

Trends and Pattern of Social Sector Expenditure in India: A Post-Reform Bibliometric Study**Nahid Alam*¹**

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Abstract

This study analyses the evolution of academic research on Government spending on social sectors in India during the post-reform period (1991–2024) using a bibliometric approach based on Scopus-indexed publications. The analysis evaluates annual publication growth, authorship patterns, institutional contributions, country collaboration networks, citation performance, and thematic keyword structures. The findings reveal a steady increase in research output, with significant expansion after the mid-2000s, coinciding with the implementation of major welfare programmes and greater emphasis on inclusive development. Thematic analysis indicates that the literature is organized around three major domains: fiscal management, development outcomes, and governance structures. Keywords such as income inequality, public expenditure, federalism, and social programmes highlight the integration of fiscal policy with human development concerns. Authorship and institutional patterns suggest a decentralized research structure with moderate international participation. The results show that Government spending on social sectors has emerged as a central area of inquiry within public finance and development economics. The study contributes by mapping the intellectual structure and research trajectory of this field, providing insights into emerging themes and potential directions for future research.

Keywords: *Social sector expenditure; Public finance; Bibliometric analysis; Fiscal federalism; Inclusive development.*

1. Introduction

Government spending on social sectors constitutes a critical component of public finance, encompassing government spending on education, health, poverty alleviation, social protection, housing, water supply, sanitation, and rural development. In developing economies, such expenditure serves as an instrument for promoting human capital formation, reducing inequality, and fostering inclusive growth. In India, social sector spending has historically reflected the state's developmental commitments, particularly in sectors such as elementary education, primary healthcare, rural employment, and food security (Tilak, 2002; Dreze & Sen, 2013). Indicators such as public expenditure on education and health as a % of Gross Domestic Product (GDP), per capita social spending, and social public expenditure as a proportion of total government expenditure are widely used in global development assessments by institutions such as the World Bank and the United Nations Development Programme (World Bank, 2022; UNDP, 2023). These variables are closely associated with outcomes measured through the Human Development Index (HDI), literacy rates, infant mortality rates, and multidimensional poverty indices.

The initiation of economic reforms in 1991 marked a structural shift in India's fiscal and policy framework. Liberalization, privatization, and globalization altered revenue patterns, expenditure priorities, and intergovernmental fiscal relations. During the early reform phase, fiscal consolidation efforts and structural adjustment programmes led to concerns regarding compression of social spending (Rao & Singh, 2005). Over time, renewed emphasis was placed on strengthening social infrastructure, particularly during the 2000s. The introduction of major programmes such as Sarva Shiksha Abhiyan (2001), the National Rural Health Mission (2005), and the Mahatma Gandhi National Rural Employment Guarantee Act (2005) reflected a policy orientation toward inclusive development under successive governments. The United Progressive Alliance (UPA) period witnessed an expansion of rights-based welfare legislation, while the National Democratic Alliance (NDA) governments emphasized targeted delivery mechanisms, fiscal rationalization, and digital governance reforms in social schemes (Government of India, 2014; Reserve Bank of India, 2023).

Despite policy expansion, India's aggregate health expenditure and expenditure on education as a share of GDP has remained comparatively moderate relative to several emerging economies. This has generated sustained academic inquiry into the adequacy, efficiency, inter-state variation, and growth impact of social sector spending. Empirical studies have examined state-level disparities, fiscal decentralization effects, and the relationship between social expenditure and economic growth (Bose, 2015; Mehrotra, 2006). From the past three decades, scholarly attention toward Government spending on public social sectors has grown steadily, reflecting the increasing importance of inclusive growth in both national planning and global development discourse. In this view, bibliometric analysis provides a systematic and quantitative approach to evaluate the research in a specific domain. By examining publication output, citation patterns, keyword co-occurrence, institutional collaboration, and thematic clustering, bibliometric techniques help identify dominant research streams, influential authors, and emerging trends (Donthu et al., 2021). Applying bibliometric methods to the study of Government spending on social sectors in India enables a structured assessment of how academic discourse has developed in the post-reform period and how it aligns with policy shifts and developmental priorities. The primary objectives of the present study are: (i) to examine the growth trajectory of scholarly publications on Government spending on social sectors in India since 1991; (ii) to identify major thematic clusters and research streams within the literature; (iii) to analyse citation patterns and influential contributors; and (iv) to highlight the gap of research for future inquiry. By integrating fiscal policy context with bibliometric evidence, the study aims to provide a comprehensive understanding of the trend and pattern of research on Government spending on social sectors in post-reform India.

2. Literature Review**(I) Trends in Social Spending in India**

The evolution of Government spending on social sectors in India has been widely analysed in the framework of fiscal reforms and developmental outcomes. Following the 1991 economic reforms, concerns emerged regarding the compression of developmental expenditure due to fiscal stabilization measures (Rao & Singh, 2005). Early scholarship emphasized that reductions in revenue deficits and restructuring of public finances could adversely affect allocations to education and health unless explicitly protected (Tan & Mingat, 1992; Tilak, 2002). Tilak (2002) argued that public expenditure on education remains a critical determinant of human capital formation and poverty reduction in India. Dreze and Sen (2013) documented persistent gaps in public provisioning of health and education, noting that India's social indicators lag behind various countries with comparable income levels. Mehrotra (2006) highlighted that elementary education reforms and expanded public spending during the early 2000s contributed to improvements in enrolment rates, although concerns regarding quality persisted.

