



TRENDS AND PATTERNS OF SOCIAL SECTOR EXPENDITURE BY CENTRAL GOVERNMENT OF INDIA

Hemantha M ¹, Dr. S.B. Nari ²

¹Research Scholar, Karnatak University, Dharwad

²Associate Professor, Karnatak University, Dharwad

1. ABSTRACT

The distribution and utilization of public resources by the Indian Central Government in the Social Sector have significantly influenced the socio-economic landscape of the country. This detailed examination explores the public spending trends and patterns in the Social Sector, providing understanding of the strategies, priorities, and shifts in public spending that have influenced the development of India's Social Sector. The study evaluates the impact of public spending by Central Government for Social Sector on Human Development. India's challenges and opportunities are being addressed, and this research provides important insights for future decision-making on Social Sector Development. The study shows a strong commitment to social welfare and a focus on development, demonstrating the Indian government's dedication to inclusive and sustainable growth and development.

2. INTRODUCTION

The allocation and utilization of public resources is very important in shaping a nation's socio-economic landscape. In India, the Social Sector Expenditure of the Central Government is significant due to the country's diverse population and complex developmental challenges. Over the years, India has made significant progress in Education, Healthcare, and social welfare through financial allocation by the Central Government.

Social Sector Expenditure (SSE) is the Total Public Expenditure on 'Social Services' and 'Rural Development' by the Central and State Governments. The 'Social Services' mainly comprises Education, Health, family welfare, water supply and sanitation. The head 'Rural Development' generally comprise poverty alleviation programs like employment generation, health and nutritional development initiatives for women and children (Dev & Mooij, 2004).

The Human Development Index (HDI) is an indicator of social standards that consists of three aspects: Life Expectancy, Access to Education and Literacy, and living conditions and income (Rezaee et al., 2021). The concept of Human Development Index was developed by Pakistani Economist Mahbub ul-Haq in the year 1990 (Haq, 1992). The Human Development Index exemplifies Amartya Sen's capabilities approach to comprehend the human well-being. The HDI comprises three dimensions namely, Long and healthy life, Knowledge and Standard of living (Sen, 1993).

In this thorough investigation, we explore the trends and patterns of Social Sector Spending by the Indian Central Government. The purpose of this analysis is to reveal the overall strategies, priorities, and changes in public expenditure that have affected the nation's Social Sector landscape. By examining the development of Central Government spending in various areas of social progress, we aim to offer valuable insights into the influence of fiscal policies on the welfare of India's extensive population.

To understand current Social Sector Spending trends, it is necessary to examine the historical development of governance in India. After gaining independence, India focused on building the nation, which required investing in Human Capital and Social Infrastructure. Policies like the Five-Year Plans and Economic Liberalization in 1991 have greatly impacted resource allocation and utilization in the Social Sector.

The historical trajectory of Social Sector Expenditure by the Central Government reflects a dynamic interplay of factors. This includes changing political regimes, economic growth trajectories, and evolving public priorities. Understanding this historical context will lay the foundation for a more nuanced examination of the present-day landscape.



The magnitude of Social Sector Expenditure by the Central Government of India shows its commitment in promoting inclusive development. Over the years, the Central Government has allocated a substantial portion of its budget to sectors such as Education, Healthcare, Nutrition, and Poverty Alleviation programs. Analyzing the allocation patterns within these sectors can reveal shifts in Government policy priorities and their alignment with the changing needs of the population.

Furthermore, the geographical distribution of public funds within India, with its diverse states and regions, plays a pivotal role in comprehending the agenda for equitable development. We will analyze how the central government's budgetary allocation strategies have aimed to bridge regional disparities and promote Socio-economic Growth across the country.

The aim of any Public Expenditure can be measured by its influence on the lives of its citizens. In this context, we will review the outcomes of Social Sector Expenditure by the Central Government. This entails evaluating improvements in Human Development, such as literacy rates, life expectancy, and poverty reduction.

Understanding the ramifications of Expenditure in the Social Sector is crucial not only for evaluating the efficacy of policies but also for informing future decision-making processes. Through the examination of the accomplishments and hurdles encountered in translating financial allocations into concrete enhancements in the lives of individuals, we can pinpoint areas that require improvement and innovation.

As India progresses, the challenges and opportunities within the Social Sector also increases. The emergence of trends such as digitalization, urbanization, and shifting demographics present novel challenges for policymakers. Furthermore, the global landscape of development assistance and cooperation has also advanced, influencing India's approach to financing in the Social Sector.

This investigation aims to delve into the contemporary trends and challenges that influence the Central Government's strategy in Social Sector Spending. To conclude, comprehending the Trends and Patterns of Expenditure in the Social sector by the Central Government of India is of utmost significance in comprehending the India's journey towards Inclusive and Sustainable Development. This exploration will provide a comprehensive perspective on the historical evolution, present priorities, impact, and future directions of Social Sector Expenditure. By scrutinizing these aspects, the intention of present study is to provide valuable insights to the ongoing discourse on Social Sector Development in India.

3. RESEARCH METHODOLOGY

In the present study, the Trends and Patterns of Public Spending and Social Sector Spending made by the Central Government of India is analysed. For that purpose, the study has considered 1980-2022 financial years as study period. The essential data are retrieved from Reserve Bank of India Database on Indian Economy, Economic and Political Weekly Research Foundation (EPWRF) Database and Global Data Lab. The study incorporates simple statistical tools like Percentages, Ratios, Annual Growth Rate, Compound Annual Growth Rate (CAGR), and Correlation to identify the Central Government Public and Social Sector Spending trends and patterns and its influence on Human Development in India.

4. RESULTS & DISCUSSION

In the Results and Discussion section, we analyze the trends and patterns of Social Sector Expenditure by the Central Government of India. Social Sector Spending has become crucial in India's fiscal policy, addressing Education, Healthcare, and social welfare. This section examines the historical trajectory of Social Sector Expenditure and how budget allocations have changed over time. Through data analysis, we aim to understand the government's focus on Social Sector Development and its impact on India's well-being. This analysis provides insights into the government's fiscal choices and their implications for the nation's Social and Economic landscape.



