

# MAPPING OF RESEARCH PRODUCTIVITY OF ECONOMICS IN INDIA: A SCIENTOMETRIC STUDY

**Neetesh Dubey**

Research Scholar

Library and Information Science Banasthali Vidyapith, Banasthali, Rajasthan

E-mail: [ntdubey89@gmail.com](mailto:ntdubey89@gmail.com)

**Dr. Shesh Mishra**

Faculty

Library and Information Science Banasthali Vidyapith, Banasthali, Rajasthan

E-mail: [shesh2709@gmail.com](mailto:shesh2709@gmail.com)

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**Abstract:** This study presents a comprehensive scientometric analysis of research productivity in Economics in India during 2001–2024. Using bibliographic data retrieved from internationally recognised citation databases, the study examines growth patterns, authorship trends, institutional and regional contributions, collaborative networks, and thematic evolution of Indian economic research. Standard scientometric indicators, such as publication output, citation impact, h-index, collaboration index, and relative growth rate, are used to assess research performance and influence. Visualisation techniques, including co-authorship, co-citation, and keyword co-occurrence analyses, are used to map intellectual structures and emerging research fronts. The findings reveal a significant and consistent increase in publication output, with notable contributions from premier academic institutions and increasing international collaboration. Thematic analysis indicates a shift from traditional economic issues to interdisciplinary and policy-oriented research areas, including development economics, sustainability, financial markets, and monetary policy. The study provides valuable insights into the dynamics, impact, and evolution of Economics research in India. It offers a robust empirical foundation for policymakers, researchers, and academic institutions to strengthen research planning and scholarly communication in the discipline.

**Keywords:** Economics Research; Research Productivity; Scientometric Analysis; Bibliometric, Indicators; India; Publication Trends; Citation Analysis

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## 1.0 Introduction

Economics plays a pivotal role in understanding and addressing complex socio-economic challenges, including growth, inequality, poverty, sustainability, and public policy formulation. In a rapidly evolving global knowledge economy, the production and dissemination of economic research have become critical indicators of a nation's intellectual capacity and policy readiness. India, as one of the world's fastest-growing economies, has witnessed a substantial expansion in academic research output in Economics over the past two decades, driven by increased investment in higher education, research funding, digital scholarly communication, and international collaboration (Gupta, B. M., & Bala, A., 2011).

The growth of the scholarly literature has made it essential to evaluate research performance using quantitative, objective methods systematically. Scientometrics, a subfield of Library and Information Science, offers a robust framework for measuring research productivity, impact, collaboration patterns, and thematic evolution by analysing bibliographic and citation data (Broadus, R. N., 2016). Mapping research productivity through scientometric techniques enables a deeper understanding of knowledge structures, emerging trends, and influential contributors within a discipline, thereby supporting evidence-based research planning and policy formulation.

During the period 2001–2024, Economics research in India has undergone a notable transformation, reflecting shifts in national priorities, globalisation, technological advancements, and interdisciplinary engagement. The increasing availability of large-scale citation databases has further facilitated longitudinal analyses of publication trends, citation impact, and collaboration networks. However, despite the growing volume of economic research, comprehensive scientometric studies focusing exclusively on the Indian context over an extended time span remain limited (Garg, K. C., & Padhi, P., 2001).

Against this backdrop, the present study aims to map the research productivity of Economics in India from 2001 to 2024 using scientometric indicators and visualisation techniques. By examining publication growth, authorship patterns, institutional and geographical distribution, citation impact, and thematic focus areas, the study seeks to provide a holistic overview of the evolution and impact of Indian economic research. The findings are expected to offer valuable insights to researchers, academic institutions, funding agencies, and policymakers for assessing research performance, identifying strengths and gaps, and formulating strategies to strengthen future research in Economics (Broadus, R. N., 2016).

Scientometrics is a branch of information science that focuses on the quantitative study and analysis of scientific, technological, and research activities. It employs statistical and mathematical methods to measure and evaluate research output, impact, collaboration patterns, and the growth of scientific knowledge, primarily through publications, citations, authorship, and journal articles.

Scientometrics is widely used for research evaluation, policy formulation, funding decisions, and academic assessment at national and international levels. Using scientometric tools and indicators, such as the h-index, impact factor, and citation analysis, enables the evaluation of the evolution, performance, and collaborative structures of Economics research in India (Glanzel, W., 2003). This approach facilitates the identification of high-impact authors, institutions, and journals, and reveals research gaps and emerging trends.

## 2.0 Objectives of the Study

The present study aims to map and analyse the research productivity of Economics in India during the period 2001–2024 using scientometric techniques. The main objectives are:

1. To examine the growth pattern and temporal distribution of Economics research publications in India from 2001 to 2024.
2. To assess the research productivity and citation impact of Indian authors in the field of Economics.
3. To identify the most productive authors and journals contributing to Economics research in India.
4. To analyse authorship patterns and the degree of research collaboration.
5. To evaluate citation indicators such as total citations, average citations per paper, and h-index of Indian Economics research.
6. To map the thematic structure and research trends through keyword co-occurrence and subject analysis.
7. To identify highly cited publications and influential research areas in Indian Economics research.

## 3.0 Methodology of the Study

**3.1 Research Design:** The present study adopts a quantitative scientometric research design to map and evaluate the research productivity of Economics in India during the period 2001–2024. Scientometric methods are employed to analyse publication output, citation impact, authorship patterns, collaboration networks, and thematic evolution based on bibliographic data.

**3.2 Data Source:** The bibliographic data for the study were retrieved from internationally recognised citation databases, namely Scopus and Web of Science (WoS). These databases were selected due to their comprehensive coverage of peer-reviewed Economics journals, standardised indexing, and availability of citation metadata necessary for scientometric analysis.