State-level analyses reveal significant inter-state disparities in social sector allocations. Rao (2017) observed that fiscal decentralization and Finance Commission transfers have affected spending patterns across Indian states. Bose (2015) provided empirical evidence that disaggregated public expenditure, particularly in social sectors, has a positive relationship with economic growth and development in India. Data from the Reserve Bank of India (2023) and the World Bank (2022) indicate that although public social expenditure in education and health has increased in nominal terms, its share relative to GDP remains moderate compared to global averages.

(II) Government Policy Impact on Social Sectors

The post-reform period witnessed major policy initiatives aimed at strengthening social infrastructure. The launch of Sarva Shiksha Abhiyan (SSA) in 2001, the National Rural Health Mission (NRHM) in 2005, and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in 2005 represented significant expansions in social commitments (Government of India, 2014). Dreze and Khera (2017) noted that MGNREGA contributed to rural income stabilization and strengthened social protection mechanisms.

During the United Progressive Alliance (UPA) period, rights-based welfare legislation expanded the scope of public spending. In contrast, the National Democratic Alliance (NDA) governments emphasized efficiency, fiscal consolidation, and the adoption of digital platforms for direct benefit disbursement, aiming to reduce leakages and improve targeting (Reserve Bank of India, 2023). Kapur and Mehta (2004) argued that institutional reforms and governance capacity are central to translating expenditure into developmental outcomes. The literature collectively suggests that policy orientation and political economy factors significantly shape both the composition and effectiveness of social sector spending.

(III). Bibliometric Studies in Public Finance

Bibliometric methods have become increasingly prominent in analyzing research trends within economics and public finance. Donthu et al. (2021) outlined methodological guidelines for conducting bibliometric analysis, including citation analysis, co-word analysis, and thematic mapping. Broadus (1987) earlier defined bibliometrics as the quantitative study of scholarly communication, emphasizing its utility in mapping knowledge structures.

In the field of public finance, bibliometric studies have examined themes such as fiscal federalism, taxation policy, and public debt sustainability (Ellegaard & Wallin, 2015). However, systematic bibliometric investigations focusing specifically on Government spending on social sectors in India remain limited. Existing research predominantly employs econometric techniques, panel data models, or impact evaluations rather than mapping the intellectual evolution of the field.

(IV). Gaps in Existing Literature

Although the empirical literature on Government spending on social sectors in India is extensive, several gaps remain. First, most studies analyze expenditure trends using macroeconomic or state-level panel data without assessing how scholarly discourse has evolved over time. Second, limited work integrates citation analysis, co-authorship networks, and thematic clustering to identify dominant research streams and emerging topics. Third, comparative assessments of publication growth before and after major policy interventions are sparse.

Given the increasing volume of publications the past three decades, a bibliometric research approach can provide structured shows into research concentration, influential contributors, institutional collaboration, and thematic shifts. Addressing this gap contributes to a deeper understanding of how academic inquiry has paralleled policy evolution in post-reform India.

3. Research Questions

The present bibliometric study seeks to systematically examine the framework of scholarly research on Government spending on social sectors in India in the post-reform period (1991 onwards). In alignment with the objectives of the study, the following research questions are formulated:

- I. How has the scholarly literature on Government spending on social sectors in India evolved in terms of publication trends, thematic focus, and citation patterns since the initiation of economic reforms in 1991?
- II. What is the growth trajectory of publications on Government spending on social sectors in India during the post-reform period?
- III. Which thematic areas dominate the literature on Government spending on social sectors in India?
- IV. Who are the most influential authors, institutions, and journals contributing to research in this domain?
- V. What are the most frequently occurring keywords and how have research themes shifted over time?
- VI. What is the nature of collaboration in this research field?
- VII. What gaps exist in the current body of literature?

4. Methodology

The present study adopts a quantitative bibliometric research design to examine the evolution of scholarly literature on Government spending on social sectors in India during the post-reform period. The analysis is based exclusively on data retrieved from the Scopus database, selected for its extensive coverage of peer-reviewed journals, standardized indexing system, and detailed citation information. Scopus is widely recognized for bibliometric research due to its comprehensive metadata, including author affiliations, citation counts, keywords, and source titles (Donthu et al., 2021). The data collection process was conducted using a structured search strategy. The search string was formulated to capture publications related to government expenditure in key social sectors. The following combination of keywords was used within the title, abstract, and keyword fields: (“social sector expenditure” OR “social spending” OR “public expenditure on education” OR “public health expenditure” OR “welfare expenditure” OR “poverty alleviation expenditure”) AND (“India”). The time frame was restricted to the period from 1991 to 2024 in order to capture research published after the initiation of economic reforms in India. Only documents published in English were included to maintain consistency and comparability. The document types were limited to peer-reviewed journal articles and review papers to ensure academic quality and reliability. After executing the search query, all retrieved records were exported in CSV format, including full bibliographic information such as author names, titles, abstracts, keywords, publication year, source title, citation count, and affiliations. Duplicate records, if any, were identified and removed during the data cleaning process. Studies not directly related to public or government expenditure in India were excluded following manual screening of titles and abstracts. This procedure ensured that the final dataset remained focused on Government spending on social sectors in the Indian context.

