure 6). Water supply and sanitation and housing are two areas in which there has been some increase in expenditure.

**Table 8. Expenditure by the State government under different heads of social sectors as a proportion of GSDP, Karnataka**

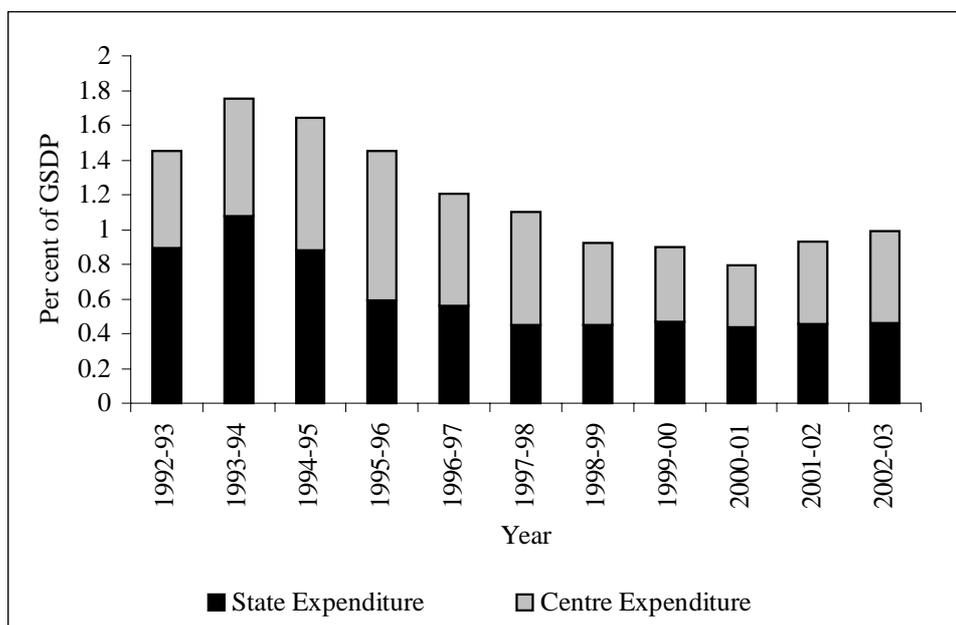
(per cent)

	1990-91	1998-99	2002-03
Social Services	6.32	6.00	6.01
General Education	3.03	2.78	2.99
Elementary Education	1.63	1.48	1.58
Secondary Education	0.89	0.89	0.93
University and Higher Education	0.45	0.35	0.42
Adult Education	0.04	0.01	0.005
Health and Family Welfare	1.00	0.93	0.88
Urban Health Services	0.31	0.38	0.32
Rural Health Service	0.01	0.01	0.02
Medical Education, Training and Research	0.09	0.10	0.11
Public Health	0.07	0.05	0.04
Family Welfare	0.17	0.13	0.15
Water Supply, Sanitation	0.31	0.58	0.42
Nutrition	0.28	0.09	0.08
Housing	0.15	0.21	0.28
Rural Development	1.01	0.45	0.46