4.1. Public Expenditure, Development and Non-Development Expenditure by Central Government of India

Table 4.1:

Year	TPE (In crore Rupees)	DE (in crore Rupees)	NDE (in Crore Rupees)	PCCPE (In Rupees)	PCCDE (in Rupees)	PCCNDE (in rupees)
1980	22768	13327	9867	335.32	196.27	145.32
1981	25265	13791	12644	365.10	199.29	182.72
1982	30791	16333	15897	434.90	230.69	224.53
1983	35534	19407	18364	491.48	268.42	254.00
1984	43632	27375	18525	590.42	370.43	250.68
1985	52666	32909	20899	697.56	435.88	276.81
1986	62916	35498	26060	816.03	460.42	338.00
1987	68261	36573	30261	866.26	464.12	384.02
1988	79111	41536	35519	982.75	515.98	441.23
1989	92908	54204	41020	1130.27	659.42	499.03
1990	105298	58645	49349	1255.04	698.99	588.19
1991	111414	59313	55170	1301.57	692.91	644.51
1992	122618	65479	60584	1406.17	750.91	694.77
1993	141853	72464	73586	1590.28	812.38	824.96
1994	160739	82803	82402	1766.36	909.92	905.52
1995	178275	84427	98632	1921.07	909.77	1062.84
1996	201007	94197	112217	2124.81	995.74	1186.23
1997	232053	110994	127820	2407.19	1151.39	1325.93
1998	279340	137257	150298	2841.71	1396.31	1528.97
1999	298053	129151	177928	2977.55	1290.22	1777.50
2000	325592	139386	197470	3195.21	1367.87	1937.88
2001	362310	159364	215456	3483.75	1532.35	2071.69
2002	413248	184197	242749	3913.33	1744.29	2298.76
2003	471203	195428	243298	4395.55	1823.02	2269.57
2004	498252	214955	262904	4575.32	1973.88	2414.18
2005	505738	229060	290677	4572.68	2071.07	2628.18
2006	583387	255718	341278	5199.53	2279.13	3041.69
2007	712671	325670	400728	6262.49	2861.78	3521.34
2008	883956	471399	428145	7659.93	4084.91	3710.10
2009	1024487	528242	514101	8756.30	4514.89	4394.03
2010	1197328	666069	551471	10095.51	5616.10	4649.84
2011	1304365	705321	627075	10691.52	5781.32	5139.96
2012	1410372	742417	692856	11420.02	6011.47	5610.17
2013	1559447	784504	803070	12465.60	6271.02	6419.42
2014	1663673	813813	881159	13130.81	6423.15	6954.69
2015	1790783	835019	990172	13957.78	6508.33	7717.63
2016	1975194	899369	1075825	15205.50	6923.55	8281.95
2017	2141973	998201	1143772	16301.16	7596.66	8704.51

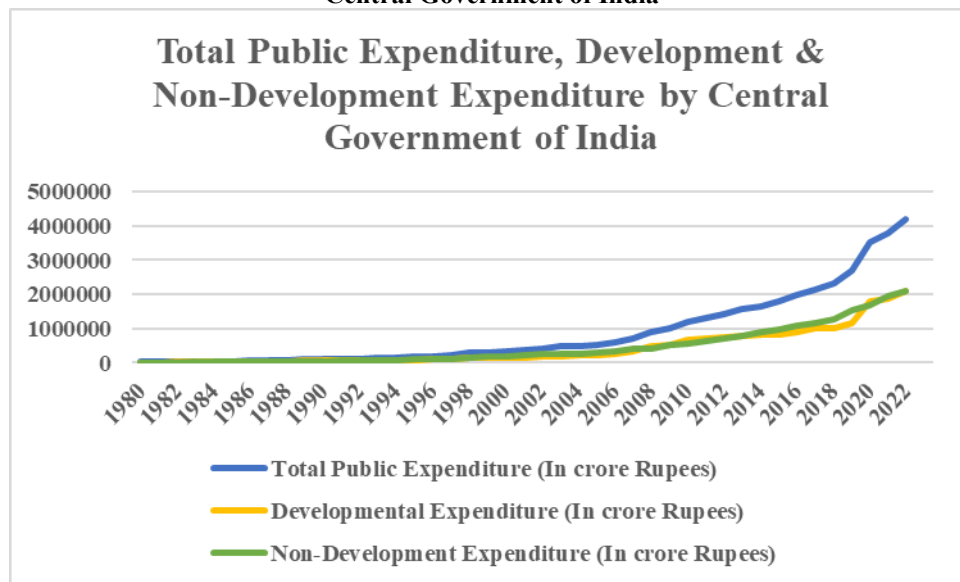


2018	2315113	1025979	1289134	17446.22	7731.57	9714.65
2019	2686330	1153187	1533142	20032.29	8599.46	11432.83
2020	3509836	1808981	1700855	25902.85	13350.41	12552.44
2021	3793801	1863116	1930685	27712.21	13609.32	14102.89
2022	4187232	2098243	2088989	30280.82	15173.87	15106.95

Source: Database on Indian Economy, RBI & Author’s calculation

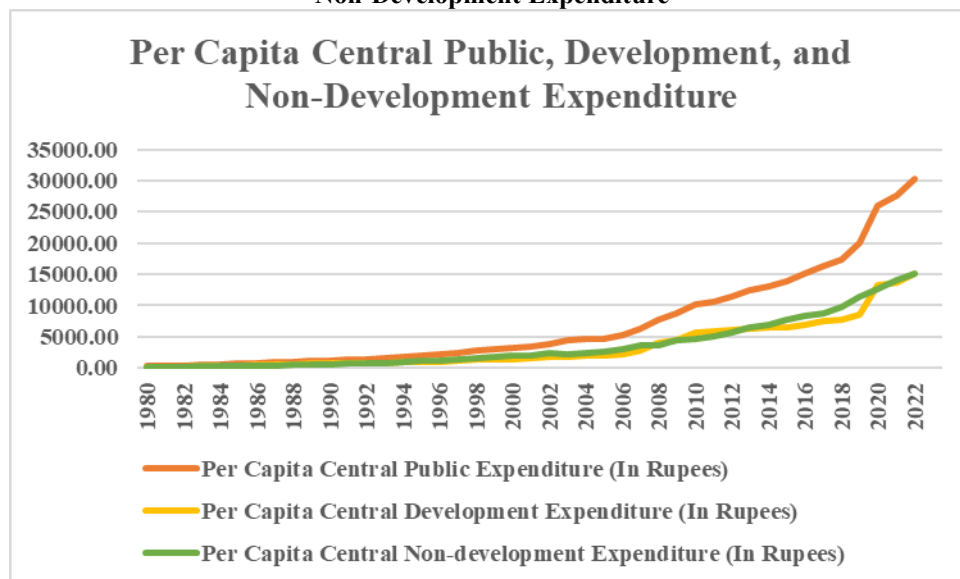
Note: TPE: Total Public Expenditure, DE: Development Expenditure, NDE: Non-Development Expenditure, PCCPE: Per Capita Central Public Expenditure, PCCDE: Per Capita Central Development Expenditure, PCCNDE: Per Capita Central Non-Development Expenditure