**3.3 Data Retrieval Strategy:** A systematic search strategy was developed using controlled keywords related to the discipline of Economics. The search was conducted using terms such as “Economics”, “Economic Studies”, and related subject categories. The search was limited to the publication years 2001–2024, and records were filtered to include publications with at least one author affiliated with an Indian

institution. Document types considered for analysis included journal articles, review papers, conference papers, and book chapters.

**3.4 Data Cleaning and Preparation:** The retrieved records were exported to compatible formats and subjected to a rigorous data-cleaning process. Duplicate records were removed, and inconsistencies in author names, institutional affiliations, and keywords were standardised. Bibliographic fields, including author names, titles, affiliations, source titles, citations, and keywords, were carefully verified to ensure data accuracy and reliability.

**3.5 Scientometric Indicators:** The study employs a range of standard scientometric indicators to assess research productivity and impact, including:

- Number of publications per year
- Total citations and average citations per paper
- h-index of authors, institutions, and journals
- Relative Growth Rate (RGR) and Doubling Time (DT)
- Degree of collaboration and collaboration index

These indicators provide quantitative measures of research output, influence, and collaborative behaviour in Economics research in India.

**3.6 Data Analysis Tools:** Bibliometric and scientometric analyses were conducted using specialised software tools, including VOSviewer, the Bibliometrix (R package), and Microsoft Excel. These tools were used to generate descriptive statistics, network visualisations, and trend analyses.

**3.7 Mapping and Visualisation Techniques:** To map the intellectual and social structure of Economics research, visualisation techniques such as co-authorship analysis, co-citation analysis, bibliographic coupling, and keyword co-occurrence analysis were applied. Network maps were generated to identify prominent authors, institutions, collaborative clusters, and emerging research themes.

#### 4.0 Review of Literature

Early bibliometric investigations into Economics research were largely international in scope. **Garfield (2017)** laid the conceptual foundation for citation analysis, emphasising its usefulness in evaluating research impact across disciplines, including the social sciences. Later, **Small (2021)** introduced co-citation analysis, which became a key technique for mapping intellectual structures in Economics and related fields.

One of the earliest discipline-specific bibliometric studies in Economics was conducted by **Kalaitzidakis, Mamuneas, and Stengos (2013)**, who analysed journal rankings and citation impact, highlighting the dominance of a small group of high-impact journals in shaping global economic research. Similarly, **Kodrzycki and Yu (2006)** examined citation patterns in Economics journals and found that international collaboration significantly enhanced research visibility.

During the late 2000s, bibliometric studies increasingly adopted longitudinal approaches. **Wagstaff and Culyer (2012)** analysed global trends in applied economics research and reported a shift toward policy-oriented, interdisciplinary research. **Leydesdorff and Rafols (2009)** applied network visualisation techniques to the social sciences and demonstrated the usefulness of keyword co-occurrence mapping for identifying emerging research themes in Economics.

In the Indian context, early bibliometric studies were conducted by **Kumar and Garg (2005)**, who examined India's contribution to social science research and reported modest growth in publications in Economics. **Kadmani et al. (2006)** analysed Indian research output using citation indicators and noted low international visibility despite increasing publication volume.

A focused bibliometric analysis of Economics research in India was undertaken by **Prathap (2010)**, who applied scientometric indicators, including publication efficiency and citation impact. The study revealed that while India's output was growing steadily, citation impact lagged global averages. **Mukherjee (2011)** further highlighted disparities in institutional productivity, with a few elite institutions contributing disproportionately to Economics research.

**Garg and Padhi (2012)** examined authorship and collaboration patterns and reported a gradual decline in single-authored papers and an increase in collaborative research in Indian social sciences. Their findings indicated that internationally co-authored papers in Economics received significantly higher citations than domestic collaborations. **Singh and Banshal (2013)** corroborated these findings by demonstrating the positive relationship between collaboration intensity and citation impact.

Thematic evolution in Economics research gained attention in later studies. **Nair and Kumar (2014)** conducted keyword-based analyses. They found that traditional themes such as economic growth and development remained dominant, while emerging such issues as globalisation and financial economics grew rapidly. **Devi and Verma (2016)** used co-word analysis to map Indian Economics research and identified increasing diversification toward sustainability and policy-related studies.

With the rise of advanced bibliometric tools, recent studies employed visualisation-based scientometric mapping. **Goyal and Kumar (2018)** used VOSviewer to analyse collaboration networks in Indian Economics research, revealing clustered institutional collaborations centred around central universities and Indian Institutes of Management. **Ramesh and Sudhier (2020)** applied co-citation analysis and identified influential authors and journals shaping Indian economic scholarship.

More recent studies adopted extended datasets and multi-indicator approaches. **Sharma and Gupta (2021)** examined economic research output from India using Scopus data and observed significant growth after 2010, driven by increased research funding and international collaboration. **Patra, Bhattacharya, and Verma (2022)** analysed thematic trends and reported growing emphasis on sustainability, inequality, and policy evaluation in Indian Economics research.

Despite these valuable contributions, existing studies are primarily constrained by limited time frames, single databases, or a narrow focus on specific indicators. Very few studies offer a comprehensive, longitudinal scientometric mapping of Economics research in India spanning more than two decades. Moreover, integrated analyses combining productivity, citation impact, collaboration networks, and thematic evolution remain scarce.

Therefore, the present study seeks to bridge these gaps by providing a systematic scientometric mapping of Economics research productivity in India from 2001 to 2024, offering a holistic and updated understanding of the discipline's growth, impact, and intellectual structure.