**Figure 5 Composition of expenditure in the social sector, 1990-91 and 2002-03**



**Figure 6 Rural development expenditure including central transfers in Karnataka**

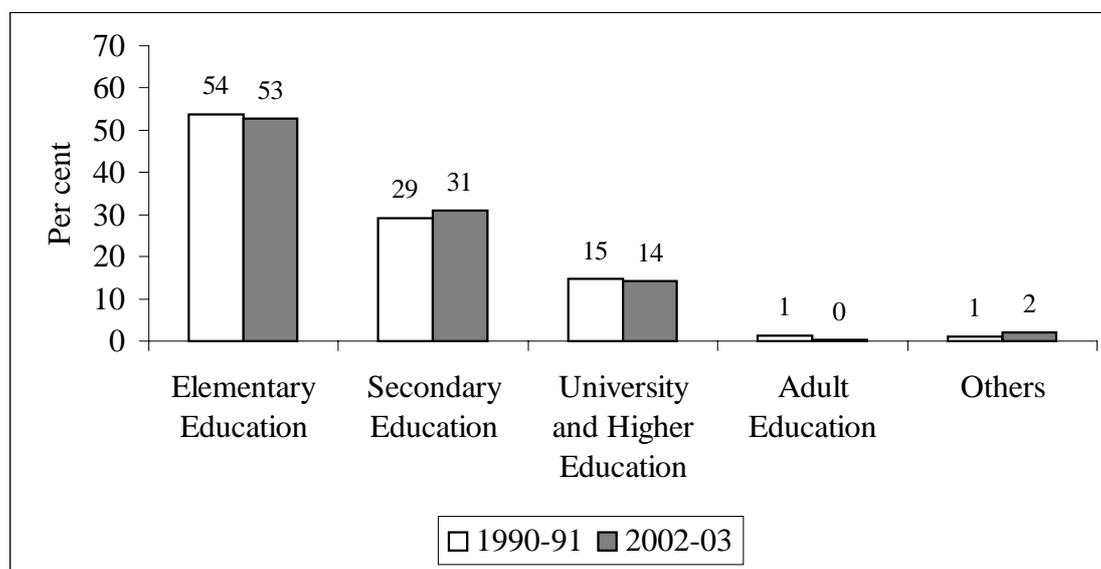


- Sources: 1. Expenditure of the State government from Finance Accounts of the State Government, various years  
 2. Actual Expenditure by the Central Government on central sector and Centrally Sponsored Schemes taken from Rural Development and Panchayat Raj Department, Government of Karnataka.

### 3.3 Expenditure on education

Although on the whole, expenditure on education as a ratio of GSDP has remained broadly at about 3 per cent between the period, 1990-91 and 2002-03, there has been a decline, albeit small, in the proportion of GSDP spent towards elementary education (Table 8) with a corresponding increase in the proportion of GSDP spent towards secondary education (Table 8). Even within social sector spending (which as a proportion of GSDP has been on the decline) between the period 1990-91 and 2002-03, the share of elementary education has declined marginally with a corresponding marginal increase in the share of secondary education (Figure 7). There has also been a small decline in the share of higher education in 2002-03 as compared to 1990-91. Expenditure in higher education declined sharply from 1990-91 to 1998-99 and increased thereafter. Increase in expenditure on higher education between 1998-99 and 2002-03 (Table 8) was mainly due to salary revision.

**Figure 7. Composition of expenditure on general education, 1990-91 and 2002-03**



A decomposition of the revenue expenditures in elementary education in 2001-02 provided by the department of primary and secondary education in the DMTEFP show that about 80 per cent of the expenditures in primary education was on employees. About 13 per cent of the expenditure was in the form of transfer payments and the rest towards supplies and services, maintenance and others (Table 9).

**Table 9 Decomposition of revenue expenditure in primary education, 2001-02**

Expenditure head	Expenditure (Rs. Lakhs)	Expenditure as per cent of total expenditure
Employee related	141886.93	79.50
Supplies and services	3095.26	1.73
Maintenance	5949.93	3.33
Transfer payments	23802.96	13.34
Others	3738.75	2.09
Total revenue expenditure	178473.83	100.00

*Source:* Departmental Medium-term Fiscal Plan: 2003-04 to 2006-07, Department of Primary and Secondary Education, Government of Karnataka.

Of the total expenditures incurred on elementary school education, almost 90 per cent is spent at the level of local bodies. An examination of the district-wise expenditure by local bodies on elementary education and the number of schools (both as a ratio of per child in the age group of 6-14 years) shows that the correlation coefficient between the two is very high (about 0.9). This is because these expenditures are mainly incurred on the payment of salaries of school teachers and pass through expenditures for the grants in aid to private institutions, but nevertheless considered as local expenditures.

Table 10 presents the district-wise pattern of spending on school education by local bodies in the State along with the indicators of schooling requirements and schooling achievements. There are wide variations in the expenditure per child of schooling age (6 to 14 years). Expenditure per child (in the age group of 6-14) however has a significant positive correlation of about 0.57 with school attendance rate and about 0.59 with literacy rate across districts (Table 11). Expenditure per child is therefore high in districts that have high school attendance rate and literacy rate. This shows that even after the decentralisation of the elementary schooling function and entrusting the responsibility to local bodies, the pattern of expenditures continued to be dictated by historical factors and not according to the needs of different districts. This brings to the fore, a serious shortcoming of decentralisation design of passing on the functions, functionaries and funds to the local bodies on a schematic basis without having any regard to the requirements of different districts. The transfers from the State government to local bodies do not seem to have helped in bringing about more

equity in the access to elementary education services in the State. The most critical policy issue in improving the educational attainment in the State is to focus on educationally backward areas and districts in allocating larger resources. In this, significant reform in both the design of decentralisation and State transfers to Panchayats is called for.