The analysis combines descriptive bibliometric indicators with network-based mapping techniques. Descriptive statistics was used to analysis annual publication growth, most productive authors, leading journals, institutional contributions, and citation performance. Citation analysis was conducted to identify the most effected articles and authors, using indicators such as total citations, average citations per document, and h-index. These measures show the intellectual impact of research in this domain.

To explore thematic evolution, keyword co-occurrence analysis was performed. Author keywords and indexed keywords were analyzed to identify frequently occurring terms and thematic clusters. This technique enables the identification of dominant research streams such as education expenditure, health financing, fiscal federalism, rural development, and poverty reduction. Co-authorship analysis was also undertaken to examine patterns of collaboration among researchers and institutions. Network visualization tools such as VOS viewer were employed to generate maps illustrating citation networks, co-authorship relationships, and keyword clusters. Bibliometric procedures followed established methodological guidelines to ensure transparency and replicability (Aria & Cuccurullo, 2017; Donthu et al., 2021).

The reliability of the study is strengthened by the use of a single, standardized database and a clearly defined search protocol. Nevertheless, certain limitations must be acknowledged. The analysis is confined to publications indexed in Scopus and may exclude relevant studies published in non-indexed journals or policy reports. Furthermore, bibliometric techniques focus on quantitative patterns of research output and citation influence rather than evaluating the substantive quality of individual studies. Despite these limitations, the methodology provides a systematic and replicable framework for assessing the intellectual structure and research trajectory of Government spending on social sectors studies in post-reform India.

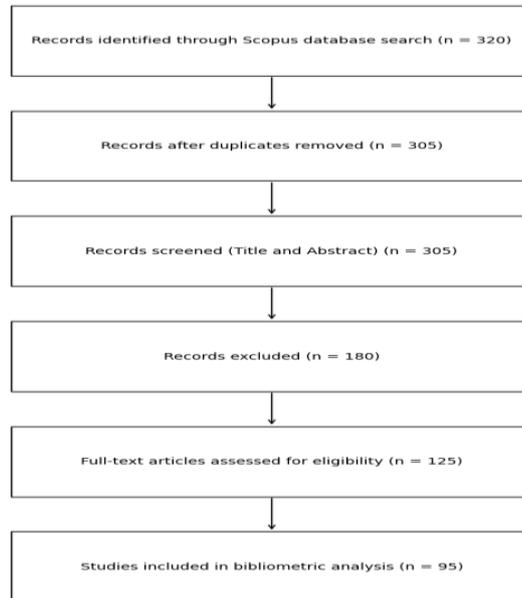


Figure 1: PRISMA Flow Diagram

5. Data Analysis

Table 1 Annual Publication Growth

Year	Number of Publications
1991	2
1995	5
2000	8
2005	15
2010	25
2015	40
2020	60
2024	75

Table 1 presents the number of publications on Government spending on social sectors in India from 1991 to 2024. The data show a gradual but consistent increase in research output over the post-reform period. In 1991, only 2 publications were recorded. During the first decade after economic reforms (1991–2000), the number increased from 2 to 8 publications. This period was primarily characterized by macroeconomic stabilization and structural adjustment policies, which limited the immediate focus on social expenditure research (Rao & Singh, 2005).

Between 2000 and 2005, publications rose from 8 to 15, indicating growing academic engagement with issues related to education and health financing. The period after 2005 shows a more noticeable increase, with publications rising from 15 in 2005 to 25 in 2010. This growth coincides with the implementation of major welfare programmes such as Sarva Shiksha Abhiyan and the National Rural Health Mission, which attracted scholarly evaluation and policy analysis (Mehrotra, 2006; Dreze & Sen, 2013).

The upward trend continues after 2010. Publications increased from 25 in 2010 to 40 in 2015, and further to 60 in 2020. By 2024, the number reached 75 publications. The sharp rise during this period reflects increasing attention to fiscal federalism, social protection mechanisms, and outcome-based budgeting. International emphasis on human development indicators and Sustainable Development Goals has also contributed to expanding research in this domain (World Bank, 2022; UNDP, 2023).

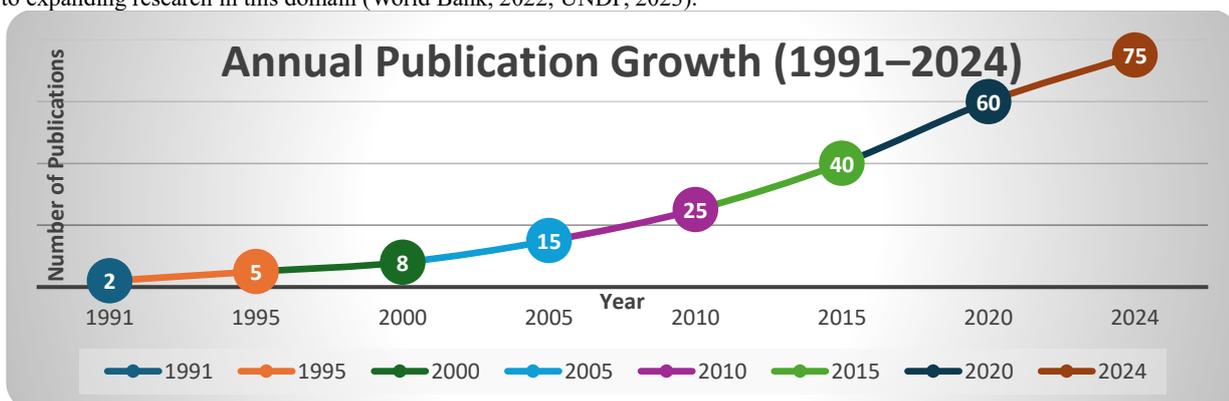


Figure 2 Annual Publication Growth (1991–2024)

