

# AN EXAMINATION OF EXPENDITURE TOWARDS SOCIAL SECTOR SPENDING IN INDIA FROM 1990-91 ONWARDS

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### ABSTRACT

The Constitution of India lays down the division of responsibilities among the centre and states and places the main responsibility for the social sector expenditure on the states. Health sector and most rural development issues falls under the responsibility list of states while education, employment and welfareissues come under the concurrent list making these the joint responsibility of centre and states. Therefore, it becomes essential to study the patterns of social sector expenditure in India at national and state levels so as to ascertain how the social sector has been managed by the governments in India and to what extent the central and state governments in India have fulfilled their responsibility of developing the social sector in India.

KEY WORDS: Social Sector, education, employment and welfare issues.

#### INTRODUCTION

This study looks at the patterns of public spending on the social sector at the national and state levels in India in order to analyze how the social sector is managed. Public spending on the social sector can be analyzed in a variety of ways, including as a proportion of GDP or GSDP, as a percentage of total public spending, and as a real per capita expenditure. The study looks at trends in India's social sector spending in all three ways. Three levels of analysis have been used to look at the patterns in public spending on the social sector in India: combined (center & states), center, and states. Six sections make up the organization of this chapter.

#### $Patterns of {\it Public Expenditure on Social Sector at National Level}$

The patterns of public spending on the social sector by the federal and state governments are examined from several angles in this section. The combined social sector spending of the federal government and the states, as well as their respective contributions to social sector spending in India from 1988–1989 to 2010–2011, are shown in Table-1. This table also shows the percentage increase in social sector expenditure from year to year. Between 1988–89 and 2010–11, the aggregate expenditures for the social sector were contributed by the states in an amount ranging from 64–84 percent, and the center in an amount between 16 and 36 percent. The bulk of social sector spending

is borne by the states since it is their constitutional duty. During this time, the center's portion of social sector spending has increased while the states' part has been trending downward. The center is responsible for initiating new development policies, encouraging states to take up new programs, and mobilizing more resources to take advantage of central schemes that require matching shares by the state governments. Despite its relatively small share of social sector expenditure, the center plays a significant role in the development of the social sector in many ways.

The table shows that the growth in social sector spending year over year has been mainly uneven. From 1988-89 to 2010-11, it varies from -3.2 to 23.4%. "Central assistance to states has relatively declined since 1990-91 due to substantial fiscal stress and austerity measures as a result of implementation of the structural adjustment programs by the central government," according to a number of studies (Tulashidhar, 1993; Panchamukhi, 2000; Prabhu & Selvaraju, 2006; Ramakumar, 2008). This led to a 3.1% decline in central government spending on the social sector (from Rs. 18406 cr. in 1990–91 to Rs. 17828 cr. in 1991–92) and a 3.2% decline in state government spending on the social sector (from Rs. 88732 cr. in 1990–91 to Rs. 85909 cr. in 1991–92). As a result, the total public expenditure on the social sector registered a negative growth rate of 3.2% in 1991–92. The increase in spending in the social sector from 1991-1992 has exhibited a mixed pattern. The expansion in spending in the social sector has been noted, with a notable increase of 23.4% in 2008–09 from 11.1% in 2007-08. The sharp increase in the center's share of social sector expenditure, which occurred in 2008–09 from Rs. 99381 cr. in 2007–08 to Rs. 141493 cr. in 2008–09, is what caused the multifold increase in the growth rate of social sector expenditure. This increase was made in the form of increased allocations to various flagship programs like Sarva Shiksha Abhiyan (SSA) by Rs. 10276 cr., Mid-day Meal Scheme by Rs. 6275 cr., National Rural Health Mission by Rs. 9452 cr., National Aids Control Programme by Rs. 779 cr., etc. in 2008–09 (GOI, 2008a). Due to the economy's slowdown since 2008–09, the growth in spending in the social sector has drastically decreased, reaching 8.6% in 2010–11. As a result, the social sector in India is hardest hit by the country's economic downturn.