**Table 10. District-wise block assistance per child and schooling achievements in 2000-01**

Districts	Expenditure per child in the age group 6-14 years (Rs.)	School Attendance Rate (%)	Number of out of school children	Literacy Rate (%)	Male Female Gap in Literacy Rate
Bagalkot	1579.873	86.78	37385	52	27.21
Bangalore (Rural)	2029.215	95.60	12691	70.77	19.31
Bangalore (Urban)	1307.839	97.28	21687	61.93	9.38
Belgaum	1716.016	91.54	51567	59.05	23.36
Bellary	1358.678	83.25	57634	50.86	23.43
Bidar	1791.658	87.59	35264	57.72	23.28
Bijapur	1775.829	82.68	59685	52.38	21.91
Chamrajnagar	1744.458	90.86	13106	47.58	16.23
Chickmagalur	2788.493	93.22	11061	70.05	16.21
Chitradurga	2058.406	92.50	18205	61.11	20.07
Dakshina Kannada	1982.709	98.24	4418	79.93	12.35
Davangere	1925.148	92.30	22023	63.12	17.99
Dharwad	1817.076	91.46	19081	60.96	18.84
Gadag	1714.471	89.89	15836	61.71	26.97
Gulbarga	1576.489	75.63	136667	42.73	24.12
Hassan	2427.975	94.89	12981	65.3	18.97
Haveri	1415.211	91.60	20506	66.19	20.34
Kodagu	2463.753	91.48	6062	76.28	11.27
Kolar	1995.583	90.19	42570	57.75	28.39
Koppal	1109.969	79.05	46046	51.98	20.33
Mandya	2245.639	95.73	11101	57.88	19.09
Mysore	2039.405	90.99	29635	52.48	15.49
Raichur	1146.402	73.27	80105	43.15	25.18
Shimoga	1995.752	93.90	14911	70.03	15.08
Tumkur	2502.724	95.50	17403	63.62	19.7
Udupi	1963.855	98.90	2059	77.73	12.57
Uttara Kannada	2942.866	93.11	13874	72.68	16

Source: Report of the High Power Committee for Redressal of Regional Imbalances, June 2002.

Budget Document 2002-03

**Table 11. Correlation matrix between different outcomes and expenditure on elementary education across districts**

	Literacy rate	School attendance rate	Male female gap in literacy	Expenditure per child
Literacy rate	1			
School attendance rate	0.78	1		
Male female gap in literacy	-0.61	-0.59	1	
Expenditure per child	0.59	0.57	-	1

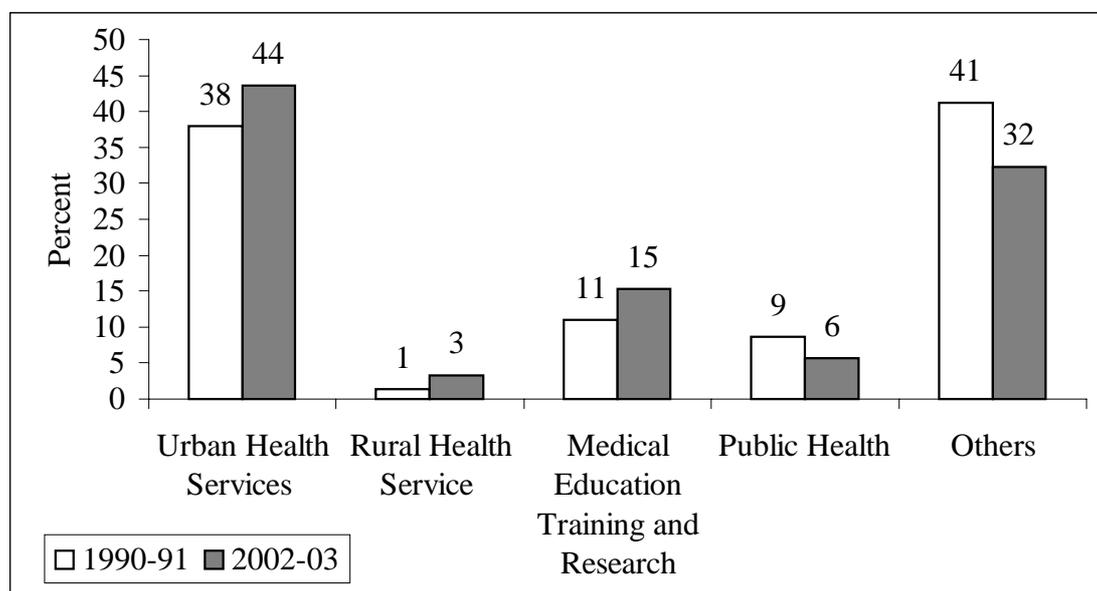
*Notes* Data on all the variables referred to 2001.