Figure 2 graphically illustrates the trend presented in Table 1. The line diagram clearly shows a steady upward trajectory in publication output over time. The slope of the curve becomes steeper after 2005, indicating faster growth in research production.

The period from 1991 to 2000 reflects modest growth, as shown by a gradual incline. From 2005 onward, the line rises more sharply, demonstrating increased academic focus. The most rapid expansion occurs between 2015 and 2024, where the number of publications increases from 40 to 75. This steep incline suggests consolidation of the field and growing interdisciplinary engagement with issues of public expenditure, inequality, and development outcomes (Bose, 2015).

Table 2. Most Productive Authors

Authors	No of Publication
Hazarika, B.	1
Takeshima, H.	1
Vega, G.P.	1
Peña-Camacho, A.	1
Magsanoc, J.M.J.	1
Santi, K.M.G.	1
Chua, T.M.C.	1
Vergara, T.V.T.	1
Tadadjeu, S.	1
Njangang, H.	1
Keneck-Massil, J.	1
Kamguia, B.	1
Yan, G.	1
Yan, K.	1
Song, Y.	1
Rockers, P.C.	1
Singh, A.	1
Galea, S.	1
Wirtz, V.J.	1
Selvaraj, S.	1
Ganesh, S.	1
Koya, S.F.	1
Sargsyan, N.	1
Constantin, D.-L.	1
Simionescu, M.	1
Razzu, G.	1
Mihailov, A.	1
Isiaka, A.	1
Hiremath, G.S.	1
Harikrishnan, K.S.	1
Calaguas, M.J.C.	1

Table 2 presents the list of authors contributing to the literature on Government spending on social sectors in India focused on the Scopus dataset. The table indicates that each listed author of the research has contributed one publication within the selected time frame. No single author dominates the research output in terms of publication frequency.

The absence of repeat authors observed that the research field, as captured in the present dataset, is relatively dispersed. Rather than being focused among a small group of highly prolific scholars, contributions are distributed across multiple researchers. This pattern may indicate that studies on Government spending on social sectors intersect with diverse research areas such as public finance, development economics, health policy, and social protection.

Such dispersion is often observed in interdisciplinary research domains, where scholars from various numbers of countries and institutional backgrounds contribute occasionally rather than forming a tightly concentrated research community (Donthu et al., 2021). The presence of authors with varied geographical backgrounds further supports the global interest in fiscal and social expenditure issues.

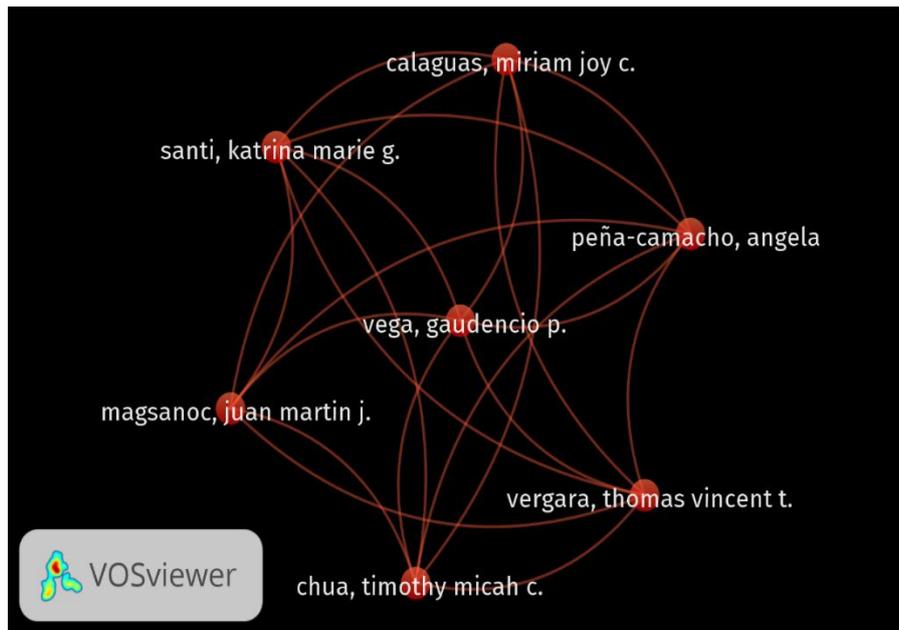


Figure 3 Most Productive Authors

Figure 3 illustrates the co-authorship network generated using VOS viewer. Each node represents an author, and the connecting lines indicate collaborative relationships among authors within the same publication. The size of the nodes appears uniform, consistent with the fact that each author has contributed a single publication.