Graph 4.1. Comparison between Public Expenditure, Development & Non-Development Expenditure by Central Government of India



Source: Database on Indian Economy, RBI & Author’s calculation

Graph 4.2. Comparison of Per Capita Expenditure in Central Public, Development, and Non-Development Expenditure



Source: Database on Indian Economy, RBI & Author’s calculation

From Table 4.1 (Graph 4.1 & 4.2), it can be observed that over the years, there is a clear trend of increasing Total Public Expenditure by Central Government of India. The Total Public Expenditure is observed to be consistently



increased from 1980 to 2022, indicating expansion in public spending by Central Government. The steady growth in public spending indicates Economic Growth as government tends to spend more with increasing Economic activities. The consistent increase in public spending indicates economic stability in the Economy. The Per Capita Central Public Expenditure has increased with an increase in Population in the Economy. This indicates that the government is aiming to improve the standard of living by increasing per capita expenditure. Increasing Per Capita Central Public Expenditure suggests that the Central Government is committed towards providing better services and amenities to its citizens.

The Development Expenditure also exhibits consistent growth with some fluctuations. The Development Expenditure is given more prominence during the early 2000s and the period 2010-2020. The fluctuations in Development Spending may indicate transition in government priorities and the budgetary allocation of funds towards development. This transition may also be attributed to changing political agendas and Economic conditions. The Per Capita Central Development Expenditure has shown a similar upward trend to Total Public Expenditure and Per Capita Total Public Expenditure. The increase in Per Capita Central Development Expenditure infers consistent effort of Central Government to allocate resources to developmental works on per capita basis. This also shows the government's priorities towards infrastructure development.

Even though the Non-Development Expenditure by Central Government has grown steadily, its growth rate appears to be slower in comparison with the Development Expenditure. This maybe indicating efforts of the government to control Non-Developmental Spendings. The slower increase in Non-Developmental Expenditure indicates government's focus towards Fiscal discipline and Efficiency in resource allocation. The Per Capita Central Non-Developmental Expenditure was relatively stable throughout the study period. The Central Government may be effectively managing non-essential public spending in the economy.

Thus, the Public Expenditure by Central Government is increasing consistently over the period with significant prominence to developmental initiatives. The Government had also controlled increase in Non-Development Spendings, reflecting efficient resource allocation and fiscal discipline in the Economy.

4.2. Social Sector Expenditure by Central Government of India

Table 4.2. Social Sector Expenditure and Per Capita Social Sector Expenditure by Central Government of India

Year	SSE (In Crore Rupees)	Population (In Crores)	Per Capita Central Social Sector Expenditure (In Rupees)
1980	1008	67.9	14.85
1981	1244	69.2	17.98
1982	1509	70.8	21.31
1983	1689	72.3	23.36
1984	2146	73.9	29.04
1985	1496	75.5	19.81
1986	2161	77.1	28.03
1987	2369	78.8	30.06
1988	2769	80.5	34.40
1989	3061	82.2	37.24
1990	3274	83.9	39.02
1991	3569	85.6	41.69
1992	4009	87.2	45.97
1993	4830	89.2	54.15
1994	5873	91.0	64.54
1995	7655	92.8	82.49
1996	9672	94.6	102.24

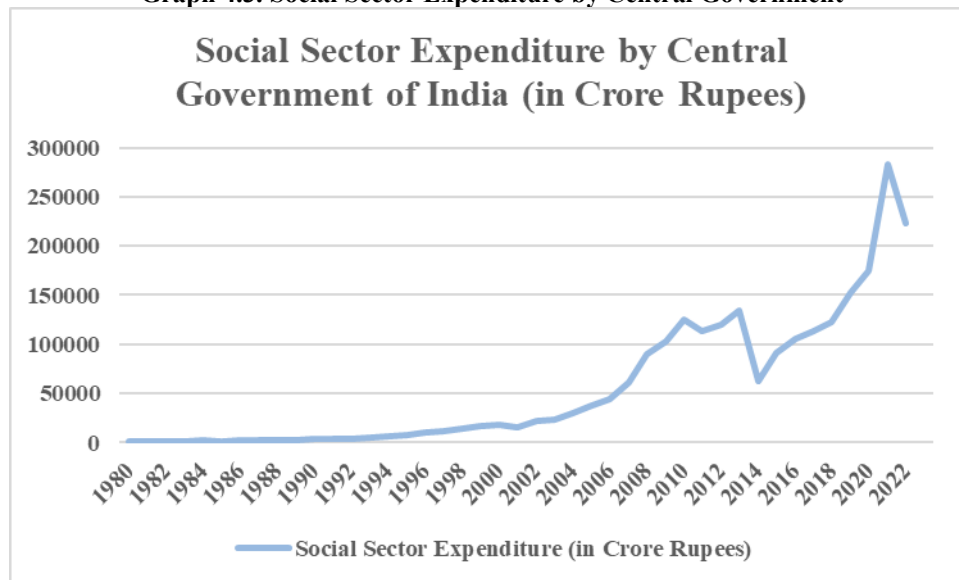


1997	11845	96.4	122.87
1998	14656	98.3	149.09
1999	17221	100.1	172.04
2000	17679	101.9	173.49
2001	15130	104.0	145.48
2002	22007	105.6	208.40
2003	23859	107.2	222.57
2004	29906	108.9	274.62
2005	38264	110.6	345.97
2006	43762	112.2	390.04
2007	61648	113.8	541.72
2008	89797	115.4	778.14
2009	102628	117.0	877.16
2010	124990	118.6	1053.88
2011	113612	122.0	931.25
2012	119346	123.5	966.36
2013	134840	125.1	1077.86
2014	62038	126.7	489.64
2015	91462	128.3	712.88
2016	105303	129.9	810.65
2017	113382	131.4	862.88
2018	122949	132.7	926.52
2019	153058	134.1	1141.37
2020	174640	135.5	1288.86
2021	283084	136.9	2067.82
2022	223047	138.3	1613.01