### *3.4 Analysis of health expenditure:*

Expenditure on health and family welfare declined from about 1 percent of GSDP in 1990-91 to about 0.88 per cent of GSDP in 2002-03 (Table 8). The proportion of GSDP spent on medical and public health declined from about 0.82 to about 0.73 per cent of GSDP in the period 1990-91 and 2002-03. Also, expenditure on public health declined from about 0.17 in 1990-91 to about 0.15 per cent of GSDP in 2002-03 (Table 8).

Within medical and public health, there has been an increase in the share of expenditure towards urban health services, rural health services and medical education training and research (Figure 8). The share of urban health services in medical and public health has increased from 38 per cent in 1990-91 to 44 per cent in 2002-03. The share of rural health services in medical and public health increased from about 1 per cent to about 3 per cent. Expenditure towards medical education, training and research increased from about 11 per cent in 1990-91 to 15 per cent in 2002-03. There has however been a decline in expenditure towards public health during the decade. The share of public health in has declined from round 9 per cent in 1990-91 to about 6 per cent in 2001-02 (Figure 8). Of the total expenditure on medical and public health, about 32 per cent of the funds were spent through local bodies in 2002-03. As the bulk of the expenditure was in the state sector for which district-wise disaggregated data are not available, analysis of expenditure at the district level is not possible.

**Figure 8. Composition of expenditure on medical and public health in Karnataka, 1990-91 and 2002-03**



The departmental financial statement of the department of health and family welfare (which excludes medical education training and research) provided in DMTEP shows that in 2001-02, about 70 per cent of the revenue expenditures were employee related and towards transfer payments (Table 12). Employee related expenditures constituted about 32 per cent and transfer payments about 38 per cent of revenue expenditures in 2001-02 (Table 12). It may be mentioned that this classification under-estimates the expenditure related to employees because assistance to local bodies, a substantial part of which are salaries, is included in transfer payments.

**Table 12. Decomposition of revenue expenditure in health and family welfare (excluding medical education, training and research), 2001-02**

Expenditure Head	Expenditure (Rs. Lakhs)	Expenditure as per cent of total expenditure
Employee related	22084.03	30.64
Supplies and Services	13335.17	18.50
Maintenance	756.46	1.05
Transfer payments	27333.3	37.93
Others	8556.95	11.87
Total Revenue Expenditure	72065.91	100.00

*Source:* Departmental Medium-term Fiscal Plan: 2003-04 to 2006-07, Department of Health and Family Welfare, Government of Karnataka.

#### **4. Fiscal Decentralisation and Delivery of Social Services**

An important institutional development in the 1990s which has impacted on the delivery of services is the 73<sup>rd</sup> Constitutional amendment in 1992 and subsequent devolution of functions, functionaries and funds to rural local bodies. With the implementation of the Karnataka Panchayat Raj Act, 1993, the local bodies were entrusted with greater responsibility of delivering social services such as school education, basic healthcare, water supply and sanitation, housing and rural development. The decentralisation of functions was implemented with a view to make the delivery systems more responsive to the needs of the people and to impart greater accountability.