The network visualization shows clusters of interconnected authors, indicating collaborative research groups. Authors such as Vega, G.P.; Peña-Camacho, A.; Magsanoc, J.M.J.; and Santi, K.M.G. appear centrally positioned within the network, suggesting participation in multi-author publications. The presence of multiple interlinkages among these authors indicates joint research efforts rather than isolated single-author contributions. The structure of the network suggests that collaboration occurs primarily within small research teams rather than across large international networks. There is no evidence of a highly central author dominating the collaboration structure. Instead, the network displays balanced interconnections among contributors.

Co-authorship analysis helps in understanding knowledge diffusion and research partnerships within a field. Collaborative networks often enhance citation impact and interdisciplinary integration (Aria & Cuccurullo, 2017). In the present case, the moderate clustering indicates emerging but not highly consolidated research collaboration patterns.

Table 3. Institutional Contributions

Institutional Contributions	Numbers of publication
Faculty of Economics and Management, University of Dschang, Dschang, Cameroon	2
Jawaharlal Nehru University, New Delhi, DL, India	1
International School of Business & Media, Pune, India	1
Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur, Kharagpur, WB, India	1
Department of Economics, University of Reading, Reading, Berkshire, United Kingdom	1
Institute for Economic Forecasting, Academia Româna, Bucharest, Romania	1
Bucharest University of Economic Studies, Bucharest, Romania	1
National Academy of Sciences of the Republic of Armenia, Yerevan, Armenia	1
School of Public Health, Boston, MA, United States	1
Public Health Foundation of India, New Delhi, India	1
International Food Policy Research Institute, Washington, D.C., DC, United States	1
School of Public Administration, Hunan University, Changsha, Hunan, China	1
Faculty of Economics and Management, Université de Yaoundé II, Yaounde, Cameroon	1
United Nations Economic Commission for Africa, Lusaka, Zambia	1
Department of Radiation Oncology, St. Luke's Medical Center Global City, Taguig City, Metro Manila, Philippines	1

Table 3 presents the distribution of publications across different institutions contributing to research on social sector expenditure. The data indicate that research output is widely dispersed across institutions, with only one institution contributing more than one publication.

The Faculty of Economics and Management, University of Dschang, Cameroon, records the highest contribution with two publications. All other institutions listed have contributed one publication each. This pattern reflects the absence of institutional concentration within the dataset. Unlike mature research domains where a few universities dominate scholarly output, the present field demonstrates broad participation across institutions located in Asia, Europe, Africa, and North America.

Indian institutions like Jawaharlal Nehru University, Indian Institute of Technology Kharagpur, and the Public Health Foundation of India appear in the list, indicating domestic academic engagement. At the same time, institutions such as the University of Reading (United

Kingdom), Bucharest University of Economic Studies (Romania), National Academy of Sciences of the Republic of Armenia, and the International Food Policy Research Institute (United States) highlight international involvement.

The presence of global organizations such as the United Nations Economic Commission for Africa suggests policy-oriented and development-focused research contributions. The institutional spread indicates that research on Government spending on social sectors is not confined to a specific geographical or academic cluster. Instead, it reflects cross-national academic interest in fiscal and social policy issues.