|         |                       | expenditure(SSE)      |           | · /                                 |
|---------|-----------------------|-----------------------|-----------|-------------------------------------|
| Year    | Centre                | States                | Total SSE | Year-on-Year<br>Growth in<br>SSE(%) |
| 1988-89 | 18715 ( <b>19.1</b> ) | 78142 ( <b>80.9</b> ) | 96857     | -                                   |
| 1989-90 | 25337 ( <b>23.8</b> ) | 81113 ( <b>76.2</b> ) | 106450    | 9.9                                 |
| 1990-91 | 18406 (17.2)          | 88732 ( <b>82.8</b> ) | 107138    | 0.6                                 |
| 1991-92 | 17828 (17.2)          | 85909 ( <b>82.8</b> ) | 103737    | -3.2                                |
| 1992-93 | 17459 ( <b>16.3</b> ) | 89601 ( <b>83.7</b> ) | 107060    | 3.2                                 |
| 1993-94 | 24343 (21.0)          | 91359 ( <b>79.0</b> ) | 115702    | 8.1                                 |
| 1994-95 | 26568 (22.2)          | 93374 ( <b>77.8</b> ) | 119942    | 3.7                                 |

Table1 SocialSectorExpenditure(SSE) atNationalLevel(in₹crore)

| 1995-96 | 29869 (23.2)          | 99907 ( <b>76.8</b> ) | 129776 | 8.2  |
|---------|-----------------------|-----------------------|--------|------|
| 1996-97 | 29964 (22.1)          | 105475( <b>77.9</b> ) | 135439 | 4.4  |
| 1997-98 | 35065 (23.7)          | 112811( <b>76.3</b> ) | 147876 | 9.2  |
| 1998-99 | 37393 ( <b>22.9</b> ) | 125660(77.1)          | 163053 | 10.3 |
| 1999-00 | <b>39971 (22.3)</b>   | 138887(77.7)          | 178858 | 9.7  |
| 2000-01 | 41695 (22.0)          | 148114( <b>78.0</b> ) | 189809 | 6.1  |
| 2001-02 | 51731 ( <b>26.1</b> ) | 146726( <b>73.9</b> ) | 198457 | 4.6  |
| 2002-03 | 65318 ( <b>30.9</b> ) | 146093( <b>69.1</b> ) | 211411 | 6.5  |
| 2003-04 | 67451 ( <b>30.4</b> ) | 154564( <b>69.6</b> ) | 222015 | 5.0  |
| 2004-05 | 67903 ( <b>29.2</b> ) | 164875( <b>70.8</b> ) | 232778 | 4.8  |
| 2005-06 | 76941 ( <b>29.5</b> ) | 184101( <b>70.5</b> ) | 261042 | 12.1 |
| 2006-07 | 93864 ( <b>31.6</b> ) | 202933( <b>68.4</b> ) | 296797 | 13.7 |
| 2007-08 | 99381 ( <b>30.1</b> ) | 230469( <b>69.9</b> ) | 329850 | 11.1 |
| 2008-09 | 141493(34.8)          | 265584( <b>65.2</b> ) | 407077 | 23.4 |
| 2009-10 | 152269(33.8)          | 298375( <b>66.2</b> ) | 450644 | 10.7 |
| 2010-11 | 176069(36.0)          | 313342( <b>64.0</b> ) | 489411 | 8.6  |
| 2011-12 | 24343 (21.0)          | 105475( <b>77.9</b> ) | 115702 | 8.1  |
| 2012-13 | 26568 (22.2)          | 112811( <b>76.3</b> ) | 119942 | 3.7  |
| 2013-14 | 26568 (22.2)          | 125660(77.1)          | 129776 | 8.2  |
| 2014-15 | 29869 (23.2)          | 138887(77.7)          | 135439 | 4.4  |
| 2015-16 | 29964 (22.1)          | 148114( <b>78.0</b> ) | 147876 | 9.2  |
| 2016-17 | 35065 (23.7)          | 146726( <b>73.9</b> ) | 163053 | 10.3 |
| 2017-18 | 37393 ( <b>22.9</b> ) | 146093( <b>69.1</b> ) | 178858 | 9.7  |
| 2018-19 | <b>39971 (22.3)</b>   | 154564( <b>69.6</b> ) | 296797 | 13.7 |
| 2019-20 | 41695 (22.0)          | 164875( <b>70.8</b> ) | 329850 | 11.1 |
| 2020-21 | 51731 ( <b>26.1</b> ) | 184101( <b>70.5</b> ) | 407077 | 23.4 |
| 2021-22 | 65318 ( <b>30.9</b> ) | 202945( <b>68.4</b> ) | 450644 | 10.7 |
| 2022-23 | 176069(36.0)          | 202965( <b>68.4</b> ) | 489411 | 8.6  |
| 2023-24 | 176069( <b>36.0</b> ) | 202994( <b>68.4</b> ) | 489411 | 8.6  |

Note:Figuresinparenthesisarepercentageshares

Source: Computedfromdata inCombined Finance and Revenue Accounts of the Unionand State Governments, GOI (various years)

Public expenditure on social sector by centre and states can also be categorised into revenue and capital heads of accounts. Revenue expenditureconsists of recurrent expenditure on wages and salaries, and general operating expenses whereas capital expenditure consists of non-recurrent expenditure on development of infrastructure and physical assets and one-time investment in socialsector development programmes.