The detailed analysis of fiscal decentralisation recently done in the context of Karnataka by Rao, Amar Nath and Vani (2004) brings out a number of important shortcomings both in the design and implementation of service delivery system. Firstly, in terms of adequacy and reach, spending on various services entrusted to local bodies is abysmal. While the State government has passed on the functions and the functionaries to panchayats, the hardening fiscal situation has resulted in restraint on devolution of funds. Most of the sectors have resources just adequate to pay for the salaries of the employees. As part of devolution, resources are transferred to places where the facilities exist, while the needs and requirements of different regions and districts within the State are not taken account of. The State Finance

Commissions too have not cared to make a proper assessment of the requirements of different taluks and districts in making their recommendations. As a result, the resources used for human development through the local governments remain grossly inadequate and their distribution, inequitable.

The second important shortcoming is the segmented nature of devolution. The devolution of functions to the Panchayats in terms of various schemes has minutely segmented the service delivery system. For example, in 2002-03 for example, there were 13 plan schemes in primary education and another 15 schemes in sports and youth services. In medical and public health, there were 50 plan schemes. The number of plan schemes in water supply and sanitation was 22 and welfare of scheduled castes and tribes, 25. Multiplicity of schemes has imparted rigidity in the application of funds. Panchayats can not discontinue the schemes even when they have outlived their utilities and the whole purpose is to safeguard the interests of the employees. Although only a few schemes account for bulk of expenditures, the organisation of the transfers in terms of schemes has reduced its efficacy and contributed to wastage of resources. Consolidation of various plan and non-plan schemes is the most important reform needed to improve the service delivery systems in the State.

The third most important shortcoming of the decentralised service delivery implemented in Karnataka is the total lack of autonomy for the local governments in implementing the schemes. The detailed analysis of major schemes in Karnataka has shown that the local bodies have flexibility in respect of only 3 percent of the funds employed by them in various expenditure schemes. Of the total expenditures incurred at the local level, 58 per cent is incurred for payment of salaries to employees, 11.5 percent are merely pass through funds - grants in aid to institutions, about 10 percent transfers to individuals, the 15.6 percent for the specified schemes. Only three percent of funds were available to the local governments for spending on items of their choice. Such a lack of autonomy makes a mockery of decentralisation experiment. Unless the tied funds are freed and local governments are enabled to exercise their choice in allocations, decentralisation will not improve the service delivery system.

Finally, there are a large number of schemes in the State sector, which legitimately belong to the district sector and therefore, need to be transferred to them. The Rao et. al. study makes a detailed analysis of the schemes that can be transferred in all sectors including the social sectors.

## **5. Tenth Plan Targets and Millennium Development Goals**

To obtain an objective understanding of the financing priorities of the State government to achieve human development targets set out in the Tenth Plan and Millennium Development Goals, it is important to assess the current status of Karnataka in terms of these objectives and highlight the financing priorities of the State government to achieve these goals. This section therefore takes up some of the important targets of human development set out in the tenth plan and Millennium Development goals and tries to examine the resource requirements for meeting these targets in Karnataka.

### **(i) Poverty Ratio**

Between 1993-94 and 1999-00, headcount ratio of poverty in Karnataka declined by 8.9 percentage points in urban areas, but only by 2.9 percentage points in rural areas (Table 14). In this context, the declining trend in expenditure on rural development and poverty alleviation in the 1990s as a share of GSDP is a matter of concern (Figure 6). Given the declining trend in expenditure on rural development, the Tenth Plan target of reducing poverty by 5 percentage points within the plan period is surely daunting. However, if the past rate of decline of poverty in urban areas continues, the urban areas of Karnataka may achieve the target. A recent study by Murgai, Suryanarayana and Zaidi (2003) showed that 53 per cent of the poor population in Karnataka was concentrated in just five districts of Raichur, Kolar, Bijapur, Gulbarga and Dharwad in 1999-00. Expenditure on poverty alleviation therefore should be targeted at these districts.