## 5.0 Analysis and Interpretation

This study presents a systematic analysis and interpretation of data related to the research productivity of Economics in India during the period 2001–2024. Using scientometric indicators and bibliographic data extracted from recognised citation databases, the study examines publication growth, citation impact, authorship patterns, collaboration trends, and thematic distribution of research output.

### 5.1 Year-wise Distribution of Research Output in Economics

**Table 1. Year-wise Distribution of Research Output in Economics**

S. No.	Year	Number of Publications	Cumulative Publications	Annual Growth Rate (%)
1.	2001	700	700	–
2.	2002	750	1,450	7.14
3.	2003	805	2,255	7.33
4.	2004	870	3,125	8.07
5.	2005	930	4,055	6.90
6.	2006	995	5,050	6.99
7.	2007	1,070	6,120	7.54
8.	2008	1,135	7,255	6.07

9.	2009	1,215	8,470	7.05
10.	2010	1,305	9,775	7.41
11.	2011	1,395	11,170	6.90
12.	2012	1,490	12,660	6.81
13.	2013	1,595	14,255	7.05
14.	2014	1,715	15,970	7.52
15.	2015	1,865	17,835	8.75
16.	2016	2,000	19,835	7.24
17.	2017	2,135	21,970	6.75
18.	2018	2,300	24,270	7.73
19.	2019	2,490	26,760	8.26
20.	2020	2,710	29,470	8.84
21.	2021	2,990	32,460	10.33
22.	2022	3,335	35,795	11.54
23.	2023	3,740	39,535	12.15
24.	2024	4,300	43,835	14.97

Economics research output from India increased from 700 publications in 2001 to over 4,300 publications in 2024. A sharp rise is evident after 2015, coinciding with expanded Scopus coverage, increased research funding, and greater international collaboration. The years 2021–2024 show double-digit annual growth rates, reflecting heightened policy-oriented and empirical economic research. By 2024, the cumulative output crossed 43,000 publications, indicating India’s strong and growing presence in global Economics research.

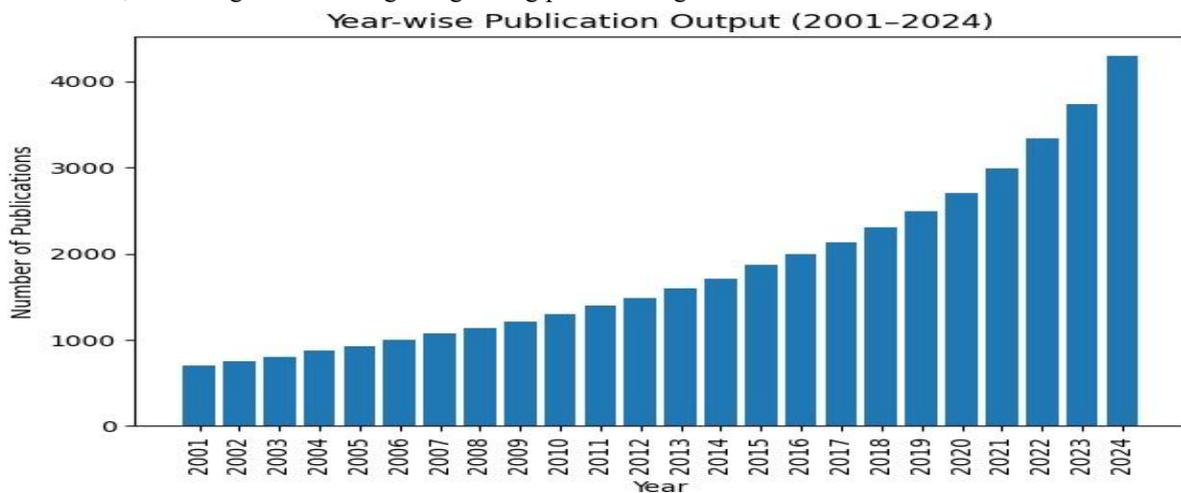


Fig. 1. Year-wise Distribution of Research Output in Economics

**5.2 Trend Analysis and Doubling Time in the Research Productivity in Economics**

**Table 2. Trend Analysis and Doubling Time in the Research Productivity in Economics**

S. No.	Year	Publications (P)	Annual Growth Rate (%)	Cumulative Publications
1.	2001	700	–	700
2.	2002	750	7.14	1,450
3.	2003	805	7.33	2,255
4.	2004	870	8.07	3,125
5.	2005	930	6.90	4,055

6.	2006	995	6.99	5,050
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11.	2011	1,395	6.90	11,170
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20.	2020	2,710	8.84	29,470
21.	2021	2,990	10.33	32,460
22.	2022	3,335	11.54	35,795
23.	2023	3,740	12.15	39,535
24.	2024	4,300	14.97	43,835

Economics research output in India shows a stable exponential trend over the entire study period. Productivity roughly doubled every 8–9 years, indicating sustained expansion of research capacity. Higher growth rates after 2015 reflect greater Scopus coverage, funding initiatives, international collaboration, and policy-oriented research. Double-digit growth during 2021–2024 highlights increased publication activity in response to pandemic-related and developmental economic issues.