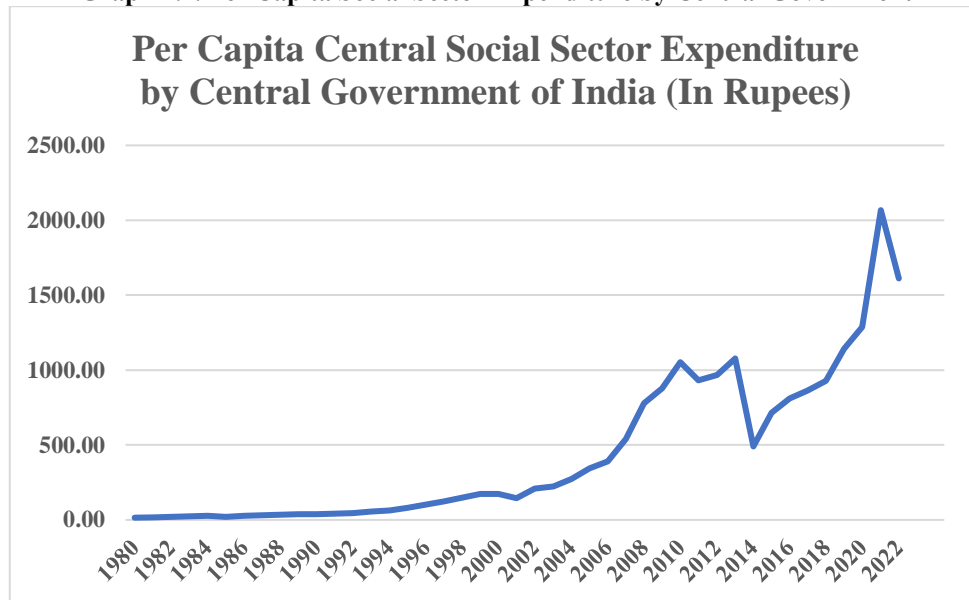
Source: Database on Indian Economy, RBI & Author’s calculation

Note: SSE: Social Sector Expenditure

Graph 4.3. Social Sector Expenditure by Central Government



Source: Database on Indian Economy, RBI & Author’s calculation

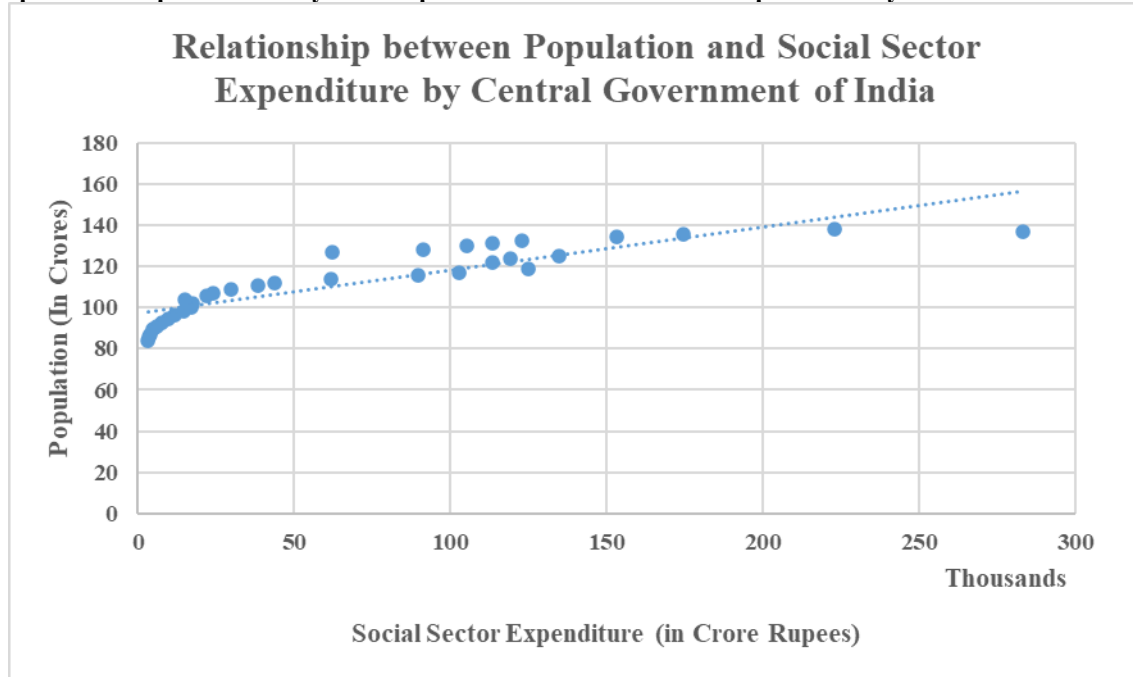
Graph 4.4. Per Capita Social Sector Expenditure by Central Government