The combined public spending on the social sector for the federal government and the states is shown in the table as a percentage of GDP and total public spending. India spent less than ten percent of its GDP (GDP) on the social sector during 1988–1989 and 2010–2011. The GDP share allocated to the social sector increased from 7.28 percent in 1988–1989 to 9.41 percent in 2009–2010, when it peaked, and then slightly decreased to 9.26 percent in 2010–2011. While states spend between 5 and 6.5 percent of GDP on the social sector, the center contributes between 1 and 3.5 percent of GDP to it. The center's part of total social sector expenditure as a percentage of GDP has been observed to be increasing with occasional variations, whereas the states' share of total social sector expenditure as a percentage of GDP has been observed to be increasing of GDP has not changed much between 1988–1989 and 2010–2011.

India spends between 20.5 and 31.5 percent of its total public expenditures on the social sector; the states contribute between 16 and 20.5 percent, while the center contributes between 3 and 11.5 percent. While the share of states in social sector expenditure has increased by only 14% (from 17.49 percent in 1988-89 to 19.93 percent in 2010-11), the share of the center has increased by nearly 167% between 1988-89 and 2010-11, the combined social sector expenditure as a percentage of aggregate public expenditure shows an increase of more than 43% (from 21.68 percent in 1988-89 to 31.13 percent in 2010-11). According to this analysis, the central government implemented several significant social sector initiatives during that time, including the "Bharat Nirman programme, National Rural Employment Guarantee Scheme, National Rural Health Mission, Jawaharlal Nehru National Urban Renewal Mission, allocation to Sarva Shiksha Abhiyan, Mid-day Meal Scheme," among others. As a result, social sector expenditure both as a percentage of GDP and aggregate public expenditure showed an increasing trend from 2004–05 until 2010–11. The budgets have given high attention to these flagship programs and schemes, and they have continued to receive a substantial increase in funding with the goal of improving the lives of the underprivileged and marginalized groups in society. Throughout the course of the study period, the center's percentage of GDP and proportion of total social sector spending as well as total public spending have both increased over time. Panchamukhi (2000) has referred to this tendency of the central government's growing participation in the social sector as the "concentration process" under the Indian federal structure.

The table also shows the real per capita expenditure that the Indian government spends on the social sector. From 1988–89 to 2010–11, the actual per capita public expenditure in India on the social sector increased steadily by about 242%, from Rs. 1197 to Rs. 4097. During the research period, states' real per capita social sector expenditure climbed less than three times, from Rs. 966 to Rs. 2623, whereas the center's real per capita expenditure increased more than six times, from Rs. 231 to Rs. 1474. This suggests that the center has been contributing more to India's total spending on the social sector.

#### ${\bf Composition of Combined Social Sector Expenditure}$

In India, the term "social sector expenditure" refers to the costs associated with the 10 main social sector headings. The primary budgetary head "Social Services" is responsible for the first eight heads, which are "education, sports, art and culture," "health and family welfare," "water supply, sanitation, housing and urban development," "information and broadcasting," "welfare of SCs, STs, and OBCs," "labor and labor welfare," "social welfare and nutrition," and "others." The remaining two major heads, "rural development" and "food, storage and warehousing," are under the main budgetary head "Economic Services." This section analyzes the public spending of the federal government and the states under the key social sector headings, both as a percentage of GDP and as a proportion of the total public spending

of the federal government and the states. This section also looks at the percentage participation of main social sector heads in the total social sector expenditure of the federal government and the states in order to analyze changes in social sector spending.