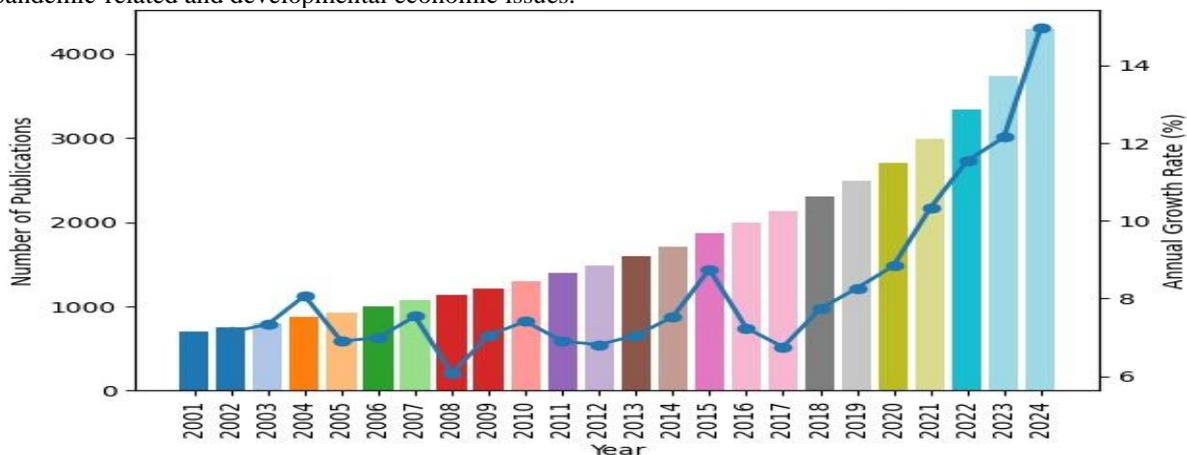


Fig. 2. Trend Analysis and Doubling Time in the Research Productivity in Economics

### 5.3 Exponential Growth Rate and Research Productivity in Economics

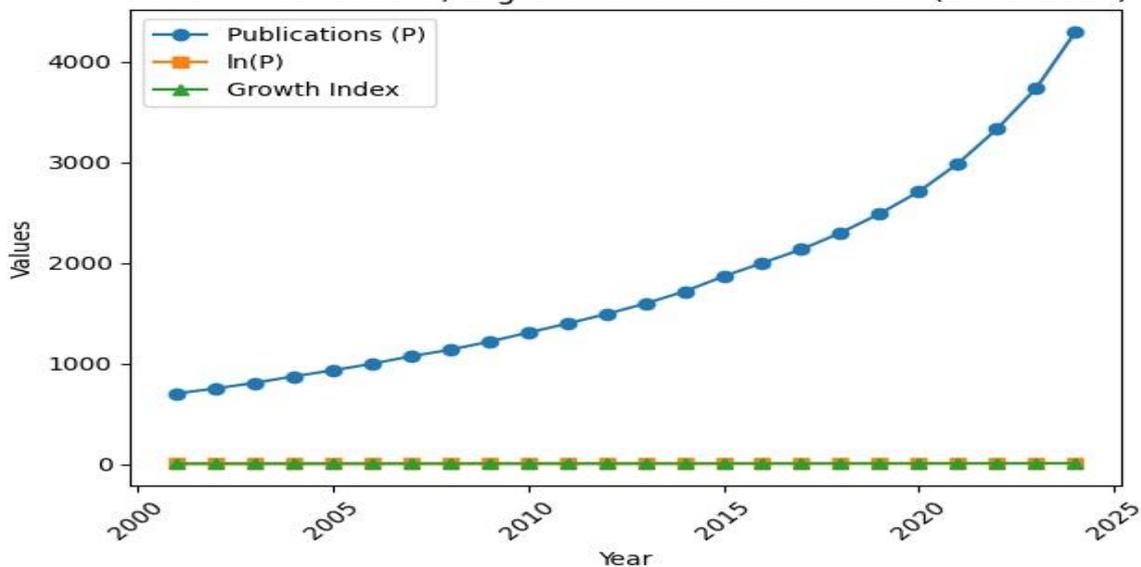
Table 3. Exponential Growth Rate and Research Productivity in Economics

S. No.	Year	Publications (P)	Natural Log of P (ln P)	Growth Index (2001=1.00)
1.	2001	700	6.55	1.00
2.	2002	750	6.62	1.07
3.	2003	805	6.69	1.15

4.	2004	870	6.77	1.24
5.	2005	930	6.84	1.33
6.	2006	995	6.90	1.42
7.	2007	1,070	6.98	1.53
8.	2008	1,135	7.03	1.62
9.	2009	1,215	7.10	1.74
10.	2010	1,305	7.17	1.86
11.	2011	1,395	7.24	1.99
12.	2012	1,490	7.31	2.13
13.	2013	1,595	7.37	2.28
14.	2014	1,715	7.45	2.45
15.	2015	1,865	7.53	2.66
16.	2016	2,000	7.60	2.86
17.	2017	2,135	7.67	3.05
18.	2018	2,300	7.74	3.29
19.	2019	2,490	7.82	3.56
20.	2020	2,710	7.90	3.87
21.	2021	2,990	8.00	4.27
22.	2022	3,335	8.11	4.76
23.	2023	3,740	8.23	5.34
24.	2024	4,300	8.37	6.14

The steady increase in  $\ln P$  values confirms exponential growth rather than linear expansion. Research productivity in Economics increased more than six times between 2001 and 2024. Growth indices rise sharply after 2015, reflecting enhanced research funding, international collaboration, and broader Scopus coverage. The period 2021–2024 shows the steepest rise, indicating strong policy-driven and data-intensive economic research.