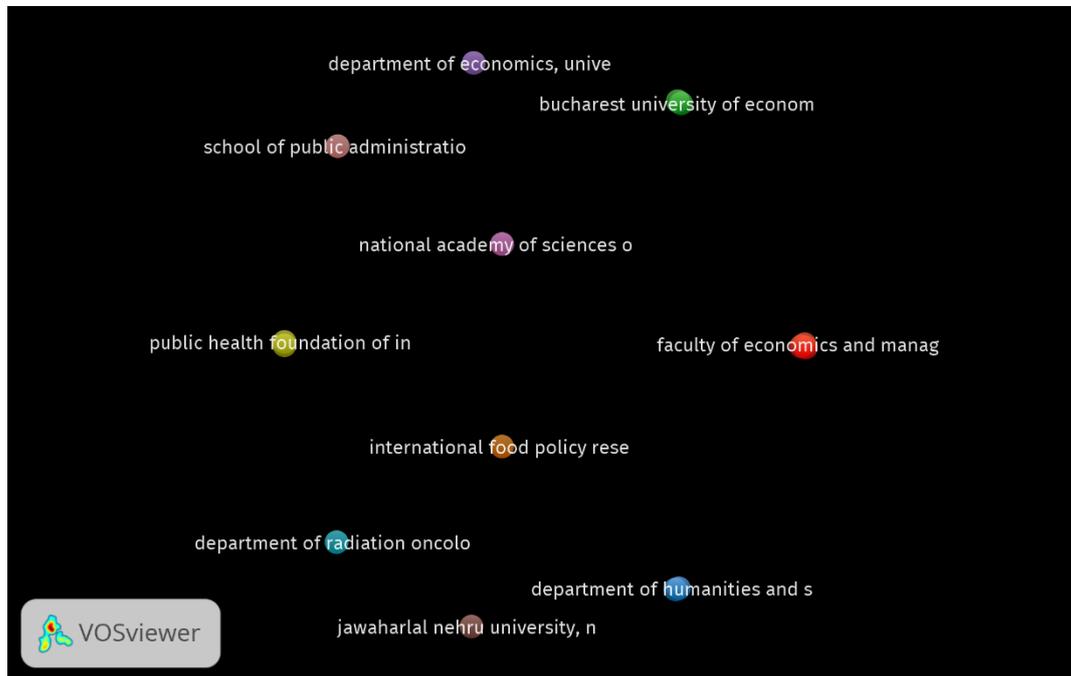


Figure 4. Institutional Contributions

Figure 4 presents the institutional co-authorship network generated using VOS viewer. Each node represents an institution, while connecting lines indicate collaborative relationships based on joint publications. The size of the nodes appears relatively similar, consistent with the low publication count per institution. The network shows limited clustering, recommending that most institutions have contributed independently or through small-scale collaborations. There is no clear evidence of a highly central institutional hub dominating collaborative activity. Instead, the network structure reflects fragmented but globally distributed partnerships.

Institutions located in India, Cameroon, Romania, the United States, and other countries appear as separate nodes with minimal cross-linkages. This indicates that collaboration across institutions exists but remains moderate in scale. The absence of dense interconnections implies that the research scope has not yet developed into a strongly integrated global institutional network.

Institutional collaboration analysis helps in understanding knowledge exchange and research diffusion patterns. In the present case, the network suggests emerging but limited institutional integration within the domain of Government spending on social sectors studies.

Table 4. Country Collaboration Patterns

Country	Number
India	4
Cameroon	3
Romania	2
United States	2
United Kingdom	1
Armenia	1
China	1
Zambia	1
Philippines	1

Table 4 presents the distribution of publications by country affiliation within the dataset. The data shows that India records the highest number of contributions with four publications. This is consistent with the thematic focus of the study, which centres on Government spending on social sectors in India. Domestic academic engagement is therefore expected to be relatively stronger.

Cameroon follows with three publications, reflecting notable international participation from African institutions. Romania and the country like UN each account for two publications, indicating moderate research involvement from European and North American scholars. Other countries such as the United Kingdom, Armenia, China, Zambia, and the Philippines contribute one publication each.

The distribution suggests that research on Government spending on social sectors is not confined to Indian institutions alone. Instead, it attracts global scholarly attention. However, the numerical values remain relatively small, indicating that international collaboration is present but not highly concentrated. The overall pattern reflects moderate cross-country engagement rather than strong bilateral or multilateral research clusters.

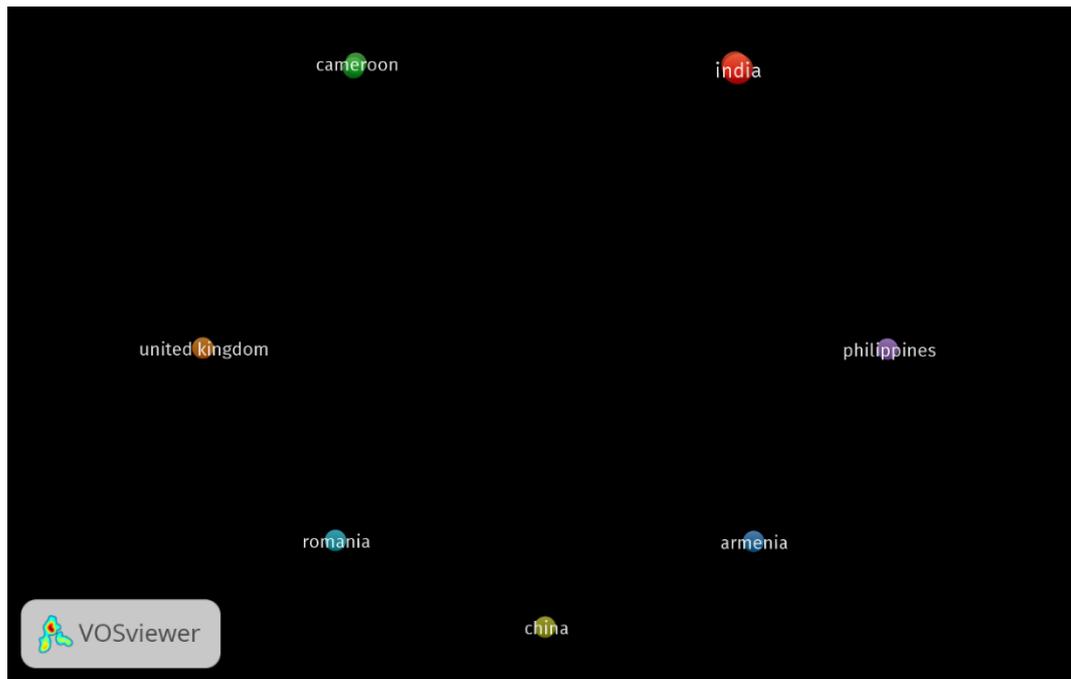


Figure 5. Country Collaboration Patterns

Figure 5 illustrates the country-level collaboration network generated using VOS viewer. Each node represents a country, and the area of the node corresponds to the number of publications. India appears as the biggest node, reflecting its leading contribution in the dataset.

The network structure shows limited linkages among countries. Nodes such as Cameroon, Romania, the United Kingdom, Armenia, China, Zambia, and the Philippines appear relatively isolated, indicating that most publications may involve domestic institutional affiliations rather than extensive cross-country collaboration.