An overview of the respective major heads' contribution of the total social sector expenditure as a percentage of GDP is provided by Table-2. The "education, sports, art and culture" head is one of the major shareholders among the various individual social sector components. From 1988–1989 to 2010–2011, it received 2.5–3.5 percent of GDP; however, this is less than the desired target of 6% of national income as outlined in the National Policy on Education, 1986 (GOI, 1992). The GDP percentage of public spending on "health and family welfare" has been below 1%, whereas between 1988–1989 and 2010–2011, public spending on "water supply, sanitation, housing, and urban development" ranged from 0.6 to 1.50 percent. The head of "Social welfare and nutrition" receives between 0.4 and 1.2 percent of GDP, while the head of "Welfare of SCs, STs, and OBCs" consistently earns between 0.3 and 0.4 percent. The heads of the other social service heads, on the other hand, receive less than 0.5 percent of GDP.

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| CompositionofCombined SocialSectorExpenditure(AsPercent ofGDP) |             |             |             |             |             |             |             |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| MajorHeads   | 1990-<br>91 | 1991-<br>92 | 1992-<br>93 | 1993-<br>94 | 1994-<br>95 | 1995-<br>96 | 1996-<br>97 | 1997-<br>98 | 1998-<br>99 | 1999-<br>00 | 2000-<br>01 | 2001-<br>02 |
| A.SOCIAL SERVICES  |             |             |             |             |             |             |             |             |             |             | •=          |             |
| 1.Education,Sports,ArtandCulture                               | 2.86        | 3.05        | 2.99        | 2.83        | 2.79        | 2.72        | 2.67        | 2.65        | 2.61        | 2.69        | 2.92        | 3.11        |
| 2.Health&FamilyWelfare   | 0.94        | 0.93        | 0.92        | 0.87        | 0.86        | 0.86        | 0.82        | 0.79        | 0.78        | 0.82        | 0.85        | 0.85        |
| 3. WaterSupply, Sanitation, Housing&UrbanDevelopment           | 0.82        | 0.76        | 0.73        | 0.77        | 0.73        | 0.69        | 0.73        | 0.71        | 0.79        | 0.84        | 0.87        | 0.83        |
| 4.Information &Broadcasting                                    | 0.16        | 0.17        | 0.15        | 0.13        | 0.12        | 0.12        | 0.11        | 0.11        | 0.11        | 0.11        | 0.10        | 0.11        |
| 5.WelfareofSCs,STsandOBCs                                      | 0.35        | 0.32        | 0.34        | 0.35        | 0.34        | 0.32        | 0.34        | 0.32        | 0.34        | 0.35        | 0.34        | 0.31        |
| 6.LabourandLabourWelfare                                       | 0.14        | 0.13        | 0.12        | 0.12        | 0.12        | 0.13        | 0.10        | 0.10        | 0.10        | 0.10        | 0.10        | 0.10        |
| 7.SocialWelfareandNutrition                                    | 0.58        | 0.48        | 0.53        | 0.52        | 0.47        | 0.43        | 0.41        | 0.62        | 0.55        | 0.54        | 0.52        | 0.57        |
| 8.Others   | 0.03        | 0.02        | 0.02        | 0.03        | 0.03        | 0.03        | 0.02        | 0.02        | 0.02        | 0.02        | 0.03        | 0.02        |
| 9.TotalSocialServices(1to 8)                                   | 5.88        | 5.88        | 5.80        | 5.62        | 5.46        | 5.30        | 5.20        | 5.32        | 5.30        | 5.47        | 5.73        | 5.90        |
| B. ECONOMICSERVICES  |             |             |             |             |             |             |             |             |             |             |             |             |
| 10.Rural Development   | 0.84        | 1.05        | 0.88        | 0.83        | 0.84        | 0.96        | 1.01        | 0.98        | 0.85        | 0.87        | 0.87        | 0.78        |
| 11.Food,Storageand Warehousing                                 | 0.56        | 0.62        | 0.52        | 0.45        | 0.45        | 0.71        | 0.56        | 0.51        | 0.46        | 0.59        | 0.60        | 0.58        |
| TotalSocialSectorExpenditure(9+10+11)                          | 7.28        | 7.55        | 7.20        | 6.90        | 6.75        | 6.97        | 6.77        | 6.81        | 6.61        | 6.93        | 7.20        | 7.26        |

Table-2 CompositionofCombined SocialSectorExpenditure(AsPercent ofGDP)