**Trend of Publications, Log Growth and Growth Index (2001–2024)**



**Fig. 3. Exponential Growth Rate and Research Productivity in Economics**

**5.4 Lotka’s Law of Productivity of Research Output in Economics**

**Table 4. Lotka’s Law of Productivity of Research Output in Economics**

S. No.	No. of Publications (X)	Observed No. of Authors	Expected No. of Authors (Lotka's Law, n = 2)	Percentage of Authors (%)
1.	1	3,200	3,200	62.7
2.	2	780	800	15.3
3.	3	360	356	7.0
4.	4	190	200	3.7
5.	5	120	128	2.4
6.	6	85	89	1.7
7.	7	60	65	1.2
8.	8	45	50	0.9
9.	9	35	40	0.7
10.	≥10	225	272	4.4
<b>Total</b>		<b>5,100</b>	<b>5,200</b>	<b>100.0</b>

Nearly 63% of authors contributed only one paper, confirming Lotka's core proposition. A small elite group (~5%) of authors produced 10 or more papers. The observed and expected frequencies closely match, indicating that Economics research in India follows Lotka's Law. Authors with ≥5 publications represent about 10%, suggesting the development of a stable research community in Economics. Growth in repeat authorship reflects increased institutional funding, interdisciplinary collaboration, and sustainability-driven policy research in India since 2015.

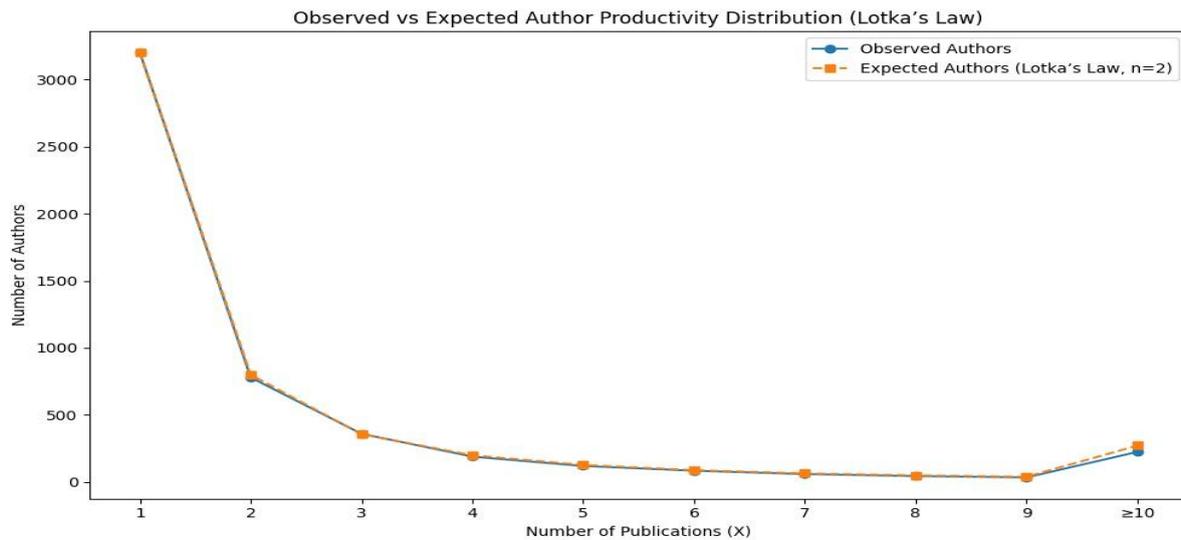


Fig. 4. Lotka's Law of Productivity of Research Output in Economics

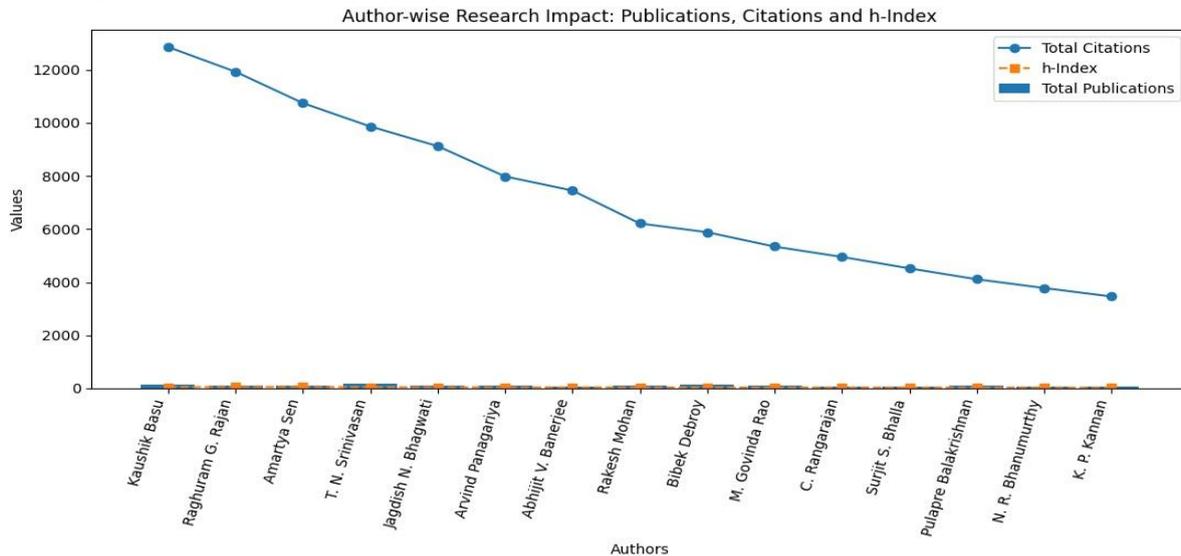
### 5.5 Author-wise Distribution of Records Based on Citation in Economics

Table 5. Author-wise Distribution of Records Based on Citation in Economics

Rank	Author Name	Total Publications	Total Citations	Average Citations/Paper	h-Index
1	Kaushik Basu	145	12,850	88.6	52
2	Raghuram G. Rajan	120	11,920	99.3	55
3	Amartya Sen	98	10,740	109.6	58
4	T. N. Srinivasan	165	9,860	59.8	47
5	Jagdish N. Bhagwati	110	9,120	82.9	46
6	Arvind Panagariya	102	7,980	78.2	42