Source: Database on Indian Economy, RBI & Author's calculation

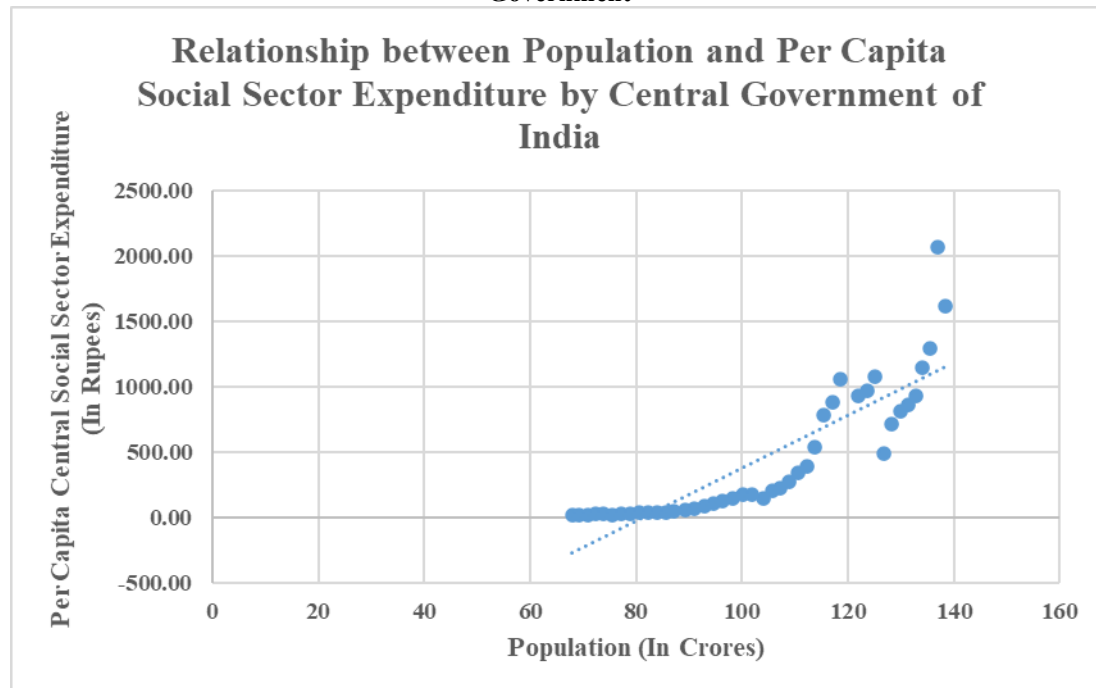
From Table 4.2 (and Graph 4.3) it is observed that there is a consistent and significant upward trend in Social Sector Expenditure (SSE) by the Central Government of India. The Social Sector Expenditure has increased from 1,008 crore Rupees to 2,23,047 Crore Rupees in 2022. Although Social Sector Expenditure generally increased, there were some years where it diminished or remained relatively stagnant. These variations maybe resulted due to various economic, political, social, and other determinants. The Social Sector Spending exponentially grown after 2000, may be hinting at shift in priorities by the Central Government towards components of Social Sector in Education, Health Care, etc.

In Table 4.2 (and Graph 4.4) Per Capita Central Social Sector Expenditure was 14.85 Rupees, indicating less public spending on the Social Sector for each citizen. Nevertheless, it experienced a substantial increase over the period to reach 1613.01 Rupees in the Year 2022. While Social Sector Expenditure showed rapid growth, Per Capita Social Sector Expenditure, in the earlier study period, did not keep pace with it. However, the trend changed over the period, indicating equal distribution of Social Sector Spending. Despite a growing population, the Central Government has been successful in increasing Per Capita Social Sector Expenditure, suggesting that Spending Efficiency has been improved. But there is a visible gap between Social Sector Spending and Per Capita Social Sector Spending, which might be due to several factors like Covid-19 Pandemic, changes in population growth and changes in Central Government priorities.

The trends and patterns of Social Sector Expenditure and Per Capita Social Sector Expenditure by the Central Government of India indicates a dynamic pattern of public investment in the Social Sector, with an objective of social well-being of growing Indian population. And the increased Social Sector Spendings over the period infers Central Government's commitment towards addressing challenges in rapidly developing Indian Economy.

Graph 4.5. Comparative Analysis of Population and Social Sector Expenditure by Central Government

Source: Database on Indian Economy, RBI & Author's calculation

Graph 4.6. Comparative Analysis of Population and Per Capita Social Sector Expenditure by Central Government

Source: Database on Indian Economy, RBI & Author's calculation

Both the Graph 4.5 & 4.6 depicts the relationship between Population Growth in India and Social Sector Spending made by Central government of India. The scatterplot (Graph 4.5) shows the association between Population Growth and Social Sector Expenditure. The horizontal axis is represented by Social Sector Expenditure and vertical axis is represented by population growth of India during 1980-2022.

The scatterplot depicts a positive correlation between Social Sector Spending and population size, indicating that as the population increases Social Sector Spending also increases. It can also be observed that there is a wide variance in population size at lower spending levels. As the public spending in social sector is increasing, the



population growth seems to stabilize, which reckons diminishing rate of population growth with enhanced Social Sector Spending by Central Government of India.

Graph 4.6. represents a scatterplot depicting the relationship between Population Growth and Per Capita Social Sector Expenditure by the Central Government of India. This scatterplot also shows a positive correlation. But as the population increases, the Per Capita Expenditure remains relatively flat or even diminishes slightly, depicted by the cluster of points near the origin. But after a certain increase in population, the Per Capita Social Sector Expenditure has grown at an increasing rate, implying that Per Capita Social Sector Expenditure has increased with increase in population. Thus, the above scatterplots collectively suggest an intricate relationship between population and Social Sector Expenditure.

4.3. Public Expenditure and Social Sector Expenditure as a percentage of Gross Domestic Product (GDP)

Table 4.3. Trends in Public Expenditure and Social Sector Expenditure as a percentage of Gross Domestic Product (GDP)

Year	GDP	PE/GDP	DE/GDP	SSE/GDP
1980	1464394	1.55%	0.91%	0.07%
1981	1552348	1.63%	0.89%	0.08%
1982	1606304	1.92%	1.02%	0.09%
1983	1723386	2.06%	1.13%	0.10%
1984	1789232	2.44%	1.53%	0.12%
1985	1883243	2.80%	1.75%	0.08%
1986	1973197	3.19%	1.80%	0.11%
1987	2051442	3.33%	1.78%	0.12%
1988	2248950	3.52%	1.85%	0.12%
1989	2382703	3.90%	2.27%	0.13%
1990	2514549	4.19%	2.33%	0.13%
1991	2541123	4.38%	2.33%	0.14%
1992	2680438	4.57%	2.44%	0.15%
1993	2807780	5.05%	2.58%	0.17%
1994	2994747	5.37%	2.76%	0.20%
1995	3221584	5.53%	2.62%	0.24%
1996	3464798	5.80%	2.72%	0.28%
1997	3605116	6.44%	3.08%	0.33%
1998	3828072	7.30%	3.59%	0.38%
1999	4166694	7.15%	3.10%	0.41%
2000	4326736	7.53%	3.22%	0.41%
2001	4535456	7.99%	3.51%	0.33%
2002	4707984	8.78%	3.91%	0.47%
2003	5078049	9.28%	3.85%	0.47%
2004	5480380	9.09%	3.92%	0.55%
2005	5914614	8.55%	3.87%	0.65%
2006	6391375	9.13%	4.00%	0.68%
2007	6881007	10.36%	4.73%	0.90%
2008	7093403	12.46%	6.65%	1.27%
2009	7651078	13.39%	6.90%	1.34%
2010	8301235	14.42%	8.02%	1.51%
2011	8736329	14.93%	8.07%	1.30%