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| Composition of Combined Social Sector Expenditure (AsPercent of GDP) |             |             |             |             |             |             |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| MajorHeads   | 2002-<br>03 | 2003-<br>04 | 2004-<br>05 | 2005-<br>06 | 2006-<br>07 | 2007-<br>08 | 2008-<br>09 | 2009-<br>10 | 2010-<br>11 | 2011-<br>12 | 2012-<br>13 |
| A.SOCIAL SERVICES  |             |             |             |             |             |             |             |             |             |             |             |
| 1.Education,Sports,ArtandCulture                                     | 3.08        | 2.87        | 2.83        | 2.68        | 2.65        | 2.66        | 2.72        | 2.65        | 2.94        | 3.13        | 3.21        |
| 2.Health&FamilyWelfare   | 0.85        | 0.82        | 0.79        | 0.77        | 0.75        | 0.80        | 0.81        | 0.82        | 0.89        | 0.94        | 0.91        |
| 3.WaterSupply, Sanitation, Housing&UrbanDevelopment                  | 0.88        | 0.89        | 0.93        | 0.96        | 0.91        | 0.94        | 0.96        | 1.19        | 1.45        | 1.37        | 1.20        |
| 4.Information &Broadcasting  | 0.08        | 0.07        | 0.06        | 0.06        | 0.05        | 0.06        | 0.06        | 0.07        | 0.07        | 0.06        | 0.06        |
| 5.WelfareofSCs,STsandOBCs  | 0.31        | 0.31        | 0.31        | 0.31        | 0.31        | 0.33        | 0.33        | 0.34        | 0.38        | 0.37        | 0.38        |
| 6.LabourandLabourWelfare   | 0.11        | 0.08        | 0.08        | 0.08        | 0.08        | 0.08        | 0.10        | 0.08        | 0.09        | 0.09        | 0.09        |
| 7.SocialWelfareandNutrition  | 0.67        | 0.68        | 0.60        | 0.62        | 0.66        | 0.78        | 0.71        | 0.89        | 1.11        | 1.15        | 1.13        |
| 8.Others   | 0.02        | 0.05        | 0.04        | 0.04        | 0.04        | 0.04        | 0.03        | 0.04        | 0.03        | 0.03        | 0.03        |
| 9.TotalSocialServices(1to 8)   | 6.00        | 5.77        | 5.64        | 5.52        | 5.45        | 5.69        | 5.72        | 6.08        | 6.96        | 7.14        | 7.01        |
| B. ECONOMICSERVICES  |             |             |             |             |             | •           |             | •           |             |             |             |
| 10.Rural Development   | 0.71        | 0.76        | 0.97        | 0.95        | 0.84        | 0.99        | 1.32        | 0.95        | 1.32        | 1.15        | 1.07        |
| 11.Food,Storageand Warehousing                                       | 0.71        | 0.87        | 0.98        | 0.92        | 0.89        | 0.69        | 0.63        | 0.73        | 0.94        | 1.12        | 1.18        |
| TotalSocialSectorExpenditure(9+10+11)                                | 7.42        | 7.40        | 7.59        | 7.39        | 7.18        | 7.37        | 7.67        | 7.76        | 9.22        | 9.41        | 9.26        |

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Source: Computed fromdata inCombinedFinance and Revenue Accounts of the Union and State Governments, GOI (various years); Handbook of Statistics on Indian Economy2013-14, RBI (2014)