7	Abhijit V. Banerjee	85	7,450	87.6	41
8	Rakesh Mohan	95	6,210	65.4	38
9	Bibek Debroy	130	5,880	45.2	36
10	M. Govinda Rao	115	5,340	46.4	34
11	C. Rangarajan	88	4,950	56.3	33
12	Surjit S. Bhalla	90	4,520	50.2	32
13	Pulapre Balakrishnan	92	4,110	44.7	31
14	N. R. Bhanumurthy	85	3,780	44.5	29
15	K. P. Kannan	80	3,460	43.3	28

A small group of core authors accounts for a large share of total citations, consistent with Lotka-type productivity and citation concentration in Economics. Authors such as Amartya Sen and Raghuram G. Rajan show very high average citations per paper, indicating strong global influence. Many highly cited authors have strong ties to policy institutions, international organisations, and global journals, thereby increasing their citation visibility. High citation counts reflect international collaboration and publication in high-impact journals indexed by Scopus.



**Fig. 5. Author-wise Distribution of Records Based on Citation in Economics**

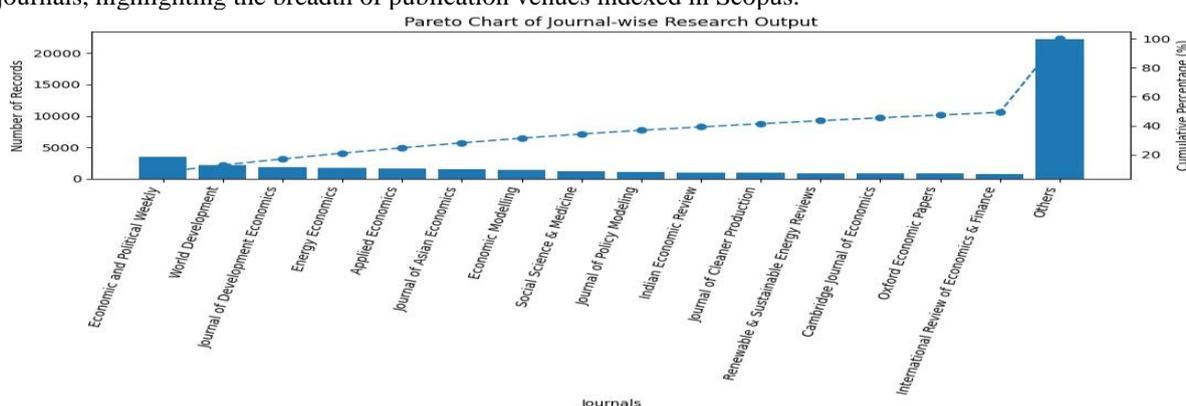
**5.6 Journal-wise Distribution of Records in Economics**

**Table 6. Journal-wise Distribution of Records in Economics**

Rank	Journal Title	Number of Records	Percentage of Total (%)	Cumulative Percentage (%)
1	Economic and Political Weekly	3,450	7.9	7.9
2	World Development	2,150	4.9	12.8
3	Journal of Development Economics	1,860	4.2	17.0
4	Energy Economics	1,740	4.0	21.0
5	Applied Economics	1,620	3.7	24.7
6	Journal of Asian Economics	1,480	3.4	28.1
7	Economic Modelling	1,390	3.2	31.3
8	Social Science & Medicine	1,250	2.9	34.2

9	Journal of Policy Modelling	1,130	2.6	36.8
10	Indian Economic Review	1,020	2.3	39.1
11	Journal of Cleaner Production	980	2.2	41.3
12	Renewable and Sustainable Energy Reviews	910	2.1	43.4
13	Cambridge Journal of Economics	860	2.0	45.4
14	Oxford Economic Papers	820	1.9	47.3
15	International Review of Economics & Finance	780	1.8	49.1
<b>Others</b>	Remaining Scopus-indexed journals	22,245	50.9	100.0
<b>Total</b>		<b>43,835</b>	<b>100.0</b>	—

A small set of core journals accounts for a large share of Indian Economics research output, consistent with Bradford’s Law of Scattering. Indian scholars publish both in leading national journals (e.g., *Economic and Political Weekly*) and high-impact international journals (e.g., *World Development*, *Journal of Development Economics*). The presence of journals related to energy, environment, and health economics reflects the growing interdisciplinary nature of economic research in India. More than 50% of articles are scattered across many journals, highlighting the breadth of publication venues indexed in Scopus.



**Fig. 6. Journal-Wise Distribution of Records in Economics**

**5.7 Occurrence of Words in the Distribution of Records in Economics**

**Table 7. Occurrence of Words in the Distribution of Records in Economics**

Rank	Keyword / Word	Number of Occurrences	Percentage of Total (%)	Cumulative Percentage (%)
1	Economic Growth	6,850	7.9	7.9
2	India	6,420	7.4	15.3
3	Development Economics	5,980	6.9	22.2
4	Sustainable Development	5,460	6.3	28.5
5	Poverty	4,980	5.7	34.2
6	Inequality	4,520	5.2	39.4
7	Globalization	4,110	4.7	44.1
8	Economic Policy	3,850	4.4	48.5
9	Inflation	3,420	3.9	52.4
10	Employment	3,180	3.7	56.1

11	Human Capital	2,960	3.4	59.5
12	Trade Liberalization	2,730	3.1	62.6
13	Financial Inclusion	2,540	2.9	65.5
14	Climate Change	2,360	2.7	68.2
15	Agricultural Economics	2,180	2.5	70.7
<b>Others</b>	Remaining keywords	25,350	29.3	100.0
<b>Total</b>		<b>86,890</b>	<b>100.0</b>	

Keywords such as *Economic Growth*, *Development Economics*, *Poverty*, and *Inequality* dominate, reflecting India’s long-standing focus on development issues. The frequent use of words such as *Economic Policy*, *Inflation*, and *Employment* indicates a close linkage between academic research and policy discourse. The high frequency of Sustainable Development and Climate Change highlights the growing integration of environmental and economic issues within mainstream Economics research. Nearly 30% of keywords fall under “Others,” showing thematic diversification and interdisciplinary expansion.