2012	9213017	15.31%	8.06%	1.30%
2013	9801370	15.91%	8.00%	1.38%
2014	10527674	15.80%	7.73%	0.59%
2015	11369493	15.75%	7.34%	0.80%
2016	12308193	16.05%	7.31%	0.86%
2017	13144582	16.30%	7.59%	0.86%
2018	13992914	16.54%	7.33%	0.88%
2019	14534641	18.48%	7.93%	1.05%
2020	13687118	25.64%	13.22%	1.28%
2021	14925840	25.42%	12.48%	1.90%
2022	16006425	26.16%	13.11%	1.39%

Source: EPWRF Database & Author's calculation

Note: GDP: Gross Domestic Product, PE: Public Expenditure, DE: Development Expenditure, SSE: Social Sector Expenditure

Table 4.3. presents the Public Expenditure and its components trends in relation to India's Gross Domestic Product (GDP) across the study period, focusing on Public Expenditure (PE), Development Expenditure (DE), and Social Sector Expenditure (SSE). The Gross Domestic Product is increasing consistently over the study period, indicating the India's Economic Growth. The ratio of Total Public Expenditure to the GDP (PE/GDP) increases from 1.55% in 1980 to reaching 26.6% by the year 2022. This suggests that increasing proportion of the India's Gross Domestic Product is being allocated to Total Public Spending by Central Government. The ratio of Development Expenditure to the GDP (DE/GDP) was just 0.07% in the year 1980, diminishing and fluctuating over the study period, but showing substantial increase to 1.90% in the year 2021 before dropping to 1.39% in 2022. The increasing PE/GDP and DE/GDP shows a shift in Central Government's focus towards public welfare and developmental works. The fluctuations in ratio of Social Sector Expenditure to the GDP (SSE/GDP) over the period may be due to changing public policies, economic conditions, and possibly the effect of different reforms and policies implemented during the study period. The significant increase in SSE/GDP in 2021 may be reflected by the emergency public spending due to Covid pandemic and increased focus towards social welfare initiatives.

4.4. Growth of Public Expenditure and Social Sector Expenditure by Central Government of India

Table 4.4. Compound Annual Growth Rate (CAGR)

Period	GDP	PE	DE	NDE	SSE	PCSSE
1980-1990	5.04%	14.94%	14.42%	15.76%	11.30%	9.18%
1990-2000	5.06%	10.81%	8.19%	13.44%	16.57%	14.52%
2000-2010	6.10%	12.57%	15.28%	9.79%	19.46%	17.82%
2010-2022	5.18%	10.11%	9.23%	10.79%	4.56%	3.33%
1980-2022	5.72%	12.89%	12.49%	13.26%	13.38%	11.52%

Source: Author's calculation

Table 4.4 provides the Compound Annual Growth Rate (CAGR) for various economic indicators over the study period 1980-2022. During the 1980-90-decade, Gross Domestic Product growth was at moderate rate of 5.04%. Public (PE) and Development Expenditure (DE) saw increased growth with PE at 14.94% and DE closely behind at 14.42%. Non-Development Expenditure experienced the highest growth rate at 15.76%. Social Sector Expenditure and Per Capita Social Sector Expenditure experienced lower but still significant growth at 11.30% and 9.18% respectively. During 1990-2000, GDP growth remained steady at 5.06%. Whereas PE growth diminished to 10.81% and DE experienced an even more slowdown to 8.19%. The Non-Development Expenditure saw almost similar growth to the previous decade at 13.44%. The SSE and PCSSE growth increased to 16.57% and 14.52% respectively. In 2000-10, GDP, PE, and DE grown at 6.10%, 12.57% and 15.28% respectively. On the other hand, Non-Development Expenditure decreased to 9.79% from the previous decade. The SSE and PCSSE saw their respective peak CAGR of 19.46% and 17.82% respectively. In 2010-22, GDP growth slightly declined to 5.88% from 6.10% in the previous period. The PE, DE, NDE had similar growth rates of around almost 10%. SSE and PCSSE experienced a significant decline in growth rates to 4.56% and 3.33% respectively. During the overall period 1980-2022, The GDP growth rate averaged at 5.72%. Similarly, Growth rates of PE, DE, NDE, SSE, and PCSSE grew on an average of 12.89%, 12.49%, 13.26%, 13.38% and 11.52% respectively.

Over the four decades, the higher growth rates were observed in Public Expenditure compared to GDP growth, indicating increased role of public spending in the Growth and Development of Indian Economy. There's a



possible correlation between Economic Growth (Measured by GDP) and Social Sector Spending during the period 2000-10. The 2010-2022 period witnessed a decrease in growth of Social Sector Spending and its per capita which could be due to transition in government priorities, Global health crisis and other external economic factors. The overall growth in SSE/GDP over the period indicates increased importance of Social Sector Spending in the Indian Economy. And the consistent growth in Non-Development Expenditure might be pointing the increased expenses incurred on public administration, defense, governance, subsidies, etc. Thus, it can be inferred that, with increase in Economic Growth the public spending by central government of India is also being increased over the period.

4.5. Fiscal Efficiency and Allocation Ratios in Social and Developmental Sectors by Central Government of India

Table 4.5. Budgetary Allocation Ratios in Social and Developmental Sectors of Central Government

Year	DE/PE	SSE/DE	SSE/PE
1980	58.53%	7.56%	4.43%
1981	54.59%	9.02%	4.92%
1982	53.04%	9.24%	4.90%
1983	54.62%	8.70%	4.75%
1984	62.74%	7.84%	4.92%
1985	62.49%	4.55%	2.84%
1986	56.42%	6.09%	3.43%
1987	53.58%	6.48%	3.47%
1988	52.50%	6.67%	3.50%
1989	58.34%	5.65%	3.29%
1990	55.69%	5.58%	3.11%
1991	53.24%	6.02%	3.20%
1992	53.40%	6.12%	3.27%
1993	51.08%	6.67%	3.40%
1994	51.51%	7.09%	3.65%
1995	47.36%	9.07%	4.29%
1996	46.86%	10.27%	4.81%
1997	47.83%	10.67%	5.10%
1998	49.14%	10.68%	5.25%
1999	43.33%	13.33%	5.78%
2000	42.81%	12.68%	5.43%
2001	43.99%	9.49%	4.18%
2002	44.57%	11.95%	5.33%
2003	41.47%	12.21%	5.06%
2004	43.14%	13.91%	6.00%
2005	45.29%	16.70%	7.57%
2006	43.83%	17.11%	7.50%
2007	45.70%	18.93%	8.65%
2008	53.33%	19.05%	10.16%
2009	51.56%	19.43%	10.02%
2010	55.63%	18.77%	10.44%
2011	54.07%	16.11%	8.71%
2012	52.64%	16.08%	8.46%
2013	50.31%	17.19%	8.65%