**Table 13 Important Targets of the Tenth Plan and the Millennium Development Goals**

Focus	Tenth Plan Target	Millennium Development Goal
Poverty	Reduction of poverty ratio by 5 percentage points by 2007 and 15 percentage points by 2012	Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day  Halve between 1990 and 2015, the proportion of people who suffer from hunger
Education	All children in school by 2003 and all children to complete 5 years of schooling by 2007  Increase in literacy rates to 75 percent within the Tenth Plan period (2002-03 to 2006-07)	Ensure that by 2015, children everywhere, boys and girls alike will be able to complete a full course of primary schooling
Gender Gap	Reduction in gender gaps in literacy by at least 50 per cent by 2007	Eliminate gender disparity in primary and secondary education preferably by 2005 and in all of education by 2015
Infant/child Mortality Rate	Reduction of infant mortality rate (IMR) to 45 per thousand live births by 2007 and 28 to 2012	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate
Maternal Health	Reduction of Maternal Mortality Ratio (MMR) to 2 per thousand live births by 2007 and 1 by 2012.	Reduce by three quarters, between 1990 and 2015, the Maternal Mortality Ratio
Drinking Water	All villages to have sustained access to potable drinking water within the plan period	Halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation
HIV/AIDS	80 % coverage of high risk groups through targeted interventions, 90% coverage of schools and colleges through education programmes, 80% awareness among the general population in rural areas, reducing transmission through blood to less than 1 %, establishing at least one voluntary testing and counseling centre in every district, scaling up of mother –to-child transmission activities up to the district level, achieving zero level increase of HIV/AIDS prevalence by 2007	Have halted by 2015 and begun to reverse the spread of HIV/AIDS
Malaria Targets	Annual Blood Examination Rate (ABER) over 10 %, Annual Parasite Incidence (API) 1.3 or less, 25 % reduction in morbidity and Mortality due to Malaria by 2007 and 50 % by 2010 (NHP 2002)	Have halted by 2015 and begun to reverse the incidence of Malaria and other major diseases

**Table 14. Achievements in terms of important variables monitored under Tenth Plan Targets and Millennium Development Goals, Karnataka**

Indicator	Year	Rural			Urban		
		Male	Female	All	Male	Female	All
Literacy	1991	60.3	34.8	47.7	82	65.7	74.2
	2001	70.6	48.5	59.7	86.9	74.9	81.1
School attendance	1993-94	73	62.3	67.8	86.1	84	85
	1999-00	77.7	72.6	75.1	87.4	88.7	88.2
Gender gap in literacy	1991	-25.5			-16.3		
	2001	-22.1			-12		
Head count ratio	1993-94	22			36		
	1999-00	19.1			27.1		
Infant mortality rate	1991	84			45		
	1997	63			24		

*Source:* Headcount Ratio based on calculation of poverty estimates by Sen and Himanshu (2004), Sarvekshana (1997) for school attendance rates for 1993-94.

School attendance rates for 1999-2000 were calculated by Himanshu (2004) using unit-level NSSO data.

[Himanshu (2004), School Attendance Rates for Different States of India: Estimates based on Unit-level Data from the 55<sup>th</sup> Round of Employment-Unemployment Survey, CESP, JNU, New Delhi.]

Literacy Rate: Census 1991 and 2001

Infant Mortality Rate: Compendium on India's Fertility and Mortality Indicators 1971-1997, Registrar General 1999.

#### (ii) School attendance

As per NSSO data, in 1999-2000, about 25 per cent of children aged between 5 to 14 years in rural areas and about 12 per cent of the children in the same age group in urban areas of Karnataka were out of school (Table 14). The Child Census of Karnataka, however, showed that only about 10 per cent of children in Karnataka were out of school in 2001. To the extent that these might be compared, between 1999-2000 and 2001, there appears to have been a large fall in the proportion of children who were out of school. The Child Census carried out in February 2003 further showed that the number of out of school children (in the age group of 6-14 years) in Karnataka halved between 2001 and 2003 (from 8.1 lakhs to 4.06 lakhs) (DMTFP 2003-04 to 2006-07). Although Karnataka had a large decline in the number of out of school children in the past few years, it has had clearly not yet met the Tenth Plan target of bringing all children to school by 2003.