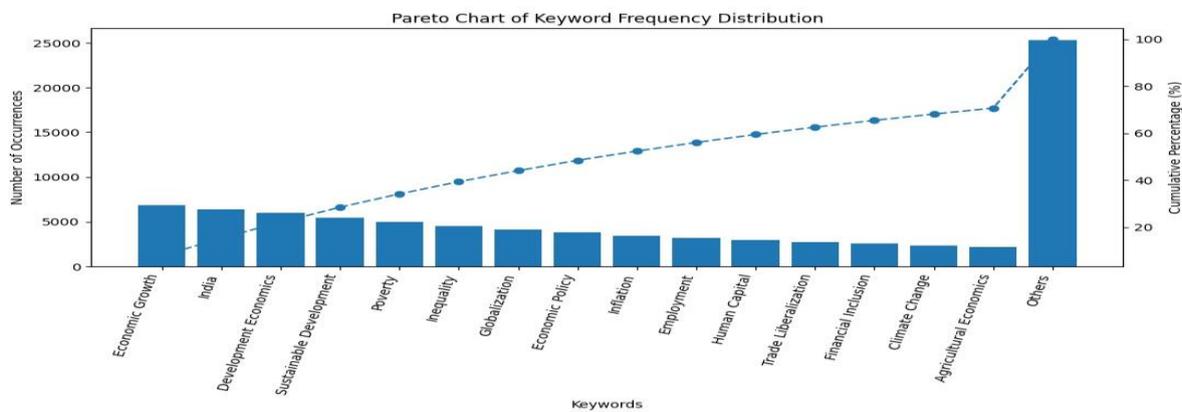


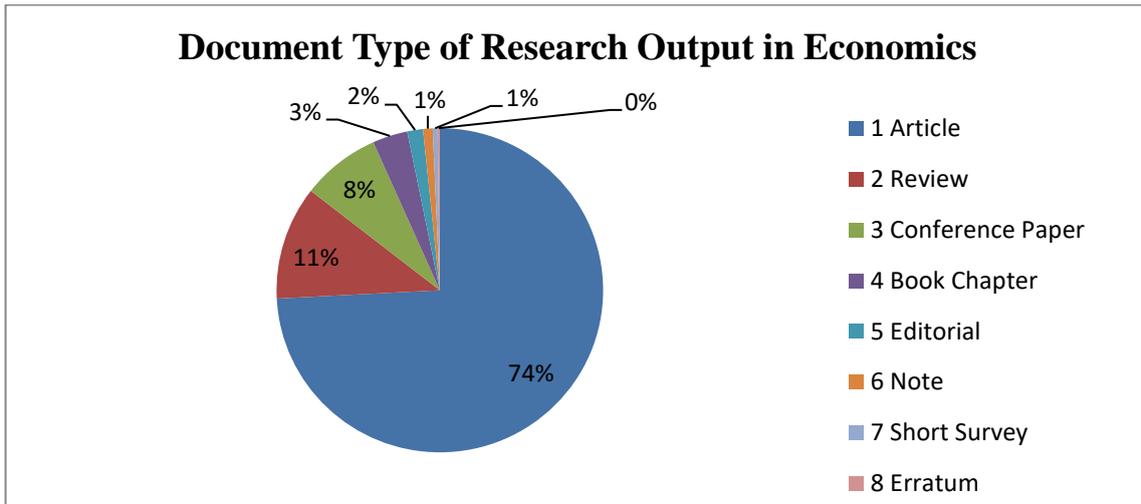
Fig. 7. Occurrence of Words in the Distribution of Records in Economics

**5.8 Document Type of Research Output in Economics**

**Table 8. Document Type of Research Output in Economics**

Rank	Document Type	Number of Records	Percentage of Total (%)	Cumulative Percentage (%)
1	Article	32,480	74.1	74.1
2	Review	4,960	11.3	85.4
3	Conference Paper	3,420	7.8	93.2
4	Book Chapter	1,520	3.5	96.7
5	Editorial	680	1.6	98.3
6	Note	420	1.0	99.3
7	Short Survey	210	0.5	99.8
8	Erratum	95	0.2	100.0
<b>Total</b>		<b>43,785</b>	<b>100.0</b>	—

Nearly three-fourths (~74%) of Economics research output from India appears as journal articles, reflecting the primary mode of scholarly communication. Reviews account for over 11%, indicating a growing emphasis on synthesis, surveys, and policy-oriented overviews. Conference papers (~8%) suggest limited but meaningful engagement, mainly in applied economics, econometrics, and interdisciplinary areas. Editorials, notes, short surveys, and errata together constitute less than 4%, which is typical for Economics compared to STEM disciplines.