2014	48.92%	7.62%	3.73%
2015	46.63%	10.95%	5.11%
2016	45.53%	11.71%	5.33%
2017	46.60%	11.36%	5.29%
2018	44.32%	11.98%	5.31%
2019	42.93%	13.27%	5.70%
2020	51.54%	9.65%	4.98%
2021	49.11%	15.19%	7.46%
2022	50.11%	10.63%	5.33%

Source: Author's calculation

Table 4.5. explains the allocation ratios in the Social Sector, Development and Overall Public Expenditure of the Central Government of India from 1980-2022. DE/PE portrays the amount of Public Spending allocated for Developmental initiatives. From 1980 to 2022, there is a decline in the ratio with some fluctuations. For instance, in 1984 the DE/PE reached the highest level 62.74% in the study period, indicating Central Government's priority towards developmental Expenses. While by 2019, it dipped to 42.93%, specifying a shift in the priorities of the government or rise in other components of public spending. The decrease in DE/PE may infer that while the DE increasing, its growth might be less compared to the Total Public Expenditure (PE), which could be due to Economic Growth where public spending is diversified into other non-development activities. SSE/DE indicates the portion of Development Expenditure of Central Government is dedicated to Social Sector Spending. Here, the overall increasing trend can be observed with significant dips in 2001,2014, and 2020. The SSE/DE trend suggests an increasing importance of Social Sectors within the Development outline over time. SSE/PE reveals the share of Total Public Expenditure spent on Social Sector. It also shows an increase in trend, particularly after 2005, reaching a peak in 2008 at 10.16%, with subsequent declines in later years. The overall trend that emerges is that the Central Government is aiming to achieve steadiness between Development and Non-developmental initiatives in the Economy.

4.6. Relationship between Social Sector Expenditure by Central Government and Human Development of India

Table 4.6. Trends in Social Sector Expenditure, Per Capita Social Sector Expenditure by Central Government of India, and Human Development Index of India (1990-2020)

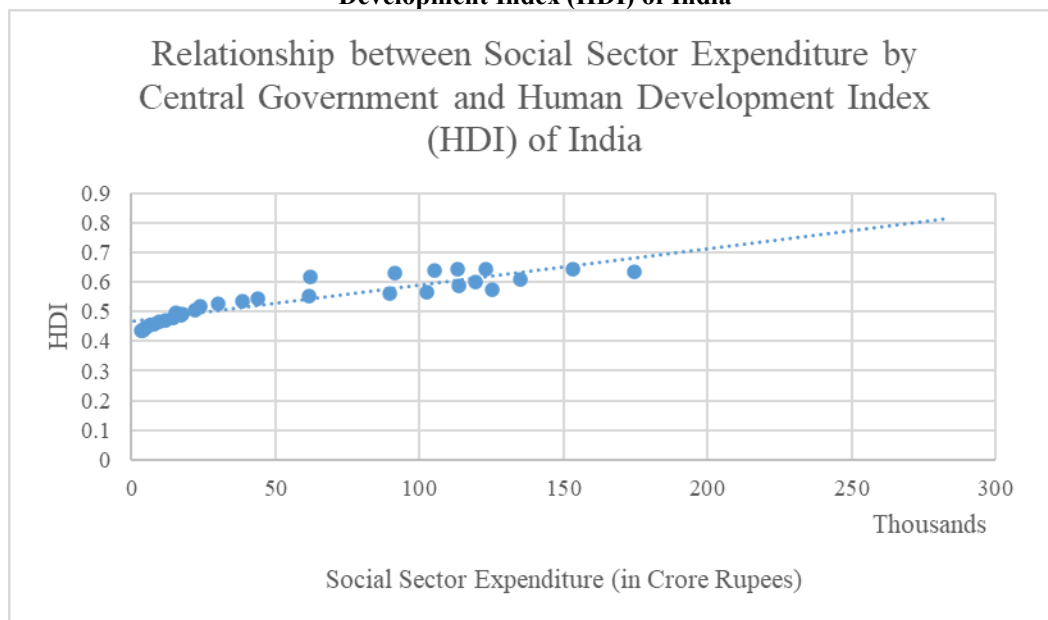
Year	Social Sector Expenditure (In Crore Rupees)	Per Capita Central Social Sector Expenditure (In Rupees)	Human Development Index (HDI)
1990	3274	39.02	0.434
1991	3569	41.69	0.437
1992	4009	45.97	0.442
1993	4830	54.15	0.446
1994	5873	64.54	0.452
1995	7655	82.49	0.458
1996	9672	102.24	0.466
1997	11845	122.87	0.471
1998	14656	149.09	0.478
1999	17221	172.04	0.486
2000	17679	173.49	0.491
2001	15130	145.48	0.496
2002	22007	208.40	0.503
2003	23859	222.57	0.516
2004	29906	274.62	0.525



2005	38264	345.62	0.534
2006	43762	390.04	0.543
2007	61648	541.72	0.553
2008	89797	778.14	0.560
2009	102628	877.16	0.565
2010	124990	1053.88	0.575
2011	113612	931.25	0.588
2012	119346	966.36	0.598
2013	134840	1077.86	0.607
2014	62038	489.64	0.619
2015	91462	712.64	0.629
2016	105303	810.65	0.639
2017	113382	862.88	0.644
2018	122949	926.52	0.645
2019	153058	1141.37	0.642
2020	174640	1288.86	0.633