It is important to note, that the Tapas Majumdar Committee (1999) set up to assess the financial requirements for making elementary education a fundamental right has estimated that Karnataka would require an additional recurrent expenditure of 1428.79 crores (at 1996-97 prices) in 2007-08 to universalise elementary education (Table 15). This additional requirement was calculated by assuming that the 1997-98 level of expenditure on elementary education as a proportion of GSDP (1.5 per cent) will be maintained. The Medium Term Fiscal Plan of the Department of Primary and Secondary Education (DMTFP 2003-04 to 2006-07) in Karnataka, however, projects spending of only 1.3 per cent of GSDP in 2006-07. Estimations based on the method used by Tapas Majumdar Committee suggest that Karnataka would require an additional recurrent expenditure of 4671 crores at current prices or 2.5 per cent of GSDP in 2006-07 to universalise elementary education.

It may be noted that the Government of Karnataka has undertaken a number of initiatives to bring out of school children back to school. These measures include redeployment of teachers within and across districts, shifting excess teachers to more needy schools and initiation of a number of schemes specifically targeted to bring out of school children back to school. The considerable decline in the number of children out of school in recent years shown in the Child Censuses conducted in Karnataka might be an outcome of these initiatives. Therefore, estimated financial requirements by the Tapas Majumdar Committee might be on the higher side. However, even the lowest estimate of resources required to bring all children back to school in Karnataka carried out by the World Bank (under the scenario where teachers are redeployed across and within districts), about 1.9 per cent of GSDP would be required in 2006-07 to meet the target (Table 15). In this context, the forecast of 1.3 per cent of GSDP by the DMTFP seems to be woefully inadequate to meet the goal of universalising school attendance.

**Table 15. Projected estimates of resources required for universalising elementary education**

		(Rs. Crores)		
S. No.	Estimates based on	2004-05	2005-06	2006-07
1	Tapas Majumdar Committee (TMC) Report	2336.98* (1.6)	3426.49* (2.1)	4671.38* (2.5)
2	World Bank (with revision of teacher's pay in line with 5 <sup>th</sup> pay commission)	3682 (2.5)	4021 (2.5)	4319 (2.4)
3	World Bank (with rationalisation of teachers across districts)	2955 (2.0)	3284 (2.0)	3465 (1.9)
4.	Projected expenditure by DMTEP of the Department of Primary and Secondary Education, Karnataka	2229.89 (1.5)	2329.56 (1.4)	2433.33 (1.3)

\* These figures have been estimated based on the methodology used in the TMC report  
 Figures in brackets indicate estimated expenditure as a percentage of GSDP (projected by the finance department in the department's medium term fiscal plan).

(iii) Literacy and gender gap in Education

In 2001, literacy rate in urban and rural Karnataka was 81.05 and 59.68 per cent respectively (Table 14). The goal of achieving literacy rate of 75 per cent by the end of the tenth plan has therefore been already met in the urban areas of Karnataka though it looks distant in rural areas. The rate of decline in the literacy rate in the rural areas between 1991 and 2001 was about 12 percentage points and at this rate, *ceteris paribus* Karnataka is unlikely to meet the Tenth Plan goal of literacy in the rural areas. Also, the goal of reducing gender gap in literacy by 50 per cent by 2007 is unlikely to be met in Karnataka. Between 1991 and 2001, gender gap in literacy reduced by only 3.41 and 4.32 percentage points in rural and urban areas of Karnataka respectively.

It is important to note that the contemporaneous correlation between school attendance rate and literacy rate across districts of Karnataka is about 0.78 (Table 11). This implies that there is a positive association between school attendance of children and literacy rate. Therefore, expenditure on increasing literacy may augment the efforts for bringing out-of-school children to school and vice-versa. Also it is important to note that gender gap in education (both in terms of school attendance and literacy) has a significant negative correlation with literacy and school attendance

across Karnataka districts (Table 11). Expenditure targeted towards school attendance and literacy would therefore also help reducing the gender gap in education.