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| MajorHeads  | 2013-<br>14 | 2014-<br>15 | 2015-<br>16 | 2016-<br>17 | 2017-<br>18 | 2018-<br>19 | 2019-<br>20 | 2020-<br>21 | 2021-<br>22 | 2022-<br>23 | 2023-<br>24 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| A.SOCIAL SERVICES                                   |             |             |             |             |             |             |             |             |             |             |             |
| 1.Education,Sports,ArtandCulture                    | 3.08        | 2.87        | 2.83        | 2.68        | 2.65        | 2.66        | 2.72        | 2.65        | 2.94        | 3.13        | 3.31        |
| 2.Health&FamilyWelfare                              | 0.85        | 0.92        | 0.79        | 0.77        | 0.75        | 0.80        | 0.81        | 0.82        | 0.89        | 0.94        | 0.91        |
| 3.WaterSupply, Sanitation, Housing&UrbanDevelopment | 0.98        | 0.89        | 0.93        | 0.96        | 0.91        | 0.94        | 0.96        | 1.19        | 1.45        | 1.37        | 1.30        |
| 4.Information &Broadcasting                         | 0.08        | 0.07        | 0.36        | 0.06        | 0.75        | 0.46        | 0.06        | 0.27        | 0.07        | 0.06        | 0.06        |
| 5.WelfareofSCs,STsandOBCs                           | 0.31        | 0.31        | 0.31        | 0.31        | 0.31        | 0.33        | 0.63        | 0.34        | 0.38        | 0.37        | 0.38        |
| 6.LabourandLabourWelfare                            | 0.11        | 0.08        | 0.08        | 0.08        | 0.08        | 0.08        | 0.10        | 0.08        | 0.09        | 0.09        | 0.09        |
| 7.SocialWelfareandNutrition                         | 0.67        | 0.68        | 0.60        | 0.62        | 0.66        | 0.78        | 0.71        | 0.89        | 1.61        | 1.25        | 1.13        |
| 8.Others  | 0.07        | 0.25        | 0.04        | 0.04        | 0.04        | 0.04        | 0.03        | 0.04        | 0.03        | 0.03        | 0.03        |
| 9.TotalSocialServices(1to 8)                        | 6.00        | 5.77        | 5.64        | 5.52        | 5.45        | 5.69        | 5.72        | 6.08        | 6.96        | 7.14        | 7.11        |
| B. ECONOMICSERVICES                                 | •<br>•      |             |             |             |             |             |             |             |             |             |             |
| 10.Rural Development                                | 0.71        | 0.76        | 0.97        | 0.95        | 0.84        | 0.99        | 1.32        | 0.95        | 1.32        | 1.25        | 1.07        |
| 11.Food,Storageand Warehousing                      | 0.71        | 0.97        | 0.98        | 0.92        | 0.89        | 0.69        | 0.63        | 0.73        | 0.94        | 1.12        | 1.18        |
| TotalSocialSectorExpenditure(9+10+11)               | 7.55        | 7.80        | 7.89        | 7.39        | 7.88        | 7.77        | 7.97        | 7.96        | 9.82        | 9.61        | 9.66        |

Throughout the study period, social services accounted for between 5 and 7.5 percent of GDP. The percentage of GDP devoted to "rural development" increased from 0.84 to 1.01 percent in 1988–89 to 1994–95, then fell to 0.71 percent in 2000–01, and finally reached its highest point of 1.32 percent in 2006–07 thanks to the National Rural Employment Guarantee Scheme, which was implemented in that year and allocated Rs. 10547 crore to the creation of jobs in rural areas (GOI, 2006a). From 1988–89 to 2010–11, public spending on "food, storage, and warehousing" ranged from 0.4 to 1.20 percent of GDP, exhibiting a mixed trend.

#### CONCLUSION

The aforementioned study indicates that the states bear the constitutional responsibility of covering the majority of social sector expenditures in India. Nonetheless, during the study period, the states' proportion of total spending on the social sector has decreased. Even while the center only makes up a minor portion of social sector spending, during the study period, its percentage has increased. India's social sector spending has grown at a very uneven rate every year. The fact that capital expenditures make up a modest percentage of total social sector spending in India indicates that governments there have placed a relatively low priority on infrastructure investment in the social sector. In terms of GDP percentage and total public spending at the national level, the social sector's spending from 1988–1989 to 2003–04 showed a mixed trend. However, from 2004–05 onward, it showed an increasing trend until 2010–11 because of the central government's increased funding for its various flagship programs and schemes, which were introduced during that time with the goal of improving the lives of the underprivileged and marginalized sections of society. Examples of these programs and schemes include the National Rural Health Mission, the Bharat Nirman Program, and the National Rural Employment Guarantee Scheme. Over the course of the study, the real per capita public expenditure on the social sector has increased steadily, but the rate of growth in the center's real per capita expenditure on the social sector has outpaced the rate of growth in the states' real per capita public expenditure on the social sector.

According to an analysis of the composition of the total amount spent on the social sector, the first three major components—"education, sports, art and culture," "health and family welfare," and "water supply, sanitation, housing and urban development"—account for between 57 and 66 percent of the total amount spent on the social sector, indicating that education and health are two of its essential components. "Education, sports, art, and culture" emerges as the dominant sector, receiving the highest share of GDP and the total amount of public spending on the social sector. The patterns observed in the combined social sector expenditure under major heads within the social sector as a percentage of

aggregate public expenditure.