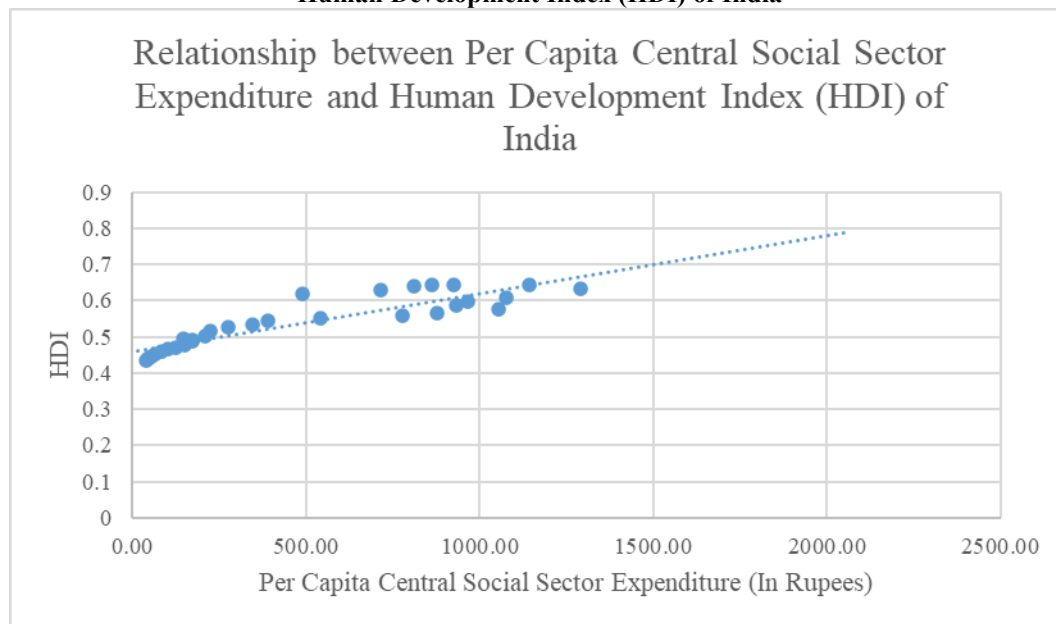
Source: Database on Indian Economy, RBI, Global Data Lab & Author’s calculation

Graph 4.7. Relationship between Social Sector Expenditure by Central Government and Human Development Index (HDI) of India



Source: Author’s calculation

Graph 4.8. Relationship between Per Capita Social Sector Expenditure by Central Government and Human Development Index (HDI) of India



Source: Database on Indian Economy, RBI & Author's calculation

From Table 4.6. (Graph 4.7) portrays a positive correlation between Social Sector Expenditure and the Human Development Index (HDI) of India, which includes aspects such as life expectancy, Education attainment and Per capita income levels. This explains that as Social Sector Spending increased, the HDI also tends to increase. While the rate of increase in HDI compared to Social Sector Spending is not linear but depicts a steady rising trend. Most of the data points are clustered in the lesser and mid-range of Social Sector Spending, indicating that even a slight increase in Social Sector Spending leads to an increase in HDI. This also implies that with continued Social Sector Spending is expected to enhance Human Development in the country.

Similarly Graph 4.8 also shows a positive correlation between Per Capita Social Sector Expenditure and HDI. The graph highlights the importance of Per Capita Social Sector Expenditure for improving HDI. It underlines that not just the overall Social Sector Spending, but the spending per citizen is also crucial. The dispersion at high Social Sector Spending may be indicating that optimal utilization is more important than increased spending.

Collectively, both Total Social Sector Spending and Per Capita Social Sector Spending by Central Government of India have a positive relationship with HDI. While increased Social Sector Expenditure enhances HDI, there might be other important determining factors which influence improvement in HDI.

5. CONCLUSION

The analysis of trends and patterns of Social Sector Spending by Central Government of India during 1980-2022, signifies the dynamic and evolving landscape of the Government spending. The present study's findings highlight the Central Government's commitment towards the Socio-economic wellbeing of its citizens through Social Sector Expenditure. While the overall trend in Social Sector Expenditure is promising, the present study stresses that optimal resource allocation, efficient utilization, overcoming regional disparities, and demographic transitions may result in enhanced overall Human Development. The present research work can provide a foundation for future research and course of action for the policymakers to enhance overall Human Development.

6. REFERENCES

1. Anand, S., & Sen, A. (1994). *Human development Index: Methodology and. Human Development Report Office (HDRO), United Nations Development Programme (UNDP).*
2. Agarwal, P. (2015). *Social sector expenditure and human development: Empirical analysis of Indian states. Indian Journal of Human Development, 9(2), 173-189.*
3. Chattopadhyay, S. (2018). *Social sector expenditure in India in the 2000s: Trends and implications. Journal of Development Policy and Practice, 3(1), 16-40.*
4. *Database on Indian Economy. Centralised Information Management System. Reserve Bank of India. <https://cimsdbie.rbi.org.in/#/dbie/statistics>*
5. Desai, M. (1991). *Human development: concepts and measurement. European Economic Review, 35(2-3), 350-357.*



6. EPWRF India Time Series. Economic and Political Weekly Research Foundation. <https://epwrfits.in/>
7. Goswami, B., & Bezbaruah, M. P. (2011). Social sector expenditures and their impact on human development: the Indian experience. *Indian Journal of Human Development*, 5(2), 365-385.
8. Mooij, J., & Dev, S. M. (2004). Social sector priorities: an analysis of budgets and expenditures in India in the 1990s. *Development Policy Review*, 22(1), 97-120.
9. Reddy, S. M., & Narsi Reddy, V. V. (2019). Social sector expenditures and their impact on human development in India: Empirical evidence during 2001-02 to 2015-16. *International Journal of Recent Technology and Engineering*, 7(6), 1938-1943.
10. Praveen, S., Harika, K., & Babu, K. A. (2019). Social Sector Expenditure and India's Development: An Empirical Assessment During 2001-02 to 2015-16. *Research Journal of Humanities and Social Sciences*, 10(3), 866-870.
11. Premalatha, R. (2020). Pattern of Public Expenditure on Social Sector in India. *Shanlax International Journal of Economics*, 9(1), 57-62.
12. Rezaee, A., Bozorg-Haddad, O., & Singh, V. P. (2021). Water and society. In *Economical, Political, and Social Issues in Water Resources* (pp. 257-271). Elsevier.
13. Sen, A. (1993). Capability and well-being. *The quality of life*, 30, 270-293.
14. Sen, A. (2000). A decade of human development. *Journal of human development*, 1(1), 17-23.
15. Soni, M. (2019). Social Sector Expenditure in India: A regional Analysis. *Research Review International Journal of Multidisciplinary*, 4(6), 1.
16. Subnational HDI (v7.0). Global Data Lab. <https://globaldatalab.org/shdi/table/shdi/IND/>
17. Ul Haq, M. (1992). Human Development in a Changing World. Human Development Report Office (HDRO), United Nations Development Programme (UNDP).