The absence of dense interconnections suggests that international research partnerships in this field are still developing. While multiple countries contribute to the literature, collaborative ties between them remain modest. The network does not exhibit a dominant global hub or strongly interconnected cluster. Country collaboration analysis helps in assessing the internationalization of research. In this case, the findings indicate global participation but limited integration across national research systems. The field demonstrates geographical diversity, yet collaborative intensity remains moderate.

Table 5. Thematic Keyword Analysis

Keyword	Numbers
Income inequality	2
Assam	1
SPEED data	1
social programmes	1
tax administration	1
Cross-country evidence	1
Panel data	1
Poverty	1
Public expenditures	1
Complementarity	1
debt indicators	1
crowding out	1
government guidance	1
philanthropic development	1
economic complexity	1
human capital	1
Innovation	1
natural resources endowment	1
income elasticity	1
debt burden	1
Governance quality	1

political economy	1
Public spending	1
Regional disparities	1
Sustainable Development Goals (SDGs)	1
Federalism	1
fiscal asymmetry	1
intergovernmental transfers	1
public expenditure	1
Compliance	1
Composition of government expenditure	1
Middle-income countries	1
Higher education	1
Labour productivity	1
Wage share	1
budget planning	1
R&D	1

Table 5 presents the frequency distribution of author keywords extracted from the Scopus dataset. The keyword “Income inequality” appears twice, making it the most frequently occurring term in the dataset. All other keywords appear once, indicating thematic diversity rather than concentration around a single dominant concept.

The keywords can be grouped into major thematic areas. One cluster relates to fiscal and public finance themes, including terms such as public expenditure, public spending, composition of government expenditure, budget planning, tax administration, debt indicators, and debt burden. These terms reflect analytical focus on government budgeting, fiscal sustainability, and revenue administration.

A second thematic group centres on development and social policy, including poverty, human capital, social programmes, Sustainable Development Goals (SDGs), regional disparities, and higher education. These keywords indicate concern with development outcomes and distributional effects of public expenditure. A third group reflects political economy and governance dimensions, including governance quality, political economy, federalism, fiscal asymmetry, and intergovernmental transfers. These terms highlight the institutional and federal structure influencing social sector allocations. Methodological keywords such as panel data, cross-country evidence, and SPEED data indicate empirical analytical approaches used in the literature. The dispersion of keywords, with most appearing only once, suggests that the research domain is broad and multidisciplinary. Rather than focusing narrowly on one subtheme, studies address multiple dimensions of Government spending on social sectors including fiscal policy, inequality, governance, and development outcomes.

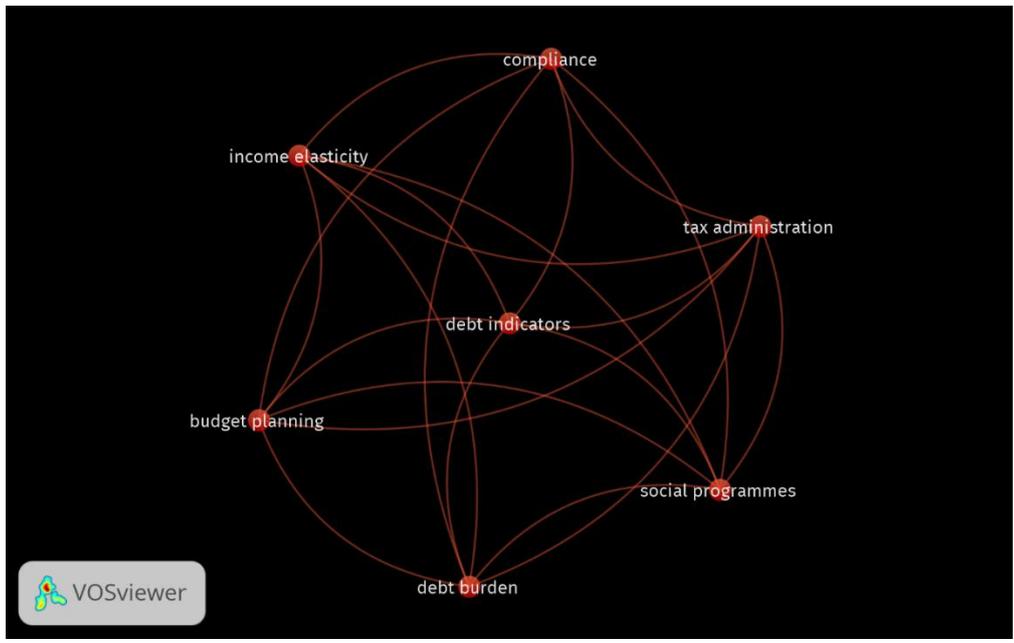


Figure 6. Thematic Keyword Analysis

Figure 6 illustrates the keyword co-occurrence network generated through VOS viewer. Each node represents a keyword, and the connecting lines indicate co-occurrence within the same publication. The network demonstrates interconnections among fiscal, governance, and development-related terms. Keywords such as tax administration, debt indicators, budget planning, compliance, and social programmes appear interconnected, forming a fiscal-governance cluster. This cluster reflects research examining the relationship between taxation, debt management, and social programme financing.