(iv) Infant mortality ratio

As per the Sample Registration System, in 1997, infant mortality rate in Karnataka was 63 in rural areas and 24 in urban areas. Urban areas in Karnataka have therefore already achieved the Tenth Plan target of reducing infant mortality rate to 25. In rural areas, although infant mortality was as high as 63 in 1997, between 1991 and 1997, infant mortality rate was reduced by 21 per 1000 live births. If infant mortality ratio continues to decline at the past rate, Karnataka is likely to reach the Tenth Plan target of reducing infant mortality to 45 by 2007 even in the rural areas. However, the declining trend in expenditure primarily towards nutrition and partly towards family welfare may constrain the achievement of the goal. Also, the percentage of malnourished children has a high positive association with headcount ratio (poverty) across districts of Karnataka (correlation coefficient is about 0.7). It is therefore important to target poverty and increase expenditure on poverty alleviation if one needs to target infant mortality<sup>8</sup>.

To sum up, expenditure in Karnataka needs to be enhanced towards elementary education. The projected expenditure of the govt. as a proportion of GSDP (based on DMTEP of the department of primary and secondary education) in the future years appears to be lower than the required amount prescribed by various studies. Although the rate of out of school children in Karnataka has been declining at a rapid pace in the last few years, additional amount needs to be invested to meet the goals on elementary education. As school attendance rate is positively associated with literacy rate and negatively associated with the male-female gap in education, targeting expenditure towards school attendance will also help to move towards other goals on education. Expenditures should also be focussed towards rural development, nutrition and family welfare to meet specific targets on poverty and infant mortality in rural areas.

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<sup>8</sup> State-wise statistics on other goals such as maternal mortality ratio, HIV/AIDs etc. are not very reliable.

## 5. Concluding Remarks

Despite the recent acceleration in economic growth in Karnataka, the performance of human development in the State is just about the average and below the achievements in the neighbouring States of Kerala, Maharashtra and Tamil Nadu. The human development indicators in some of the northern districts are abysmally low. Considerable effort is needed to achieve the targets set for the Tenth Plan and the Millennium Development Goals. The problem is particularly challenging in respect of improving the human development indicators in the relatively backward districts of the State. Improving welfare of the people in the State requires considerable augmentation of investment in both physical and human capital.

Ensuring adequate allocation to human development expenditures is seriously constrained by the steadily deteriorating fiscal health of the State. Ironically, even after the State adopted the fiscal adjustment programme with the World Bank assistance, the deterioration has continued. Additional allocation to the human development sectors in the State has to come by increasing the stagnant revenue-GSDP ratio, improving the power sector finances, levying appropriate user charges on irrigation, rationalising grants and fees for higher educational institutions and containing unproductive administrative expenditures. The debt swap scheme introduced recently would provide some fiscal space to the State governments to enhance spending on human development in the next few years.

The analysis of human development spending in Karnataka shows that over the decade of the 1990s, there has been a deterioration in the SAR, SPR and HER. Declining trend in these ratios presents the nature and magnitude of challenges in the achieving the MDGs and the targets set for the Tenth Plan. The declining trend in the share of expenditure towards rural development, nutrition and to an extent family welfare in particular is a matter of concern.

The analysis of human development expenditures incurred by the local government in Karnataka, in particular with respect to education, shows that the expenditure does not go to districts where the need is more. The scheme wise allocation of funds has segmented the expenditure very narrowly. The analysis of

decentralisation of expenditures shows that the local governments do not have access to adequate resources for spending nor do they have enough flexibility to spend on items of their choice, in the way they want to.

Where does Karnataka stand in terms of achieving the Tenth Plan and Millennium Development Goals? The major challenge appears to be in the reduction of poverty in rural areas. The declining expenditure on rural development may pose a serious threat to the achievement of goal on poverty in the rural areas. Also, one of the major goals on health, on the infant mortality rate, particularly in rural areas will be achieved only if the decline continues to occur at the past rate. With the declining trend in expenditure on nutrition and poverty alleviation schemes, the past rate of growth may be difficult to maintain. In terms of school attendance, while there has been a large improvement in the recent past, further improvement may need substantial investments. The projected expenditure on elementary education by the Departmental Medium Term Fiscal Plan is much lower than the required amount suggested by various studies.

Although in some areas like infant mortality rate and literacy in urban areas, Karnataka has already achieved the targets or well on the way to achieve the targets, there is no room for complacency. Much remains to be done to improve the human development indicators in the States in the rural areas and specifically in the backward districts of the State. Focussed interventions in these areas should bring in significant improvements in the human development in the State in the future years.

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