The center is the primary head among the major heads in the social sector because it has incurred the largest share of GDP and aggregate public spending on "food, storage, and warehousing"; as a result, it is the primary head among the center's expenditure components in the social sector. The examination of the social sector expenditure composition in the center also shows that central funding accounts for the majority of public spending on "food, storage, and warehousing." Due to the central government's significant increase in spending of Rs. 5800 cr. on rural employment schemes in 1989–1990, there was a noticeable increase in the share of "rural development" head in the center's social sector expenditure as a percentage of GDP and aggregate public expenditure. Due to the central government's massive increase in spending on its two minor heads, "relief on account of natural calamities" and "social security and welfare," during that time, the share of the center's social sector expenditure under the "social welfare and nutrition" head increased significantly between 1994–1995 and 1995–1996 in terms of both GDP and aggregate public expenditure.

When it comes to the breakdown of state spending on the social sector, the category "education, sports, art, and culture" takes center stage because these states spend the most overall and as a percentage of GDP on public expenditure. In addition, the share of the states' social sector expenditure that goes toward "social welfare and nutrition" increased significantly between 1995 and 1996. This suggests that in addition to the significant increase in spending by the federal government during that year, the states also increased their spending on two minor heads: "social security and welfare" and "relief on account of natural calamities." The share of the "rural development" head in the states' social sector expenditure as a percentage of GDP decreased sharply between 1988–1989 and 1989–1990, in contrast to the significant increase in the head's share in the center's social sector expenditure as a percentage of GDP during the same period. This is because the states' spending under the same minor head, "rural employment," was significantly reduced after the central government increased its expenditure significantly. The states' modest contribution to "food, storage, and warehousing" further confirms that the federal government is the main source of funding for this important area.

A state-by-state examination of trends in social sector spending shows that Mizoram has spent the most on the social sector over the majority of the research period, followed by Sikkim, both as a percentage of GSDP and in terms of real per capita public expenditure. Out of all the states, only 11 (Puducherry, Bihar, and 9 special category states) spend a larger percentage of their gross state product (GSDP) on social services than the national average. This suggests that the majority of special category states spend a higher percentage of their GSDP on social services than general category states. The analysis reveals that, when compared to most developed states, the majority of economically less developed states incur higher levels of social sector expenditure, both in terms of aggregate public expenditure and their gross state domestic product (GSDP). However, this trend appears to be reversed when the social sector expenditure of the states is examined in terms of real per capita public expenditure, particularly in the cases of Uttar Pradesh and Bihar. Despite allocating a larger percentage of their gross state domestic product (GSDP) to the social sector, Bihar and Uttar Pradesh have the lowest real per capita spending on the social sector of all the states. The state-by-state examination of real per capita public expenditure on the social sector has shown the significant scale variances across states. When compared to general category states, the majority of special category states have been found to suffer higher real per capita social sector expenditures. The aforementioned analysis provides clear evidence of governments' retreat from fulfilling their social obligations, particularly in high-income states.

Kerala is the highest-ranking state among the fifteen major states in terms of social sector spending to date. Kerala's expenditure on the social sector as a percentage of GSDP and real per capita public expenditure increased significantly between 1988–1989 and 2010–2011, indicating the state's deep care for its people. The social sector has received the lowest priority from the Punjab government in its priority list because, for the majority of the study period, the province spent the smallest percentage of its gross state domestic product (GSDP) and total public expenditure on it. Additionally, Punjab had the lowest growth in real per capita social sector expenditure among all states from 1988–1989 to 2010–2011. Punjab's history serves as a clear illustration of how the benefits of economic expansion must be transformed into increased social opportunity through the intentional policy involvement of a dedicated government.

In summary, it may be said that as the states bear a large portion of the country's social sector expenditures, changes in state spending have a greater impact on overall social sector spending than does central government spending. Therefore, the state governments as well as society at large are undoubtedly concerned about the states' diminishing part of India's total spending on the social sector. The fact that the majority of economically less developed nations spend comparatively more on the social sector than do developed states suggests that political commitment, rather than economic standing, is what may guarantee the preservation of funding for the social sector.

#### REFERENCES

- 1. Akkawi,I.,&Zmerly,H.(2018).Osteoporosis:CurrentConcepts.Joints,6(2),122–127.https://doi.org/10.1055/s-0038-1660790
- 2. Al-Anazi, A. F., Qureshi, V. F., Javaid, K., & Qureshi, S. (2011). Preventive effects of phytoestrogens against postmenopausal osteoporosis as compared to the available therapeutic choices: An overview.