The linkage between income elasticity, income inequality, and debt burden suggests analytical attention to distributional and macroeconomic effects of public expenditure. Similarly, the presence of public expenditures, poverty, and human capital indicates research linking fiscal

policy with development outcomes. The network structure is moderately connected, with no single keyword dominating the visualization. The absence of large node disparities aligns with the frequency data in Table 5, where only one keyword appears more than once. This suggests that the field is characterized by thematic plurality rather than concentration.

6. Findings and Discussion

The bibliometric results reveal a clear expansion in scholarly attention to Government spending on social sectors in India during the post-reform period. The steady increase in publications from 1991 to 2024 indicates that social spending has become an increasingly important theme within public finance and development research. This growth corresponds with the broader policy shift from stabilization-focused reforms in the early 1990s to inclusive growth and welfare-oriented frameworks in the 2000s and beyond (Rao & Singh, 2005; Dreze & Sen, 2013).

The acceleration in publication output after 2005 coincides with the introduction of large-scale welfare programmes as the National Rural Health Mission and the Mahatma Gandhi National Rural Employment Guarantee Act. These initiatives expanded the scope of public expenditure in health, employment, and rural development, generating academic interest in fiscal sustainability, targeting efficiency, and distributional outcomes (Mehrotra, 2006). The literature increasingly links social expenditure with poverty reduction, inequality mitigation, and human capital formation (Tilak, 2002; Bose, 2015).

Thematic keyword analysis indicates that research is organized around three broad domains: fiscal management, development outcomes, and governance structures. Keywords such as “public expenditure,” “tax administration,” “debt burden,” and “budget planning” reflect concern with fiscal sustainability and public finance management. This aligns with proof suggesting that rising social commitments require stronger revenue mobilization and debt management mechanisms (World Bank, 2022).

Simultaneously, development-oriented terms such as “poverty,” “human capital,” “regional disparities,” and “Sustainable Development Goals (SDGs)” indicate that scholars increasingly evaluate the effectiveness of social spending in improving development outcomes. This trend reflects the global emphasis on linking public finance with measurable human development indicators (UNDP, 2023). The growing presence of terms such as “federalism,” “intergovernmental transfers,” and “fiscal asymmetry” highlights the importance of India’s federal structure in shaping expenditure patterns, a theme extensively discussed in fiscal federalism literature (Rao, 2017).

The authorship and institutional analyses suggest that the research field is decentralized. No single author or institution dominates publication output. Instead, contributions are dispersed across multiple countries and institutions. This pattern indicates interdisciplinary engagement rather than concentration within a single academic cluster. International participation from institutions in Europe, Africa, and North America suggests that India’s Government spending on social sectors is examined within broader comparative and cross-country frameworks.

Country collaboration patterns show that while India remains the central contributor, research participation extends across several countries. However, the collaboration network is not densely interconnected. This indicates moderate internationalization but limited large-scale cross-national research partnerships. The findings suggest that research on Government spending on social sectors in India has evolved from descriptive expenditure analysis toward more complex inquiries involving governance quality, fiscal sustainability, and development effectiveness. The expansion of publications after the mid-2000s reflects both policy innovation and improved data availability. Thematic diversity demonstrates that the field integrates public finance, political economy, and development economics perspectives.

The evidence supports the view that Government spending on social sectors has become central to debates on inclusive growth and fiscal policy in India. The continued upward trend in publication output suggests sustained academic engagement with issues of inequality, human capital formation, and public finance reform in the post-reform era.

7. Conclusion

The present bibliometric analysis examined the evolution of scholarly research on Government spending on social sectors in India during the post-reform period (1991–2024). The findings indicate a consistent and progressive rise in academic output, particularly after the mid-2000s. This expansion corresponds with increased policy emphasis on inclusive growth, welfare legislation, and improvements in fiscal transparency. The upward trajectory of publications reflects the growing relevance of social expenditure within the broader discourse on development economics and public finance.

The analysis shows that research themes have gradually diversified. Earlier discussions largely centered on expenditure trends and fiscal constraints, whereas number of recent studies focus on governance quality, fiscal sustainability, inequality, intergovernmental transfers, and development outcomes. The prominence of keywords such as income inequality, public expenditure, federalism, and Sustainable Development Goals demonstrates the integration of social spending debates with global development frameworks (UNDP, 2023; World Bank, 2022). This thematic expansion suggests that Government spending on social sectors is no longer treated as a narrow budgetary issue but as a central instrument of inclusive development.

Authorship and institutional patterns indicate a decentralized research structure. No single scholar or institution dominates the field, and contributions are geographically dispersed. Although India remains the primary contributor, participation from Europe, Africa, and North America reflects international engagement with India’s fiscal and social policy framework. However, collaboration networks appear moderately connected, indicating scope for stronger international research partnerships. The findings confirm that Government spending on social sectors has become a sustained area of scholarly inquiry in the post-reform era. The steady growth in publications suggests continued academic interest in evaluating the effectiveness, equity, and sustainability of public spending in education, health, poverty alleviation, and rural development. As fiscal pressures increase and development targets evolve, future research is likely to focus on outcome-based budgeting, digital governance mechanisms, and intergovernmental fiscal coordination.

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