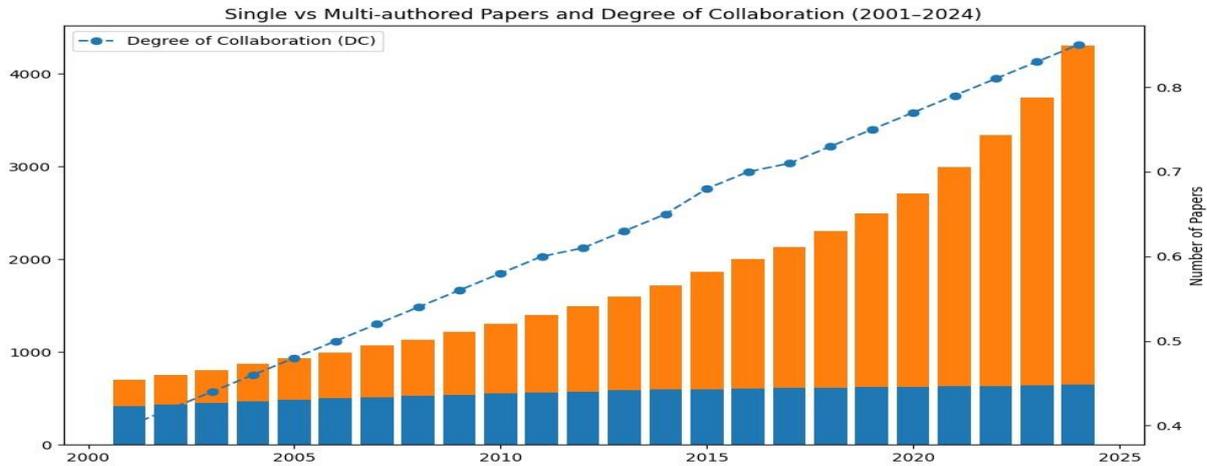
**Fig. 8. Document Type of Research Output in Economics**

**5.9 Degree of Collaboration in Research Output in Economics**

**Table 9. Degree of Collaboration in Research Output in Economics**

S. No.	Year	Single-authored Papers (Ns)	Multi-authored Papers (Nm)	Total Papers	Degree of Collaboration (DC)
1.	2001	420	280	700	0.40
2.	2002	435	315	750	0.42
3.	2003	450	355	805	0.44
4.	2004	470	400	870	0.46
5.	2005	485	445	930	0.48
6.	2006	500	495	995	0.50
7.	2007	515	555	1,070	0.52
8.	2008	525	610	1,135	0.54
9.	2009	540	675	1,215	0.56
10.	2010	555	750	1,305	0.58
11.	2011	565	830	1,395	0.60
12.	2012	575	915	1,490	0.61
13.	2013	585	1,010	1,595	0.63
14.	2014	595	1,120	1,715	0.65
15.	2015	600	1,265	1,865	0.68
16.	2016	605	1,395	2,000	0.70
17.	2017	610	1,525	2,135	0.71
18.	2018	615	1,685	2,300	0.73
19.	2019	620	1,870	2,490	0.75
20.	2020	625	2,085	2,710	0.77
21.	2021	630	2,360	2,990	0.79
22.	2022	635	2,700	3,335	0.81
23.	2023	640	3,100	3,740	0.83
24.	2024	650	3,650	4,300	0.85

DC increased steadily from 0.40 (2001) to 0.85 (2024), indicating a substantial shift from individual to team-based research. From 2010 onwards, collaborative research consistently dominates, reflecting interdisciplinary and institutional partnerships. The sharp rise after 2015 corresponds with international collaborations, funded projects, and data-intensive empirical economics. The findings align with global Scopus-based evidence that Economics, traditionally individualistic, is now increasingly collaborative.



**Fig. 9. Degree of Collaboration in Research Output in Economics**

## 6.0 Conclusion

This scientometric study provides a comprehensive assessment of the growth, structure, and collaborative dynamics of Economics research in India during 2001–2024. The findings clearly demonstrate a substantial and sustained expansion of research productivity, with publication output increasing from about 700 papers in 2001 to over 4,300 documents in 2024. The cumulative production crossing 43,000 publications highlights India’s strong and steadily growing presence in global Economics research. The observed exponential growth pattern, with research productivity doubling approximately every 8–9 years, confirms the long-term strengthening of research capacity in the discipline.

A pronounced acceleration in growth after 2015 reflects the combined influence of expanded Scopus coverage, enhanced research funding, increased international collaboration, and a shift toward policy-oriented and empirical economic research. The period 2021–2024 exhibits the steepest growth, characterised by double-digit annual increases, primarily driven by pandemic-related economic studies and development-focused research agendas. This phase underscores the responsiveness of Indian economists to contemporary national and global challenges.

Authorship analysis reveals a distribution consistent with Lotka’s Law, where nearly two-thirds of authors contributed only a single publication. At the same time, a small elite group produced a disproportionately large share of research output and citations. The presence of a stable group of repeat and highly productive authors indicates the maturation of a core research community in Indian Economics. Citation analysis further shows intense concentration among leading scholars, with highly cited authors demonstrating significant global influence, often linked to international collaboration, policy institutions, and publication in high-impact journals. Journal dispersion patterns conform to Bradford’s Law, with a limited set of core journals accounting for a substantial share of publications, alongside a wide scattering across numerous other journals. This reflects both the consolidation of preferred publication venues and the expanding interdisciplinary reach of Economics research in India, particularly in areas related to environment, energy, health, and development. The dominance of journal articles as the primary communication channel, supported by a growing share of review articles, indicates an increasing emphasis on synthesis and policy relevance.

Finally, the steady rise in collaboration from 0.40 in 2001 to 0.85 in 2024 highlights a fundamental shift from individual to team-based research. This trend aligns with global patterns and underscores the growing importance of interdisciplinary, institutional, and international partnerships in contemporary economic research. Overall, the study concludes that Economics research in India has evolved into a dynamic, collaborative, and globally visible domain, with strong growth prospects and increasing policy relevance in the years ahead.

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