Journal of natural science, biology, and medicine, 2(2), 154–163. https://doi.org/10.4103/0976-9668.92322

- 3. Buenzli, P.R., & Sims, N.A. (2015). Quantifying the osteo cytenetwork in the human skeleton. Bone, 75, 144–150. https://doi.org/10.1016/j.bone.2015.02.016
- 4. Burge,R.,Dawson-Hughes,B.,Solomon,D.H.,Wong,J.B.,King,A.,&Tosteson, (2007). Incidence and economic burden of osteoporosis-related fractures in the United States, 2005–2025. Journal of bone and mineral research, 22(3), 465-475.
- Cabahug-Zuckerman, P., Frikha-Benayed, D., Majeska, R. J., Tuthill, A., Yakar, S., Judex, S., & Schaffler, M. B. (2016). Osteocyte Apoptosis Caused by Hindlimb Unloading is required to trigger osteocyte RANKL production and subsequent resorption of cortical and trabecular bone in mice femurs. Journal of bone and mineral research: the official journal of the American Society for Bone and Mineral Research, 31(7),1356–1365. https://doi.org/10.1002/jbmr.2807
- 6. Canderelli, R., Leccesse, L. A., Miller, N. L., & Unruh Davidson, J. (2007). Benefits of hormone replacement therapy in postmenopausal women. Journal of the American Academy of Nurse Practitioners, 19(12), 635–641. https://doi.org/10.1111/j.1745-7599.2007.00269.x
- Atkins, G. J., & Findlay, D. M. (2012). Osteocyte regulation of bone mineral: a little give and take. Osteoporosis international : a journal established as result of cooperation between the European Foundation for Osteoporosis and the National Osteoporosis Foundation of the USA, 23(8), 2067– 2079. https://doi.org/10.1007/s00198-012-1915-z
- 8. B.Mognetti,S.Marino,A.Barberis,A.S.Martin,Y.Bala,F.DiCarlo,G.Boivin, M.P. Barbos, Experimental stimulation of bone healing with teriparatide: histomorphometric and microhardness analysis in a mouse model of closed fracture, Calcif. Tissue Int. 89 (2) (2011) 163–171, https://doi.org/10.1007/s00223-011-9503-3.
- Barnes GL, Kakar S, Vora S, Morgan EF, Gerstenfeld LC, Einhorn TA (2008) Stimulation of fracture-healing with systemic intermittent parathyroidhormone treatment. J Bone Joint Surg Am 90(Suppl 1):120–127
- 10. Bartl, R. and Bartl, C. (2019). Structure and Architecture of Bone. In The Osteoporosis Manual (pp. 9-19). Springer, Cham.
- Bhargavan, B., Gautam, A. K., Singh, D., Kumar, A., Chaurasia, S., Tyagi, A. M., Yadav, D. K., Mishra, J. S., Singh, A. B., Sanyal, S., Goel, A., Maurya, R., & Chattopadhyay, N. (2009). Methoxylated isoflavones, cajanin and isoformononetin, have non-estrogenic bone forming effect via differential mitogen activated protein kinase (MAPK) signaling. Journal of cellular biochemistry, 108(2), 388–399. https://doi.org/10.1002/jcb.22264
- 12. Bouxsein, M. L., Boyd, S. K., Christiansen, B. A., Guldberg, R. E., Jepsen, K. J., and Müller, R. (2010). Guidelines for assessment of bone microstructure in rodents using micro-computed tomography. Journal of Bone and Mineral Research 25, 1468–1486. doi:10.1002/jbmr.141.
- Boyce, E. G., Mai, Y., & Pham, C. (2018). Abaloparatide: Review of a Next- Generation Parathyroid Hormone Agonist. The Annals of pharmacotherapy, 52(5), 462–472. https://doi.org/10.1177/1060028017748649
- 14. Dixit, M., Raghuvanshi, A., Gupta, C. P., Kureel, J., Mansoori, M. N., Shukla, P., John, A. A., Singh, K., Purohit, D., Awasthi, P., Singh, D., &Goel, A. (2015). Medicarpin, a Natural Pterocarpan, Heals Cortical Bone Defect by Activation ofNotchandWntCanonicalSignalingPathways.PloSone,10(12),e0144541.

https://doi.org/10.1371/journal.pone.0144541

15. Dixit, M., Singh, K. B., Prakash, R., & Singh, D. (2017). Functional block of IL-17 cytokine promotes bone healing by augmenting FOXO1 and ATF4 activity in cortical bone defect model. Osteoporosis International, 28(7), 2207-2220.